CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145544

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP USA Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

the Applicant

B. Business address of the Disclosing Party:

One Penn Plaza
New York, NY 10119
United States

C. Telephone:

206-382-5282

Fax:

717-859-7926

D. Name of contact person:

Ms. Laura S Unger

F. Brief description of contract, transaction or other undertaking (referred to below as the "Matter") to which this EDS pertains:

MASTER TASK ORDER CONTRACT PROFESSIONAL ENGINEERING SERVICES HIGHWAY/ROADWAY DESIGN, TRAFFIC STUDIES AND DESIGN (FOR TASK ORDERS) CATEGORIES 1-7: AWARDED CATEGORIES 1, 2, 4, AND 7

Which City agency or department is requesting this EDS?

DEPT OF PROCUREMENT SERVICES

Specification Number

118890

Contract (PO) Number

32190

Revision Number

Release Number

User Department Project Number

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

New York

Registered to do business in the State of Illinois as a foreign entity?

Yes

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. Michael J Abrahams
Title:	Board Director
Role:	Director

Officer/Director:	Mr. David McAlister
Title:	Interim CEO
Role:	Officer

Officer/Director:	Mr. Roger W. Blair
Title:	Senior Vice President
Role:	Both

Officer/Director:	Mr. Patrick T. Sheridan
Title:	Senior Vice President & Treasurer
Role:	Officer

Officer/Director:	Mr. Andrew J. Lynn
Title:	Vice President
Role:	Officer

Officer/Director:	Ms. Hillary F. Jassey
Title:	Secretary
Role:	Officer

Officer/Director:	Mr. W. Stephen Dale
Title:	Assistant Secretary
Role:	Officer

Officer/Director:	Mr. Cary M. Siegel
Title:	Assistant Secretary
Role:	Officer

Officer/Director:	Mr. Gregory P. Benz
Title:	Board Director
Role:	Director

Officer/Director:	Mr. John D. Porcari

Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Joseph G. Pulicare
Title: Senior Vice President
Role: Both

Officer/Director: Mr. Gerald S. Jannetti
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Bernard P. McNeilly
Title: Senior Vice President
Role: Both

Officer/Director: Mr. Garry E. Nunes
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. J. Steven Paquette
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Eric R. Roecks
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. John Trotta
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Peter F. Donahue
Title: Board Director
Role: Director

Officer/Director: Ms. Pamela Townsend
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Nicholas Mitrakis
Title: Controller
Role: Officer

Officer/Director: Mr. Christopher J D'Aquino
Title: Assistant Controller
Role: Officer

Officer/Director: Mr. Christopher L Peters
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Amir J. Degany
Title: Assistant Vice President
Role: Officer

Officer/Director: Mr. Kevin B. Reed
Title: Vice President
Role: Officer

Officer/Director: Mr. Leslie Gartner
Title: Assistant Vice President
Role: Officer

Officer/Director: Mr. Robert Rohlfs
Title: Assistant Vice President
Role: Officer

Officer/Director: Mr. Fadi S. Walieddine
Title: Assistant Vice President
Role: Officer

Officer/Director: Ms. Sandy Bishay
Title: Assistant Vice President
Role: Officer

Officer/Director: Mr. David Patterson
Title: Assistant Vice President
Role: Officer

Officer/Director: Ms. Anita Macaluso
Title: Senior Vice President
Role: Officer

Officer/Director: Mr. Sam Knaster
Title: Senior Vice President

Role:	Officer

Officer/Director:	Mr. Arpit Talati
Title:	Senior Vice President
Role:	Officer

Officer/Director:	Mr. David B. Terry
Title:	Senior Vice President
Role:	Officer

Officer/Director:	Mr. Joseph B. Willhite
Title:	Senior Vice President
Role:	Officer

---

2. Ownership Information

Please provide ownership information concerning each person or entity that holds, or is anticipated to hold (see next paragraph), a direct or indirect beneficial interest in excess of 7.5% of the Applicant. Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited liability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

Please disclose present owners below. Please disclose anticipated owners in an attachment submitted through the "Additional Info" tab. "Anticipated owner" means an individual or entity in existence at the time application for City action is made, which is not an applicant or owner at such time, but which the applicant expects to assume a legal status, within six months of the time the City action occurs, that would render such individual or entity an applicant or owner if they had held such legal status at the time application was made.

- Parsons Brinckerhoff Holdings Inc. - 100.0% - EDS 145548
  - WSP USA Buildings Inc. - 100.0% - EDS 145549
    - WSP USA Holdings, Inc. - 100.0% - EDS 145550
      - WSP Group Holding LLC - 100.0% - EDS 145551
        - WSP USA Group Holding Inc. - 100.0% - EDS 145552
          - WSP Group Consulting Inc. - 100.0% - EDS 145553
            - WSP Global Inc. - 100.0% - EDS 145554

Owner Details

Name	Business Address

Parsons Brinckerhoff Holdings Inc.	One Penn Plaza New York, NY 10119 United States
WSP Global Inc.	16 Floor - 1600 Rene-Levesque Blvd. West Montreal, Quebec H3H 1P9 Canada
WSP Group Consulting Inc.	16 Floor - 1600 Rene-Levesque Blvd. West Montreal, Quebec H3H 1P9 Canada
WSP Group Holding LLC	One Penn Plaza 2nd Floor New York, NY 10119 United States
WSP USA Buildings Inc.	One Penn Plaza New York, NY 10119 United States
WSP USA Group Holding Inc.	One Penn Plaza 2nd Floor New York, NY 10119 United States
WSP USA Holdings, Inc.	One Penn Plaza New York, NY 10119 United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION IV -- DISCLOSURE OF SUBCONTRACTORS AND OTHER RETAINED PARTIES

The Disclosing Party must disclose the name and business address of each subcontractor, attorney, lobbyist (as defined in MCC Chapter 2-156), accountant, consultant and any other person or entity whom the Disclosing Party has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Disclosing Party is not required to disclose employees who are paid solely through the Disclosing Party's regular payroll.

If the Disclosing Party is uncertain whether a disclosure is required under this Section, the Disclosing Party must either ask the City whether disclosure is required or make the disclosure.

1. Has the Disclosing Party retained or does it anticipate retaining any legal entities in connection with the Matter?

Yes

2. List below the names of all legal entities which are retained parties.

Name:	Urban GIS, Inc.
Anticipated/Retained:	Anticipated
Business Address:	1143 W Rundell Pl Suite 301 Chicago, IL 60607 United States
Relationship:	Subcontractor - MWDBE
Fees ($$ or %):	13.7
Estimated/Paid:	Estimated

Name:	DB Sterlin Consultants, Inc.
Anticipated/Retained:	Anticipated
Business Address:	123 N. Wacker Drive Suite 2000

	Chicago, IL 60606 United States
Relationship:	Subcontractor - MWDBE
Fees ($$ or %):	13.8
Estimated/Paid:	Estimated

Name:	Infrastructure Engineering, Inc.
Anticipated/Retained:	Anticipated
Business Address:	1 South Wacker Drive Suite 2650 Chicago, IL 60606 United States
Relationship:	Subcontractor - MWDBE
Fees ($$ or %):	17.4
Estimated/Paid:	Estimated

Name:	SQN Associates, LLC
Anticipated/Retained:	Anticipated
Business Address:	134 N. Lasalle Suite 700 Chicago, IL 60602 United States
Relationship:	Subcontractor - MWDBE
Fees ($$ or %):	5
Estimated/Paid:	Estimated

---

3. Has the Disclosing Party retained or does it anticipate retaining any persons in connection with the Matter?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain :

Please see attached disclosure statement provided under Additional Information tab regarding subsidiary Louis Berger U.S., Inc.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

I certify the above to be true

9. [FOR APPLICANT ONLY] The Applicant and its Affiliated Entities will not use, nor permit their subcontractors to use, any facility listed as having an active exclusion by the U.S. EPA on the federal System for Award Management ("SAM")

I certify the above to be true

10. [FOR APPLICANT ONLY] The Applicant will obtain from any contractors/ subcontractors hired or to be hired in connection with the Matter certifications equal in form and substance to those in Certifications (2) and (9) above and will not, without the prior written consent of the City, use any such contractor/subcontractor that does not provide such certifications or that the Applicant has reason to believe has not provided or cannot provide truthful certifications.

I certify the above to be true

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

I have a disclosure to make

List below the names of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the execution date of this EDS, an employee, or elected or appointed official, of the City of Chicago:

Name:	Mr. Alexander Jaeger
City Title:	Chicago Bikeways Engineering Intern

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

D. CERTIFICATION REGARDING FINANCIAL INTEREST IN CITY BUSINESS

Any words or terms defined in MCC Chapter 2-156 have the same meanings if used in this Part D.

1. In accordance with MCC Section 2-156-110: To the best of the Disclosing Party's knowledge after reasonable inquiry, does any official or employee of the City have a financial interest in his or her own name or in the name of any other person or entity in the Matter?

No

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for

damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VI -- CERTIFICATIONS FOR FEDERALLY FUNDED MATTERS

Is the Matter federally funded? For the purposes of this Section VI, tax credits allocated by the City and proceeds of debt obligations of the City are not federal funding.

No

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having

more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

APPENDIX C-PROHIBITION ON WAGE & SALARY HISTORY SCREENING

This Appendix is to be completed only by an Applicant that is completing this EDS as a "contractor" as defined in MCC Section 2-92-385. That section, which should be consulted (www.amlegal.com), generally covers a party to any agreement pursuant to which they: (i) receive City of Chicago funds in consideration for services, work or goods provided (including for legal or other professional services), or (ii) pay the City money for a license, grant or concession allowing them to conduct a business on City premises.

On behalf of an Applicant that is a contractor pursuant to MCC Section 2-92-385, I hereby certify that the Applicant is in compliance with MCC Section 2-92-385(b)(1) and (2), which prohibit: (i) screening job applicants based on their wage or salary history, or (ii) seeking job applicants&#39 wage or salary history from current or former employers. I also certify that the Applicant has adopted a policy that includes those prohibitions.

This certification shall serve as the affidavit required by MCC Section 2-92-385(c)(1).

Yes

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

Applicant's ultimate parent company is WSP Global Inc., which is publically traded on the Toronto Stock Exchange. The following entities having more than a 7.5% interest in WSP Global Inc. are exempt from filing an EDS under Rule 1(i) of the Rules Regarding Economic Disclosure Statement and Affidavit, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board ("CPPIB") owns 19.73% and the Caisse de Depot et Placement du Quebec ("CDPQ") owns 18.81%. Attached are the year-end public financial statements in accordance with the rule.

List of vendor attachments uploaded by City staff

None.

List of attachments uploaded by vendor

Louis Berger U.S., Inc. Disclosure Statement.
CPP Investment Board Annual Report
Caisse de Depot et Placement du Quebec Annual Report

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 09/27/2019
Ms. Laura S Unger
Assistant General Counsel, Regulatory Compliance
WSP USA Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

DISCLOSURE STATEMENT

This Statement provides disclosures about the Louis Berger companies for events occurring prior to the acquisition of Berger Group Holdings, Inc. ("BGH") by WSP Global Inc. ("WSP") which acquired BGH on December 18, 2018. WSP continues to provide this Statement in accordance with the highest standards of corporate transparency and conduct.

Louis Berger Companies

Until December 18, 2018, BGH was the common parent of a group of professional services companies (collectively the "LB Company") with its first tier subsidiaries being:

- Louis Berger Group, Inc. ("LBG"), formed in 1963, is an operating company with a general purpose of providing engineering, planning, architecture, development, construction management and program management services primarily to U.S. federal, state and local governments and private clients. Louis Berger U.S., Inc., formerly a subsidiary of LBG after being acquired in 2015, is currently a wholly-owned subsidiary of WSP USA Inc.
- Louis Berger International, Inc. ("LBI"), formed in 2012, is a holding company with a general purpose of owning certain foreign subsidiaries that provide engineering, planning, architecture, development, construction management and program management services to foreign governments and private clients.
- Louis Berger Services, Inc. ("LBS"), acquired in 2012 is an operating company with a general purpose of providing commercial services related to operations and maintenance, power generation, and related services to federal, state and local governments and private clients. LBS is currently a wholly-owned subsidiary of WSP USA Services Inc. and is the parent of Louis Berger Aircraft Services, Inc. and Louis Berger Hawthorne Services, Inc.

BGH and two of its subsidiaries, LBG and LBI, were the subject of related investigations involving conduct by former employees in 2010 and earlier. These investigations resulted in a False Claims Act Settlement Agreement and an Administrative Agreement in 2010 as well as Deferred Prosecution Agreements in 2010 and 2015. All of these agreements have expired. These matters, discussed below, have been fully resolved with the U.S. government. The LB Company took full responsibility for the historical actions of former managers and employees. The LB Company entered into Integrity Monitoring Agreements with the Port Authority of New York and New Jersey, the New York City Department of Investigation, New York State Department of Transportation and the Metropolitan Transportation Authority, and a Contractor Certification with the City University of New York. These Integrity Monitoring Agreements have expired.

CORRECTIVE ACTIONS BY LB COMPANY

The LB Company implemented and continuously improved on a $25-million reform program including: broadening ownership by employees; implementing a new, state-of-the-art Enterprise Resource Planning (Accounting) System specifically designed for Government Contractors; and, creation of an Office of Compliance and Ethics, managed by the Chief Integrity Officer. The LB Company maintains a comprehensive Code of Business Conduct and other internal controls, specifically including an anti-corruption program.

LOUIS BERGER COMPANIES ARE RESPONSIBLE, CONTRACT AWARD-ELIGIBLE VENDORS

The Louis Berger companies are responsible vendors serving and are receiving new contract awards from federal civil and military agencies, and state and local government clients. The matters discussed below arise out of misconduct of former LB Company employees that occurred in 2010 and earlier. This disclosure statement, the reform efforts undertaken, and the continuing attention to corporate responsibility ensure that the LB Company is presently a responsible vendor that deals fairly and honestly with its clients. This responsibility is best evidenced by the continued receipt of government contract awards by the Louis Berger Companies from federal, state and local government agencies.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

2010 False Claims Matter (LBG)

LBG was the subject of a False Claims Act ("FCA") investigation by the U.S. Attorney's Office in Newark, New Jersey for the over-allocation of overhead charges in connection with contracts performed for the U.S. Government overseas, primarily for USAID, between 1998 and 2007. LBG voluntarily refunded the over-allocated overhead charges to the U.S. Government. On November 5, 2010, LBG entered into a two-year Deferred Prosecution Agreement (the "2010 DPA") with the U.S. Department of Justice (the "DOJ"), a civil FCA Settlement Agreement (the "FCA Settlement"), and a three-year Administrative Agreement (the "AA") with USAID. LBG fully complied with the terms of and successfully completed the 2010 DPA, which expired in accordance with its terms on November 5, 2012 The AA was successfully completed on November 5, 2013. USAID has praised the Company's performance under the AA. All potential charges associated with the 2010 DPA were dismissed in November 2012. LBG paid a fine of $18.7 million under the 2010 DPA. LBG also paid $50.6 million (including the refunded overhead) under the FCA Settlement. The former LBG employees who were identified as orchestrating the improper conduct at issue in the FCA matter were separated from the company in 2009 and 2010, and were separately prosecuted by the DOJ.

2015 Foreign Corrupt Practices Act Matter (LBI)

During its own internal investigation of the FCA matter, the LB Company discovered evidence of potential inappropriate payments made to foreign government officials by rogue employees in breach of express company policy. The Company disclosed that information to the U.S. Government. The LB Company voluntarily commissioned a private law firm to conduct an extensive internal investigation for potential Foreign Corrupt Practices Act ("FCPA") violations, as well as a review of company business operations for potential violations of the standards of conduct applicable to projects financed by the World Bank and the Japan International Cooperation Agency ("JICA"). These apparent violations by personnel, previously employed by the LB Company, were limited to several overseas offices involving certain procurements in several countries in the Middle East and Asia and occurred between 1998 and 2010. The LB Company self-reported the misconduct uncovered by its internal investigation to the DOJ, the World Bank and JICA. The reviews performed by the DOJ, the World Bank, and JICA all centered on the conduct by same former employees.

- 2015 Deferred Prosecution Agreement: The DOJ and the U.S. Attorney's Office in Newark, New Jersey evaluated the self-reported FCPA issues involving conduct that occurred in 2010 and prior. LBI is the business unit that houses the operations responsible for these actions. In July 2015, LBI entered into a Deferred Prosecution Agreement with the DOJ and the U.S. Attorney's Office (the "2015 DPA") for a term of three years. LBI fully complied with the terms of and successfully completed the 2015 DPA, which expired in accordance with its terms on July 7, 2018. The LB Company fully cooperated with the criminal investigations of the individuals responsible for the misconduct, both of whom were separated from the LB Company in 2012, and eventually plead guilty to charges brought by the DOJ.
- World Bank Matter: The World Bank, as a public international organization, is not subject to U.S. domestic law and it is not a "governmental entity." It applies its own rules of conduct to the use of its finances. The World Bank reviewed the results of the LB Company's internal FCPA investigation of the LB Company's foreign business units with respect to World Bank-financed international development projects under the World Bank's internal standards of conduct. On January 29, 2015, the World Bank debarred LBG and its controlled subsidiaries for a period of 12 months, based on LBG's Vietnam contracts awarded before 2010, from participating in World Bank-financed projects. LBG worked cooperatively with the World Bank to satisfy the conditions of the World Bank order. On January 28, 2016, LBG fully complied with the terms of and successfully completed the one-year World Bank debarment and the LBG is now fully eligible to participate in World Bank projects.
- JICA Matter: As the FCPA investigation progressed toward conclusion, the LB Company's legal and management representatives briefed JICA regarding two JICA-financed international development projects, based in India, that were later named in the 2015 DPA. On September 18, 2015, JICA sanctioned LBG, the legal entity that originally entered into these two India-based JICA-financed projects, from pursuing new JICA-financed projects for a period of nine months. JICA did not impose any fine upon LBG or seek restitution of any payments received by LBG

LOUIS BERGER
412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

under the contracts at issue. On June 18, 2016, LBG fully complied with the terms of and successfully completed the JICA sanction period and the LBG is reinstated as an eligible bidder on all JICA-financed projects.

- India Projects Inquiries**:** The JICA-financed India projects referenced in the 2015 DPA were water supply projects in the Indian state of Goa and city of Guwahati. After the 2015 DPA was announced, local Indian authorities initiated investigations of the same self-reported conduct by former rogue employees that formed the basis of the 2015 DPA. This conduct occurred before the LB Company's comprehensive reform that began in 2010. LBG continues to cooperate with Indian investigative authorities in all aspects of their investigations.
    - During the Goa Crime Branch investigation, the LB Company shared requested documents and information and also shared the results of its internal investigations, with respect to the Goa project, with the authorities. Two former Louis Berger non-management employees provided evidence to Goa authorities. In August 2015, former Louis Berger India employee Satyakam Mohanty and former Goa Public Works Department Minister Churchill Alemao were arrested as part of this investigation. In addition, former Goa Chief Minister Digambar Kamat was charged with disappearance of evidence relevant to the investigation. In January 2017, Mr. Kamat was charged as a prime accused in the matter.
        - As part of the Goa investigation, LBG was charged on September 25, 2015 with violating section 120-B of the Indian Penal Code relating to conspiracy and with violating sections 7, 8, 9, and 13 of the Prevention of Corruption Act of 1988. The matter is pending before Special Judge, CBI Court Goa, and the charges in this matter have not yet been framed by the court against the accused.
    - The Directorate of Enforcement, Goa (the "ED") is currently conducting an investigation under the Prevention of Money Laundering Act, 2002 (the "PMLA") with respect to the Goa water supply project. The Company is fully cooperating with ED officials in all aspects of this investigation. On July 12, 2018, ED filed a criminal complaint in the Special Court under PMLA against the former Goa Chief Minister Digambar Kamath and former Minister Churchill Alemao charging them with violations of PMLA. LBG is not charged in this charge sheet.
    - The Guwahati Criminal Investigation Department ("CID") investigation, subsequently transferred to the Indian Central Bureau of Investigation ("CBI"), the LB Company shared requested documents and information required by the CID and CBI and also shared the results of its internal investigations, with respect to the Guwahati project. The CBI initiated their review in the normal manner for their cases, which consists of filing a First Information Report (FIR). The LB Company is fully cooperating with the authorities' ongoing investigation in Guwahati.
    - As a result of the Goa investigation, the Government of Maharashtra created an inquiry committee to look into the Maharashtra infrastructure contracts held by the LB Company. The committee has not sent any notices to the LB Company requesting any information or statements.

Statement as of March 1, 2019. Additional information on these topics are available, upon request, from the LB Company.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

2019 ANNUAL REPORT

INVESTING FOR GENERATIONS

CPP INVESTMENT BOARD

20 YEARS ANS

Table of Contents

01

Corporate Overview

Who We Are 1
20 Years of CPPIB 2
Chairperson's Report 4
President's Message 7
Operational Highlights 10
Additional CPP 11
Global Investments 12
Our People 14

02

Strategy

Our Mission and Investment Strategy 17
- Our Investment Strategy 23
- Investment Departments Overview 38
- Our People and Culture 43
- Furthering Operational Capabilities 45
- Accountability 45
- Risk Management 46

03

Performance and Governance

Management's Discussion & Analysis 52
- Financial Performance 53
- Performance of the Investment Departments 63
- Fiscal 2020 Objectives 85
- CEO/CFRO Certification 86
- Accounting Policies and Critical Estimates 86

Compensation Discussion and Analysis 87
- Report of the Human Resources and Compensation Committee 87
- Compensation Discussion and Analysis 89

Governance 102
- Governance Practices of the Board of Directors 103
- Board of Directors 112

04

Financial Statements and Notes

Management's Responsibility for Financial Reporting 116
Investment Certificate 117
Independent Auditor's Report 118
Financial Statements
- Consolidated Balance Sheet 120
- Consolidated Statement of Comprehensive Income 121
- Consolidated Statement of Changes in Net Assets 122
- Consolidated Statement of Cash Flows 123
- Consolidated Schedule of Investment Portfolio 124

Notes to the Consolidated Financial Statements 125

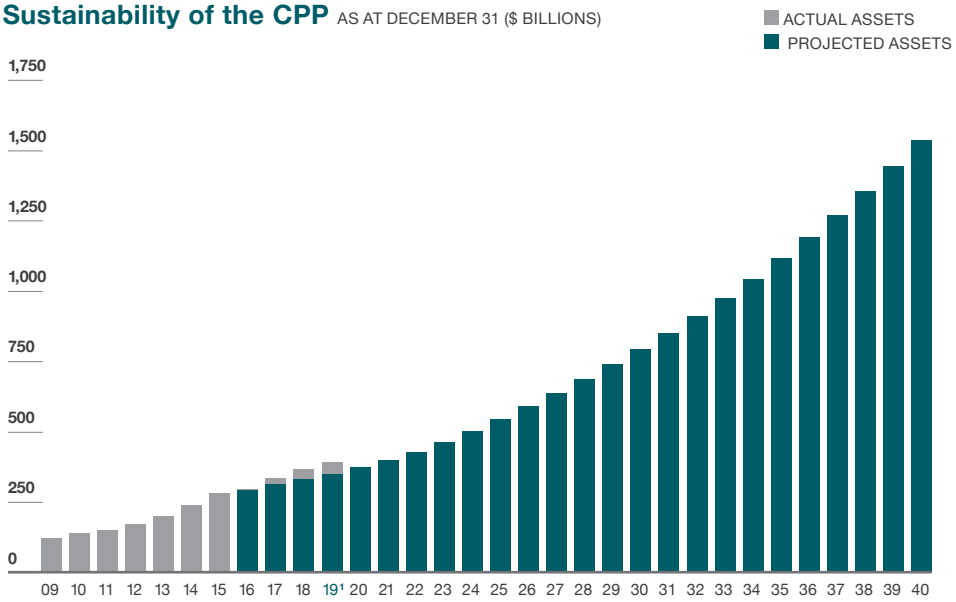
We are CPPIB. Investing for generations.

Canada Pension Plan Investment Board (CPPIB) is a global investment management organization established to help ensure the Canada Pension Plan (CPP) is strong and sustainable.

We compete around the world to secure and manage public and private assets. Our teams bring deep expertise and local knowledge. We take a disciplined, long-term approach to managing the CPP Fund.

CPPIB ensures the Fund is diversified by asset class and geography so that it is more resilient, and to safeguard the best interests of current and future beneficiaries against other factors affecting the funding of the CPP.

Sustainability of the CPP AS AT DECEMBER 31 ($ BILLIONS)



75+
YEARS OF CPP SUSTAINABILITY

20+ MILLION
CONTRIBUTORS AND BENEFICIARIES

The most recent triennial report by the Chief Actuary of Canada indicated that the CPP is sustainable over a 75-year projection period.

Projections of the CPP Fund, being the combined assets of the base and additional CPP accounts, are based on the nominal projections from the 29th Actuarial Report supplementing the 27th and 28th Actuarial Reports on the Canada Pension Plan as at December 31, 2015.

1 Represents actual total Fund assets as at March 31, 2019.

YESTERDAY

CPPIB began investing 20 years ago.

For Canada, it was a critical time. Canadian governments took action to address demographic changes and an impending pension shortfall. They also increased CPP contribution rates.

These bold reforms were a foundation to help ensure the CPP was placed back on sound financial footing for long-term sustainability and to support generations to come. In 1999, CPPIB received its first transfer of funds to invest.

We steadily evolved from there. From local to global. From passive to active investment management. All to build value and grow the Fund for contributors and beneficiaries.

In the past 10 years:

$239 BILLION

NET INCOME AFTER ALL CPPIB COSTS

11.1%

RATE OF RETURN (NET NOMINAL)

TODAY

Sustainable. Scalable. Diversified. This is CPPIB at its 20-year milestone.

Taken together, our clarity of mission, professional governance, scale, certainty of assets and investment strategy set us apart from other funds.

Our long-term performance helps provide a foundation on which Canadians can build financial security in retirement.

20 Years of CPPIB

1999
Received first transfer of funds from CPP to begin investing in publicly traded stocks

2001
CPPIB's first public meetings held in nine Canadian cities

First private equity fund investments

2003
First direct real estate transaction: Five Canadian shopping centres

In-house management of our passive public equity portfolio begins

2004
Legislated restrictions on investments in foreign holdings lifted

2006
CPP Fund surpasses $100 billion in assets

CPPIB made the decision to adopt an active management strategy

2008
Opened our first international offices in Hong Kong and London

$392 BILLION

CPP FUND VALUE AT MARCH 31, 2019

$32 BILLION

FISCAL 2019 NET INCOME AFTER ALL CPPIB COSTS

8.9%

FISCAL 2019 RATE OF RETURN (NET NOMINAL)

TOMORROW

We will continue to take ambitious steps forward.

On the path to 2025 we have set out a plan to position CPPIB for growth.

> We will build an increasingly diverse and global team and champion an inclusive culture

> Up to one-third of the Fund is set to be invested in emerging markets

> Technology and data will help us improve efficiency and investment decision-making

2009
Participated in three of the five largest private investment transactions in the world

2011
More than half the portfolio invested outside of Canada

2014
Increased our global footprint by opening offices in New York City and São Paulo, Brazil

2015
Opened offices in Mumbai, India and Luxembourg

2016
Marked 10 years of active management with the CPP Fund totalling almost $280 billion

2017
Opened our office in Sydney, Australia

2018
Issued our inaugural Green Bond, the first such market offering from a pension fund

2019
Began managing additional CPP contribution amounts

DEAR FELLOW CONTRIBUTORS AND BENEFICIARIES OF THE CANADA PENSION PLAN,

As Chairperson of CPPIB, it is my honour to report to you on the activities of the Canada Pension Plan Investment Board in this, our 20th year since receiving the first funds to invest on behalf of the Canada Pension Plan. Before I deliver the report on this year's activities, I will take a moment to reflect on the 20 years since CPPIB's inception.

CPPIB was formed by an Act of Parliament in 1997, with a singular mandate "to maximize returns without undue risk of loss, taking into account factors that may affect the funding of the Canada Pension Plan." Just over a year later, in March 1999, CPPIB received an initial transfer of about $12 million.

Over the ensuing 20 years, numerous developments took place, including our first private-market investment in 2001, our first commercial real estate investment in 2003, and our strategic decision in 2006 to move to an active management strategy.

Our enabling legislation, the *CPPIB Act*, provided three far-sighted, critical ingredients for the organization's successes to date: gold-standard governance, arm's-length operation from government and unambiguous investment objectives. The Board, Management and our stewards all agree that these will only become more important in the years ahead.

And, while this milestone 20th anniversary naturally has us looking back at what has brought us to this chapter in the life of the organization, CPPIB is a forward-looking organization by nature. Making decisions today with a view to the best interests of multiple generations is key to our mindset, and this draws our focus continually toward long-term performance.

In January 2019, CPPIB received its first transfer of funds from the additional CPP. The Board's oversight duties in preparation for this transfer included ensuring that the Board, Management and the organization as a whole are well-equipped to deal with the challenges of managing two accounts with different risk profiles; and to ensuring there would be no potential negative impact to the base CPP or additional CPP. To accomplish this, the Board worked both on its own and with Management to assess how CPPIB could best take on this new stream of funds, always considering how we can most effectively serve contributors and beneficiaries.

Details of how CPPIB is managing the additional CPP and the base CPP are found on page 20 of this year's annual report.

Since inception, CPPIB has repeatedly demonstrated that it can accomplish what it sets out to do. Our results this past fiscal year, where the total CPP Fund stood at $392 billion, are a prime example of the work the organization does to contribute to the sustainability of the CPP Fund.

DR. HEATHER MUNROE-BLUM
Chairperson

THROUGHOUT ITS 20-YEAR HISTORY, CPPIB HAS REPEATEDLY DEMONSTRATED THAT IT CAN ACCOMPLISH WHAT IT SETS OUT TO DO.

Stewardship of CPPIB's long-term investment strategy

In my report on CPPIB's activities last year, I wrote about the work Management had initiated with respect to developing the strategic direction for CPPIB in 2025. This year, Management received Board approval for the CPPIB 2025 strategy, which focuses on four key elements:

- Adopting a global investment approach;
- Placing a focus on using technology and data to empower all employees and drive better investment decisions;
- Building an operationally excellent core services team; and
- Furthering our talent and an optimal CPPIB culture.

It has been a big 12 months since my last report. I commend Management on setting a clear and ambitious strategy that positions CPPIB to compete across global capital markets, and to leverage its comparative advantages to benefit the CPP Fund.

In the spirit of proactively equipping ourselves to manage evolving risks, the Board continuously assesses CPPIB's risk oversight as well as the appropriate evolution of our risk management framework. In fiscal 2018, we appointed a Chief Financial and Risk Officer and established an ad hoc risk committee of the Board of Directors. That committee oversaw a comprehensive review of CPPIB's risk management practices. In February 2019, we formally constituted a standing risk committee of the Board to position our governance and the organization for the next phase of growth. (See page 103 for a description of Board membership and roles.) I look forward to reporting to you on the work of this committee in next year's report.

Optimizing CPPIB's culture is a key emphasis of the 2025 strategy, and part of the Board's commitment to best-in-class governance is expressed through ensuring CPPIB's culture, conduct and values represent a high standard and are enduring and owned across the organization. The Board struck an ad hoc conduct and culture committee in early 2018 with a mandate to review CPPIB's organizational culture and to consider opportunities to enhance oversight of our culture consistent with our goal to meet rigorous standards of business conduct.

The committee focused on a review and affirmation of CPPIB's core values, which underpin our culture and are articulated in our guiding principles and considered our Code of Conduct and related polices. A refreshed CPPIB Code of Conduct was approved by the Board and published on April 1, 2019 to ensure that our values of respect, integrity, partnership, inclusion and high performance are manifest and transparently embedded in our Code and across the organization.

The ad hoc committee on conduct and culture concluded its work in December 2018, with the Governance Committee of the Board taking on the supervision of Management's ongoing activities under the refreshed Code.

As an organization nearly 85% invested outside of Canada, we also pay close attention to the geopolitical environment. In fiscal 2019, this theme loomed especially large, with the growth of protectionism, trade uncertainty and growing trade tensions – particularly between the United States and China. Our Board oversight role requires us to understand the potential impact of geopolitical risks to CPPIB and to investigate Management's approach to anticipating and mitigating related risk impacts. The Board participated in numerous education sessions with Management and external experts to engage deeply with the potential risks related to these developments.

We also continue to be very much engaged in the oversight of CPPIB's efforts to understand and manage climate-related risks.

This past fiscal year, the Board provided guidance to Management on ways to enhance active assessment of Environmental, Social and Governance (ESG) and reputation-based considerations of CPPIB's portfolio, independent of the level of any one investment. Focus was placed on expanding the scope of assessments on potential investments, such that the Total Fund benefits from comprehensive risk-adjusted return calculations, including consideration of reputation and ESG factors.

Engagement with CPPIB's business activities

The Board's oversight of CPPIB's investment strategy requires us to have a deep understanding of the markets in which we operate. As we've done since 2014, the Board holds a meeting in one of our regional markets every other year, allowing us to learn more about the geopolitical context, immersing ourselves in the local operation, and meeting with our employees, investment partners and others of influence and interest in that region.

In fiscal 2019, the Board held a meeting in Latin America, where we met with employees, investment partners, peers and government contacts in São Paulo, Brazil and Santiago, Chile. Given CPPIB's focus on emerging markets as an element of its 2025 strategy, gaining deeper knowledge of Brazil, as the financial capital of Latin America, is critical. Through these face-to-face meetings with stakeholders, the Board gathered valuable insights into investment opportunities, as well as the challenges and geopolitical risks that global investment organizations like ours will face.

While it's important for the Board to hear from our global and domestic stakeholders, we and Management are always aware that the work we do serves the retirement benefit of 20 million CPP contributors and beneficiaries. In carrying out this critical, singular public purpose, public accountability is vital. CPPIB demonstrates this accountability through a multitude of activities, including robust disclosure of our investment activities, the tabling of this annual report in Parliament by the federal Finance Minister, public presentations at home and abroad, and during this past year through our Canadian public awareness initiative. In addition, every second year, we hold public meetings in every province that participates in the CPP. These meetings offer Canadians and stakeholder groups across the country the opportunity to meet with us, ask questions and learn more about CPPIB.

CHAIRPERSON'S REPORT

I co-hosted one of these public meetings in Halifax last year, where it struck me again how integral the success of this organization is to the Canadian fabric. Attendees ranging from post-secondary students to current beneficiaries asked us thoughtful and important questions on topics ranging from climate change, to costs, to the sustainability of the CPP. It is a privilege to hear directly from you and I thank each of the CPP contributors and beneficiaries who took the time to come out and speak with us. Our next public meetings will be held in 2020.

The Board's oversight activities also include an annual review of CPPIB's operating budget. In fiscal 2019, the operating expense ratio remained relatively steady over a five-year period at 32.8 basis points, as we added employees to manage the growing and increasingly diversified Fund, and invested in initiatives such as enhanced technology and data systems.

The Board also approves the appointments to CPPIB's Senior Management Team (SMT), and this past fiscal year we welcomed one individual in a new role, and four as successors. With these appointments, the SMT now has a strong combination of fresh perspectives and deep organizational knowledge, which is a substantial asset for an organization like ours that plans for 2025 and beyond. On behalf of my fellow Directors, I take this opportunity to welcome the new SMT members and to thank all of the SMT, including those who have departed, for their many significant contributions.

Continued renewal of the Board of Directors

This year, we completed the proactive work that began in 2015 to contribute to an effectively staggered renewal of the Board. I thank all of our Directors, past and present, who contributed to the development of this Board renewal process, targeted to deliver a dedicated, skilled and collegial Board, ongoing.

This fiscal year, the federal Minister of Finance announced the appointments of Sylvia Chrominska and Chuck Magro to the Board, reappointed Tahira Hassan, and myself as Chair. Sylvia and Chuck replace Ian Bourne and Bob Brooks, who both graciously extended their tenure to ensure a measured, smooth and orderly transition. Our first international Director, Jackson Tai, completed his term and his replacement will be announced in due course.

It is with both sadness and appreciation that I recognize Doug Mahaffy, who passed away in January, just following his retirement from the Board. Doug also served with dedication and great distinction during his nine years on the Board. The appointment of William "Mark" Evans, as Doug's replacement, was announced after our fiscal year end.

On behalf of my fellow Directors, I offer a warm welcome to Sylvia, Chuck and Mark, and extend profound gratitude to each of Ian, Bob and Jack for their dedication and superb record of outstanding contributions. Each provided sound guidance and wise, thoughtful governance oversight during a period of substantial change for CPPIB.

Complete biographies of our Board of Directors can be found on page 112 of this report.

In closing

I've had the consistent privilege of working with a superbly qualified and committed group of Directors and a stellar Management team. I thank our Directors for their thoughtful, sustained engagement in delivering a globally recognized standard of governance oversight of CPPIB. I also celebrate our CPPIB employees for their exemplary work, and ongoing commitment to providing a stable and secure base from which Canadians can plan their retirements led by our dedicated CEO, Mark Machin, and his senior team. Our employees working around the world have consistently placed equal emphasis on the results they achieve, and on how those results are delivered for Canadians.

I close expressing my appreciation to our Board, executive and all employees – and all those who have come before us – for the outstanding progress and contribution CPPIB has made over the past 20 years. As we enter the third decade of CPPIB, we all look forward to continuing to serve our common purpose: the retirement benefits of the contributors and beneficiaries of the CPP.

Sincerely,

Heather Munroe-Blum OC, OQ, PhD, FRSC

Chairperson

TO OUR FELLOW CANADA PENSION PLAN CONTRIBUTORS AND BENEFICIARIES,

MARK MACHIN
President & Chief Executive Officer

Canada Pension Plan Investment Board (CPPIB) has been through a remarkable evolution since it first began to invest your contributions 20 years ago.

We have steadily expanded internationally, broadened our investment and risk management capabilities and worked hard towards being the best fund of our type in the world – all to serve the 20 million people who have entrusted us with the foundation of their retirement savings.

At this 20-year milestone moment, CPPIB is taking stock of the past, but focused firmly on our future and the opportunities and challenges we see coming over the next 20 years. We understand the importance of data and technology, the shift in economic power toward emerging markets, and how we can use our comparative advantages and the reputation we've built to access the best investment opportunities and to attract the best people.

It is critical to me, as CEO, that Canadians have conviction that we will safeguard and grow the money that they, and their employers, contribute each month. This was top of mind for CPPIB in January, as we began to receive and invest additional CPP contribution amounts.

Much like 20 years ago, the first additional CPP transfer of funds was small – less than $15 million. Over time, that will increase to support the enhanced benefits that contributors will receive from CPP in their retirement years. The maximum benefit level will begin to climb from one-quarter to up to one-third of their average work earnings covered by the CPP. For CPPIB, this means more capital to invest over the coming decades, since additional CPP assets are expected to match base CPP assets by 2055.

Today, both the base CPP and additional CPP have the full advantage of CPPIB's global network, expertise, investment systems and risk management. (You can learn more about our strategy for investing these funds on page 20.)

While we look forward to this new phase of growth, it is also important to stay true to the mandate that has been our compass since the beginning: to achieve a maximum rate of return, without undue risk of loss, having regard to the factors that may affect the funding of the CPP. Each and every one of us at CPPIB is seized with the responsibility to invest on behalf of our contributors and beneficiaries, recognizing – as we did in 1999 – that a CPP pension is the source of basic retirement income for many people in this country. And, taken with Old Age Security, it is often the only money that provides precious peace of mind when it comes to the overwhelming challenges posed by life expectancy and market risks.

Another constant is our dedication to earn the trust of Canadians and ensure they are informed about CPPIB and our approach to managing their money. The compulsory nature of our asset management role – that Canadians don't get to choose CPPIB – imposes an even greater responsibility to demonstrate that they can count on us. We will continue to inform Canadians more directly by expanding our digital communication channels and seeking new ways to supply them with facts about the Fund that are efficient and low cost.

About 15 years from now, we project that CPPIB will cross $1 trillion in net assets, and we have conviction that the highly scalable investment programs we are building today can comfortably handle the increased size of the CPP Fund to serve Canadians now and in the future. Moreover, greater heft will strengthen CPPIB's competitiveness against investment behemoths that are already measured in trillions of dollars today.

PRESIDENT'S MESSAGE

Over the past 20 years, CPPIB has earned its standing as an influential and resourceful investor with a wide range of global capabilities that can keep pace with its asset growth. In fact, this year *The Economist* called us "an investment force to be reckoned with" and a model for many other countries. We view this accolade with humility, knowing that the world is changing rapidly and we can never be complacent. Our next 20 years will require us to expand our skills and embrace new technologies. We will also need an innovative spirit that will continue pushing us towards fresh ideas.

As I think about CPPIB's next phase of growth, it's clear that the principles that have defined our culture since day one – partnership, integrity, high performance and a strong sense of purpose – will guide us forward.

Investment climate

The past year confirmed our view that CPPIB will need bold and transformative thinking to anticipate the trends that will drive growth in the coming years, as well as navigate the vagaries of unexpected and unpredictable markets.

To begin with, geopolitical risks are more acute, with unpredictable potential outcomes witnessed around the world. Equity markets took a tumble as the last pages of the calendar were turned in 2018, but we then saw an early 2019 rebound in financial conditions, with generally supportive central banks – at least at the time of my writing, that is.

Aside from a confluence of temporary shocks, there are country-specific questions hanging over the global economy. In the United States, issues such as a government shutdown and a fading impulse from tax reform slowed the economy for the moment. Meanwhile, China's policymakers looked to targeted fiscal and monetary stimulus as they responded to trade pressures and witnessed a slowing in industrial activity that contributed to reduced GDP forecasts. What's more, Europe also felt the impact of an economic slowdown, with a decrease in exports that is reverberating through its economies and giving way to constrained fiscal and monetary policy.

These are tensions that we can't control. What we can do is continue to diversify the Fund and remain ready to take advantage of market dislocations and the opportunities that these uncertainties create. We must keep our eyes on our extended horizon and withstand the heavy pressures of dealing with current events.

Against a difficult backdrop, our investment departments worked creatively and collaboratively to find, assess and execute on new investment opportunities. This includes the partnership between Energy & Resources and Thematic Investing to explore the long-horizon potential to invest in the still-nascent electric car charging space, as well as the Infrastructure team working closely with both Power & Renewables as well as Relationship Investments to bring to bear new opportunities in hydroelectric power and water and wastewater management, respectively.

Extending our network of partners and deepening our global connections has also become increasingly important to our strategy as more and more large sources of capital compete for the best assets. CPPIB is grateful to its partners for another year of collaboration and idea sharing that helped build businesses and generate growth in the past year.

Another factor that is reshaping the global investment environment is climate change. As a long-term investor, understanding environmental impacts on our investments is a key consideration and we continue to chart both the risks and opportunities stemming from climate change. This year, we launched our inaugural Green Bond, becoming the first pension fund to do so. We followed that with a euro-denominated offering. These issuances provide additional funding for CPPIB as it increases its holdings in renewables and energy-efficient buildings as world demand gradually transitions in favour of such investible assets.

We expect that the next several years will look very different from today as demographic trends, new digitally driven business models and evolving consumer demand change the investment landscape. Our ability to navigate the increasingly complex and unpredictable future requires agility in our thinking and in our investment approach. To win we must continue to build our investing programs, strengthen our commitment to pushing deep into emerging markets and mine insights from our data systems.

Our performance

CPPIB's efforts to create a resilient Fund and build value is on track, as we report a 10-year rate of return of 11.1% this year, net of all costs.

To translate some of that success into dollar terms (because that's what pays pensions, after all), CPPIB's investment operations have contributed $152 billion in net investment income, after all costs, over the last five years alone. While we launched our active management strategy more than a decade ago, it takes time for programs to solidify and their assets to mature, so we are pleased to see this momentum.

Of course, as our 20-year journey shows, incremental gains along the way can add up too. In fiscal 2019, the Fund grew to $392.0 billion, comprising $32.0 billion in net income and received $3.9 billion in net contributions. We achieved a solid net return of 8.9% this year.

While these are strong annual results, our focus is on making a contribution to the long-term sustainability of the Fund. And we know that at our chosen risk level, which we believe maximizes returns in the long term while also not taking undue risk as detailed on page 30, we expect to incur annual losses of 17% or more once in any 20-year period. We also measure our success against our Reference Portfolios, a representation of the passive public investment alternative each account might otherwise hold. When public markets soar, we expect our Reference Portfolios to perform exceptionally well, often better than our total Fund.

However, during a downturn, our diversified Fund demonstrates its resilience, as it did this year where we had some bearish turns and bumps, particularly in December 2018 when a broad equity market sell-off saw the S&P 500 drop by roughly 14% during the fourth quarter of the calendar year.

Our dollar value-added (DVA) compared to our Reference Portfolios for the fiscal year was $6.4 billion. While it's important to report on our annual progress, we know that DVA is a volatile measure, and this is why we look at our success over the long term, and as of the end of the fiscal year, we have delivered $29.2 billion in compounded DVA since inception of our active management strategy.

As the Fund grows, and our investment decisions become increasingly global, we're also developing new risk management capabilities. This past year, the Risk group worked with senior management, and in partnership with the Board of Directors, to develop a new framework that supports and enables the risk-taking required to fulfil our mandate and to pursue returns, without taking excessive risk. Our new Integrated Risk Framework leverages our strong existing risk management practices while ensuring we have the necessary agility for seizing investment opportunities.

Our 2025 strategy

With two decades under our belt, CPPIB has hit its stride and truly knows its potential as a global active manager of capital. Last year, I wrote about the Board-approved strategic direction for CPPIB in 2025. Over this past year, we've continued to refine this 2025 strategy, and chart the course for the coming years.

Pillars of our 2025 plan include investing up to one-third of the Fund in emerging markets such as China, India and Latin America, increasing our opportunity set and pursuing the most attractive risk-adjusted returns. We have reoriented our investment departments to deliver on this growth plan, to manage a larger Fund and to achieve our desired geographic and asset diversification.

We will continue to develop an enterprise-wide technology and data capability and to improve our analytics and automation processes, while also better capitalizing on our collective knowledge. This year we were pleased to welcome Kelly Shen as Senior Managing Director & Chief Technology and Data Officer, a newly created role on the senior leadership team, to lead our advancements in this area.

Our corporate functions, including the human resources, tax, legal and other professionals are critical to ensuring it is possible for our operations to perform seamlessly.

We do all this while we further strengthen our focus on how we govern the organization, how we operate each day, and how we find, hire and retain talented professionals. Through it all, our employees, our stewards and our stakeholders can expect us to be transparent in our financial and investment disclosure. As mentioned earlier, public trust in our work is the lifeblood of CPPIB's mandate, and we must work hard to earn it every day and connect directly with contributors and beneficiaries.

CPPIB aspires to be a world-class, global investment organization in terms of strong governance, talent and delivering superior financial returns through our strong performance over the long term.

Looking ahead

At CPPIB's 20-year milestone moment, we reflect on what has helped us overcome many hurdles as well as what has fuelled this organization's growth.

Through this time, the one constant has been the quality of our people, who are all driven to succeed by the knowledge that they are helping to lay the groundwork for Canadians' retirement security. No matter which CPPIB office I visit internationally, I see that our employees are motivated to deliver their best for you each day.

I am enormously grateful for the opportunity to lead CPPIB as we meet these challenges and opportunities, and I am proud to lead an organization that has come so far since its founding. Thank you to our Board of Directors and all my colleagues at CPPIB for their hard work this past year, and for their relentless commitment and support of our organization and our mandate in the next phase of our journey. And thanks to you for trusting us with investing today for your tomorrow.

Sincerely,

Mark Machin

President & CEO

OPERATIONAL HIGHLIGHTS

Preparing to accept, invest and report on the additional Canada Pension Plan

- Completed the final stages of preparation for the arrival of additional CPP funds in January 2019. Changes to all policies, standards and procedures were completed and approved.
- Currently operating under the two-account, two-pool investment structure.

Improving our understanding of opportunities and risks related to climate change

- Accelerated our work on this issue with the creation of the Climate Change Program to oversee, guide and support our organizational efforts.
- Delivered a framework that allows investment teams to efficiently and effectively identify, assess and price key climate change risks and opportunities that are likely to have an economic impact on their investments.
- Produced and published the first ever carbon footprint of the public equities portfolio, with specific metrics including total carbon emissions and carbon intensity.

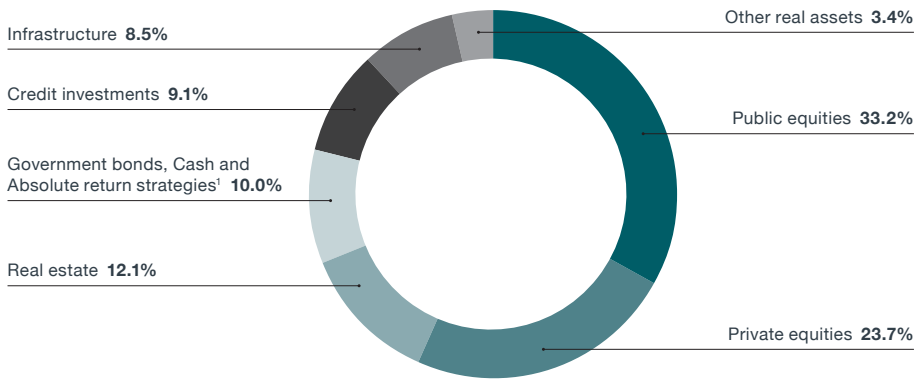
Driving better investment decisions with technology and data

- Created a focused Technology & Data department headed by a new Senior Managing Director & Chief Technology and Data Officer.
- Launched a Knowledge Management team to improve knowledge sharing and collaboration across the organization.

Scaling our investment activities and growing our emerging market investments

- Capital Markets and Factor Investing scaled to $66.5 billion in assets under management, including establishing new investment programs.
- Active Equities grew to $63.2 billion of assets under management, including increasing the Fund's emerging markets exposure by adding new investments, primarily in Asia and Latin America.
- Credit Investments was launched and assets increased to $36.6 billion through scaling our investment activities along the entire credit spectrum.
- Private Equity assets increased to $87.7 billion at the end of fiscal 2019 as we continue to actively manage relationships to generate deals.
- The Real Assets portfolio increased to $94.1 billion through a continued focus on growth, including in emerging markets.
- Grew our investments in emerging markets from $56.1 billion to $77.9 billion this year, representing 19.9% of our net investments; this includes $50.2 billion in Greater China.

Asset Mix AS AT MARCH 31, 2019



1 Net of external debt issuances

Investing Today for Your Tomorrow

Starting January 2019, CPPIB began to receive and invest additional CPP contribution amounts resulting from the recent enhancements to the CPP. These added amounts will be phased in for contributors over seven years starting in 2019, with full implementation in 2025. Both the base CPP and additional CPP will have the full advantage of CPPIB's global network, expertise, investment strategies and risk governance framework while being invested at their distinct investment risk profiles.

Here's an overview of how the enhancements to CPP will work, and the expected growth of the Fund.

Each scenario is based on $50,000/yr in wage-adjusted constant earnings.

STARTED WORKING IN 1990

Retires in 2030

Up to **$500/yr** in extra retirement benefits

5 years of full additional CPP contributions

STARTED WORKING IN 2010

Retires in 2050

Up to **$2,500/yr** in extra retirement benefits

25 years of full additional CPP contributions

STARTS WORKING IN 2025

Retires in 2065

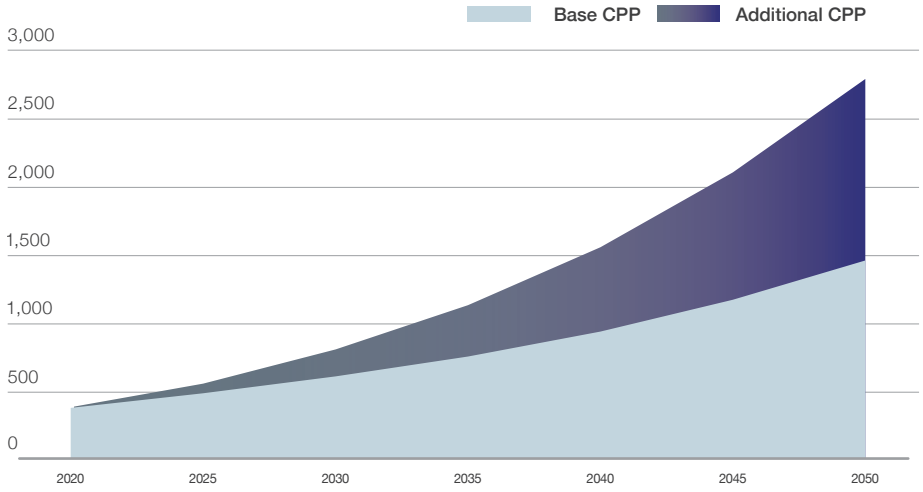
Up to **$4,000/yr** in extra retirement benefits

40 years of full additional CPP contributions

Fully enhanced benefits will be available after approximately 40 years of making additional CPP contributions, while partial benefits will be available sooner based on years of additional CPP contributions. Benefits are presented in wage-adjusted 2016 dollars.

Disclaimer: The information in this infographic is not intended to provide investment or financial advice to any individual or organization and should not be relied upon for that purpose. Source of data for additional CPP benefits: Department of Finance Canada, "Archived – Backgrounder: Canada Pension Plan (CPP) Enhancement", September 2016.

Growth of CPP Fund ($ BILLIONS AS PROJECTED IN THE 29TH ACTUARIAL REPORT)



Employee & Employer CPP Contributions

\+ **Fund Investment Returns**

– CPP Benefits

= **CPP Fund** {Base CPP & Additional CPP}

GLOBAL INVESTMENTS

CPPIB benefits from the CPP Fund's exceptionally long investment horizon, a certainty of assets and the scale of our operations. We have developed a global team of professionals with deep expertise and local knowledge. Located in eight international offices, our teams pursue attractive investment opportunities around the world.

52
COUNTRIES IN WHICH WE HOLD INVESTMENTS

274
GLOBAL INVESTMENT PARTNERS

425
GLOBAL TRANSACTIONS IN FISCAL 2019

Our Comparative Advantages

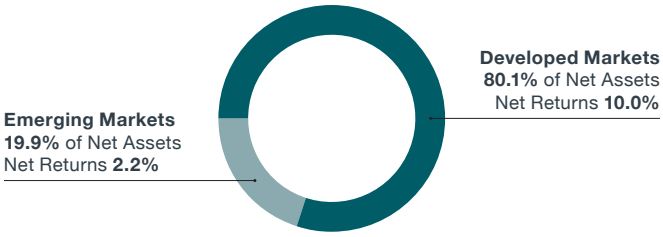
> Long-Term View

> Certainty of Assets

> Size and Scale

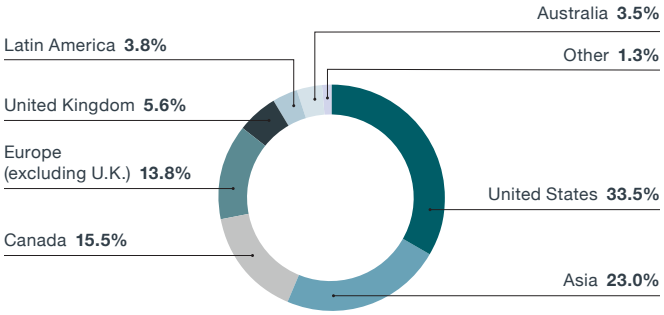
Total Fund Market Classification

AS AT MARCH 31, 2019



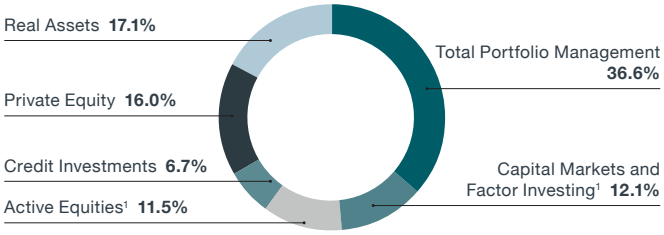
Global Diversification by Region

AS AT MARCH 31, 2019



Assets Under Management by Investment Department

AS AT MARCH 31, 2019



1 For Capital Markets and Factor Investing and Active Equities, Assets Under Management (AUM) represent the sum of long investments in each of these programs. AUM differs from Net Investments, which factors in offsetting systematic exposures through short investments.

Global Investments

1 Midstream joint venture
United States
US$1.34 billion
Formed a joint venture with Williams to establish midstream exposure in the U.S., with initial ownership stakes in two of Williams' midstream systems.

2 Grand Paris development
Paris, France
Formed a joint venture with CMNE, La Française's majority shareholder, to develop real estate projects linked to the Grand Paris project, a significant infrastructure initiative in Paris.

3 Ultimate Software
United States
Total value:
US$11 billion
Acquired a leading global provider of cloud-based human capital management solutions, alongside consortium partners Hellman & Friedman, Blackstone and GIC.

4 CPPIB Green Bond Issuance
Canada and Europe
C$1.5 billion/€$1.0 billion
First pension fund to issue green bonds in 10-year fixed-rate notes. Our inaugural Green Bond was a Canadian dollar-denominated bond, followed by a euro-denominated bond.

5 ChargePoint
United States
Total value:
US$240 million
Invested as part of a funding round in preferred shares of ChargePoint, the world's leading electric vehicle charging network.

6 European logistics facilities
Europe
€450 million
Formed a partnership with GLP and Quadreal to develop modern logistics facilities in Germany, France, Italy, Spain, the Netherlands and Belgium.

7 Companhia Energética de São Paulo (CESP)
São Paulo, Brazil
R$1.9 billion
Together with Votorantim Energia, acquired a controlling stake in CESP, a Brazilian hydro-generation company.

8 Pacifico Sur
Mexico
C$314 million (initial)
Signed an agreement alongside Ontario Teachers' Pension Plan to acquire a 49% stake in a 309-kilometre toll road in Mexico from IDEAL.

9 WestConnex
Sydney, Australia
Total value:
A$9.26 billion
Invested in WestConnex, a 33-kilometre toll road project in Sydney, alongside consortium partners Transurban, AustralianSuper and ADIA.

10 Logistics facilities
Korea
Up to US$500 million
Partnered with ESR to invest in modern logistics facilities in Korea.

11 Challenger fund
Australia and New Zealand
A$500 million
Partnered with Challenger Investment Partners to invest in middle-market real estate loans in Australia and New Zealand.

12 Ant Financial
China
US$600 million
Invested in Ant Financial, a company with an integrated technology platform and an ecosystem of partners to bring more secure and transparent financial services to individuals and small businesses.

13 Renewable power assets
Canada, U.S., Germany
C$2.25 billion
Acquired 49% of Enbridge's interests in a portfolio of North American onshore wind and solar assets and two German offshore wind projects, and agreed to form a joint venture to pursue future European offshore wind investment opportunities.

14 Berlin Packaging
United States
US$500 million
Invested US$500 million in the recapitalization of Berlin Packaging L.L.C. alongside Oak Hill Capital Partners. Berlin Packaging is a leading supplier of packaging products and services to companies in multiple industries.

Our people are our most valuable resources

1

Green Bonds

We issued two Green Bonds this year, which enabled us to invest further in eligible assets such as renewable energy projects, sustainable water and wastewater management systems and green real estate projects. Our Green Bond team collaborated on our inaugural issuance in June 2018, the first such market offering from any pension fund. Investors bought $1.5 billion of the Canadian dollar-denominated 10-year bond. Our euro-denominated Green Bond of €1 billion was issued in January 2019.

Team: (l-r) Redon Gallani, Natalie Steshenko, Jeffrey Hodgson, Samantha Hill, James Logush, Sandy McRae, Brian Savage, Mike Conrad

2

Ant Financial

Collaboration among Fundamental Equities Asia, Active Fundamental Equities and Thematic Investing teams led to an investment of US$600 million in Ant Financial, China's leading financial services technology platform. Through this investment, we increased our exposure to the Asia region and will contribute to Ant Financial's efforts to provide more secure, transparent, cost-effective and inclusive financial services to businesses and individual consumers both globally and in China.

Team: Roman Leifer, Kyu Ho, Jing Xu, Agus Tandiono, Helen Wu, Michael Tao, Mike Rodgers

3

Companhia Energética de São Paulo (CESP)

We extended our partnership with Votorantim Energia through a joint-venture opportunity to acquire the State of São Paulo's controlling stake in Brazilian hydro generation company Companhia Energética de São Paulo (CESP) for R$1.9 billion. Through this Power & Renewables investment, CPPIB increased its existing portfolio of renewable energy in Brazil and contributed to the growth of its valued partnership with Votorantim Energia, a leading player in the Brazilian power sector, after forming a partnership in December 2017.

Team: (l-r) Martin Laguerre, Sebastian Berardi, Jose Entrecanales, Bruce Hogg, Ricardo Szlejf, Karen Boutros, Joao Possamai

4

Grand Paris

The Real Estate team in Europe forged a new partnership in France with a leading real estate manager and investor La Française, and its parent company CMNE, to launch a real estate investment and development vehicle: Société Foncière et Immobilière du Grand Paris. Through this partnership, the team is positioned to access opportunities related to regeneration and infrastructure-led investments in the Greater Paris market, as the city's transit upgrade plans reshape the region.

Team: (l-r) Rod Carnan, Lillia Benzine, Marcus Peel, Andrea Orlandi, Tim Barlow

We have grown and excelled as a result of the commitment of our people and their devotion to our purpose. Their investment knowledge, international experience and dedication to high performance drives us forward. They enable us to successfully pursue attractive investments across geographies and asset classes.

5

Additional CPP

For more than a year before we began to receive additional Canada Pension Plan contribution amounts, teams across our organization worked to ensure that these incoming amounts would be invested at their distinct investment risk profile while still having the full advantage of CPPIB's global network, expertise, investment strategies, operational capability and risk governance framework. The new two-account structure is now serving all CPP beneficiaries and contributors.

Team: (l-r) Stephen McGurk, Tara Perkins, Julie Levesque, Brad Sinclair, Susan Han, Steven James, Wei Wang, Stephanie Lau, Dario Kosarac, Asheeyah Shameer, Marinde Kwok, Logan Willis, Scott Bull

SENIOR MANAGEMENT TEAM

CPPIB's Senior Management Team brings a broad range of experience to lead the organization.

LEFT TO RIGHT

Suyi Kim
Senior Managing Director & Head of Asia Pacific

Edwin Cass
Senior Managing Director & Global Head of Real Assets

Mary Sullivan
Senior Managing Director & Chief Talent Officer

Shane Feeney
Senior Managing Director & Global Head of Private Equity

Geoffrey Rubin
Senior Managing Director & Chief Investment Strategist

Patrice Walch-Watson
Senior Managing Director, General Counsel & Corporate Secretary

Kelly Shen
Senior Managing Director & Chief Technology and Data Officer

Mark Machin
President & Chief Executive Officer

Alain Carrier
Senior Managing Director & Head of International, Head of Europe

John Graham
Senior Managing Director & Global Head of Credit Investments

Michel Leduc
Senior Managing Director & Global Head of Public Affairs and Communications

Neil Beaumont
Senior Managing Director & Chief Financial and Risk Officer

Deborah Orida
Senior Managing Director & Global Head of Active Equities

Poul Winslow
Senior Managing Director & Global Head of Capital Markets and Factor Investing

OUR MISSION AND INVESTMENT STRATEGY

This section provides an overview of how CPPIB manages the Fund.

How we manage the CPP Fund

Our investment objectives

The *Canada Pension Plan Investment Board Act* directs Canada Pension Plan Investment Board (CPPIB) to manage the assets of the CPP Fund in the best interests of contributors and beneficiaries of the Canada Pension Plan (CPP). CPPIB's primary objective is to "invest its assets with a view to achieving a maximum rate of return, without undue risk of loss, having regard to the factors that may affect the funding of the Canada Pension Plan."

Aligned with our independence from any government, the Act sets no expectations or directions on economic development, social objectives or politically based directives. As a result, we are able to invest with an unambiguous focus solely on the interests of CPP contributors and beneficiaries.

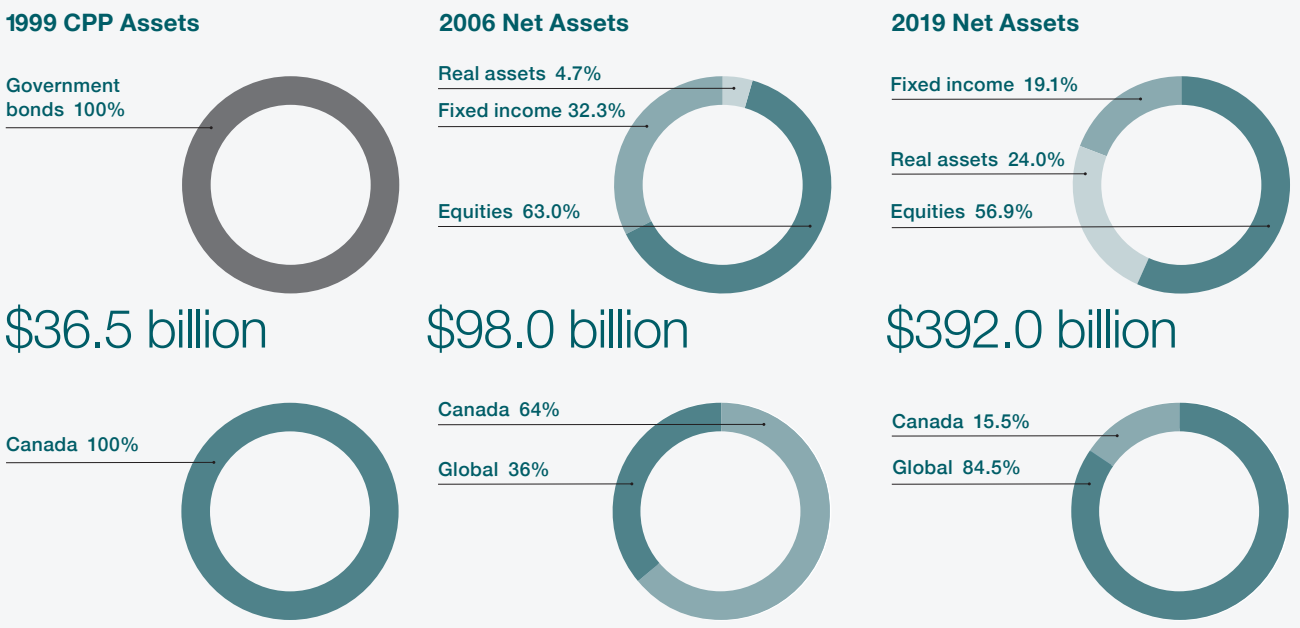
Our purpose

CPPIB's purpose is to help sustain the CPP as a foundation on which Canadians can build financial security in retirement by appropriately investing the assets of the CPP Fund. When the CPP began in 1966, the contribution rate was set low but with the clear expectation that it would rise over the years. By 1997, despite several increases in contribution rates, there was serious concern about the viability of the CPP. In response, the federal and provincial governments worked together to place the CPP on more secure financial footing. They made two major changes. First, they introduced a system to set contribution rates at a long-term, stable level. Second, they directed the CPP Fund to invest broadly in the capital markets to seek higher long-term returns that will help better sustain the plan. They also established CPPIB as an independent Crown corporation to manage investment of the CPP Fund, at appropriate levels of risk, to maximize long-term returns.

Until March 1999, the CPP Fund was invested only in non-marketable Canadian, federal, provincial and territorial bonds (known as CPP Bonds). It is at that time that CPPIB became responsible for investing all CPP contributions not needed for CPP payments and administration expenses and for reinvesting all net income it generates. Together with net transfers from the CPP, which include the CPP Bonds and net cash flows, the Fund has grown to its current value of $392.0 billion. In January 2019, CPPIB also took on responsibility for managing the assets of the additional Canada Pension Plan (additional CPP). See page 20 for more details on additional CPP. The assets held through the additional CPP reached $423 million at March 31, 2019, and will grow rapidly with the anticipated substantial additional net cash inflows.

Historical Comparison of the Portfolio for the CPP

As at March 31



It is critical that CPPIB manages the Fund so as to offset the risks and non-investment factors that the CPP itself faces. These include an aging population in Canada, future levels of employment and immigration, and the real rate of growth in earnings on which CPP contributions are based. To offset exposures exclusively related to future Canadian economic and demographic conditions, our investments are prudently diversified. Combined with the relatively small size of domestic capital markets, this is the key reason why a large proportion of Fund assets, currently 84.5%, is invested outside Canada.

Managing a public fund responsibly and successfully is not only about investment skill – it is also about the organization's culture. CPPIB's strong and unifying culture is founded on our Guiding Principles – Integrity, Partnership and High Performance. As a first order of business, we seek to attract talented individuals who are truly motivated to work for an international, professional organization that serves a meaningful national purpose. All new employees receive in-depth orientation on the role and impact of these three core principles that guide everything we do. All staff members also attend an intensive workshop every year devoted to reviewing the Guiding Principles, actively discussing how they apply through case studies and reinforcing their use in everyday duties.

Our annual employee performance review process includes an assessment of how each employee has demonstrated these principles in their work. We evaluate an employee's performance not only on their results but also on how they have achieved them.

Independence with accountability

All the assets in the CPP Fund are owned by CPPIB and are entirely separate from any government's assets. CPP contributions by plan members and employers are savings invested in the Fund to generate retirement income benefits. Unlike Old Age Security, CPP benefits do not come from general tax revenues. The money required to pay CPP benefits comes from only two sources:

- Contributions from plan members and their employers based on employment earnings up to the maximum amount covered by the CPP, and
- Investment returns earned on the Fund.

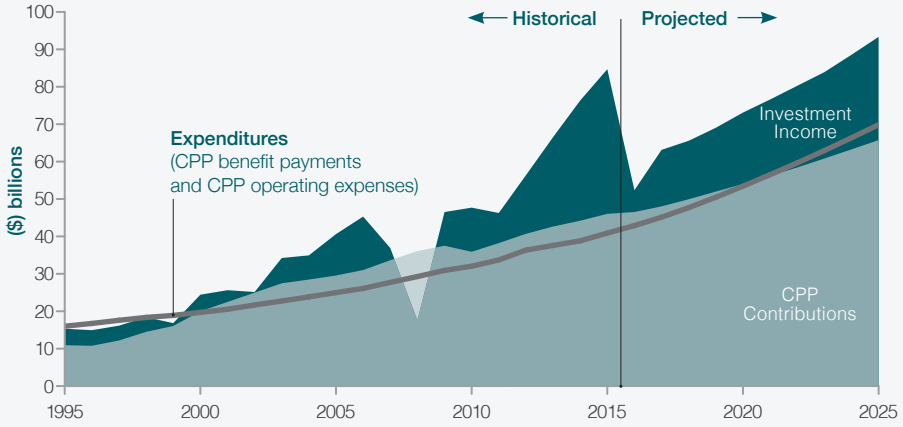
Most importantly, unlike taxes collected into the consolidated revenue fund, CPP contributions may only be applied to serve the CPP.

Canadians expect the CPP to remain free from political influence. Under the 1997 CPP reforms, the federal and provincial finance ministers enshrined CPPIB's independence with carefully written legislation, ensuring that we can, and do, operate at arm's length from any government. To maintain the public's trust through a careful balance between independence and accountability, we operate in a highly transparent way. This includes:

- Explaining through multiple public outreach channels who we are, what we do and how we invest;
- Broadly disclosing our investment activities and major transactions in a timely manner;
- Issuing regular reports about our assets, portfolio holdings and performance results;
- Holding public meetings every two years in each participating province;
- Preparation of an external Special Examination every six years; and
- Actively engaging with news organizations, stakeholders and other interested parties.

CPP Revenues and Expenditures

As at December 31 ($ billions)



From the 27th Actuarial Report:

> The assets grow continuously over the projection period. During the period 2000 to 2020, contributions are more than sufficient to cover expenditures.

> From 2021 onward, a portion of investment income is required to fund CPP expenditures.

> Investment income, which represents 24% of revenues in 2017, will represent 30% in 2030. This clearly illustrates the importance of investment income as a source of future revenues for the CPP.

> Based on Table 10 – Historical Results and Table 11 – Financial Projections for the base CPP.

Similarly, our Board of Directors is accountable to the stewards of the CPP, the federal and provincial finance ministers. Our diverse Board is appointed by the Governor in Council on the recommendation of the federal Minister of Finance, following consultation with the provinces.

CPP contributors and beneficiaries can take comfort in these strong checks and balances to protect their best interests and the independence of the Fund. Amendments to the legislation that governs CPPIB, and certain amendments to the legislation that governs CPP, require agreement by the federal government plus two-thirds of the provinces representing two-thirds of the population. This is a higher requirement than for changes to the Canadian Constitution.

Finally, the overall framework has been upheld by various organizations as a leading example for other countries to emulate in the management of public funds.

Current and future status of the CPP Fund

Every three years, the Office of the Chief Actuary of Canada conducts an independent review of the sustainability of the CPP over the next 75 years. In addition to future return expectations, this review takes many factors into account, including:

- The growing base of contributors and employment earnings;
- The rising ratio of those receiving pension benefits relative to contributors; and
- Expected increases in life expectancy.

The most recent actuarial review of the base Canada Pension Plan (base CPP) – that is, as it existed before January 2019 – was conducted as of December 31, 2015. The results were released in the 27th Actuarial Report in September 2016. The Report concluded that the CPP is sustainable for the next 75 years. It showed that investment income over the three years since the previous review was 248% higher than expected, contributing $67.5 billion to the $70 billion by which Fund assets were higher than anticipated by the end of the period. While results as favourable as these are not expected to be repeated, the additional investment income helped offset the additional costs associated with increased benefits. It also helped offset non-investment factors, such as a greater increase in life expectancy than anticipated in the previous review.

A key assumption in the 27th Actuarial Report is that, over the 75 years from 2015, the base CPP investments will earn an average annual rate of return of 3.9% above the rate of Canadian consumer price inflation, after all investment costs and CPPIB operating expenses. In the 28th Actuarial Report, covering only additional CPP, the corresponding assumption is that the additional CPP investments will earn an average annual net real rate of return of 3.55%. The next actuarial review will cover the status of both base and additional CPP as at December 31, 2018, and will be performed in calendar 2019.

Additional Canada Pension Plan (additional CPP)

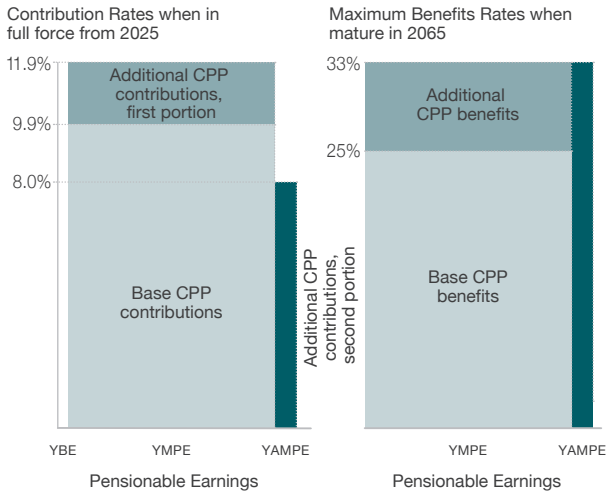
In December 2016, following federal and provincial agreement, Royal Assent was given to Bill C-26, *An Act to Amend the Canada Pension Plan*, the *Canada Pension Plan Investment Board Act* and the *Income Tax Act*. This Act increased the amount of retirement pensions and other benefits that will be paid on contributions made after 2018. It also increased both the rate of contributions required on earnings covered by the CPP and the upper limit on covered earnings. The contribution and earnings limit increases began in January 2019 and will be phased in over seven years.

With this Amendment, the Canada Pension Plan now defines the enhanced CPP in two parts. The "base" Canada Pension Plan (base CPP), refers to the benefits and contributions at the rates used before January 2019. The "additional" CPP refers to the additional benefits and the additional contributions that started in January 2019. The contributions, benefits and resulting assets for the additional CPP must be accounted for separately from those for the base CPP.

The additional contributions are set at levels such that, together with investment income, they are expected to be sufficient to fully pay the additional benefits (see the call-out box on page 22). Contributors will gradually earn additional benefits as they make additional contributions. Full additional benefits will be paid out only after 40 years of contributions. The diagrams illustrate the increases in:

- Contribution rates after 2025, following the phase-in period;
- Covered earnings from Year's Maximum Pensionable Earnings (YMPE) to Year's Additional Maximum Pensionable Earnings (YAMPE) in 2025; and
- Maximum benefits rising from 25% to 33% of pensionable earnings following 40 years of contributions.

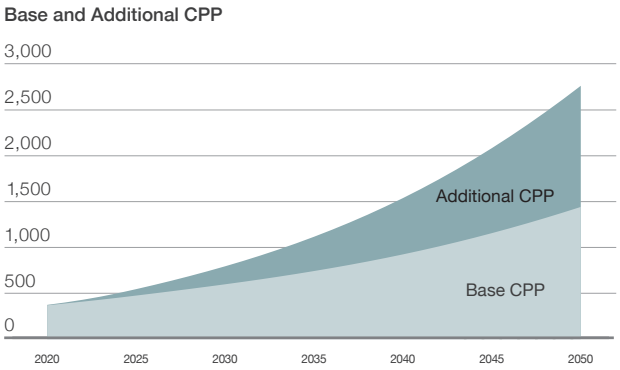
Increase in Maximum Benefits, Covered Earnings and Contribution Rates



YBE – Year's Basic Exemption
YMPE – Year's Maximum Pensionable Earnings
YAMPE – Year's Additional Maximum Pensionable Earnings

Growth of CPP Fund

($ billions)



Office of the Chief Actuary Projections – 29th Actuarial Report

Financial projections

The charts on page 21 show expected growth in contributions and expenditures (CPP benefits plus CPP operating expenses) for the base CPP and the additional CPP until 2050. These figures are based on projections in the 29th Actuarial Report, released in 2018.

Both the base CPP and additional CPP accounts have two sources of growth: cash inflows received from the CPP when contributions exceed benefits, and net investment income. For the base CPP, annual benefits will likely begin to exceed contributions in 2021.

Contributions to the additional CPP are projected to far exceed benefits payments until at least 2057. As a result, the assets in the additional CPP account will grow at a much faster rate than those in the base CPP account. By 2055, the two accounts are expected to have comparable assets of about $1.8 trillion each. Thereafter, assets in the additional CPP account are expected to remain greater than in the base CPP account.

Since the additional CPP is fully funded, whereas the base CPP is only partially funded, the two parts of the CPP differ significantly in terms of their future proportions of contributions and investment income as a percentage of total revenues. For the base CPP, the percentage of total revenues represented by investment income is expected to grow slowly from 26% in 2020 to 34% in 2070. However, for the additional CPP, investment income will grow steadily as a percentage of total revenues, stabilizing at about 70% of its total revenues by 2070.

Risk target

As previously noted, investment income will perform a much larger role in sustaining the additional CPP than it does for the base CPP.

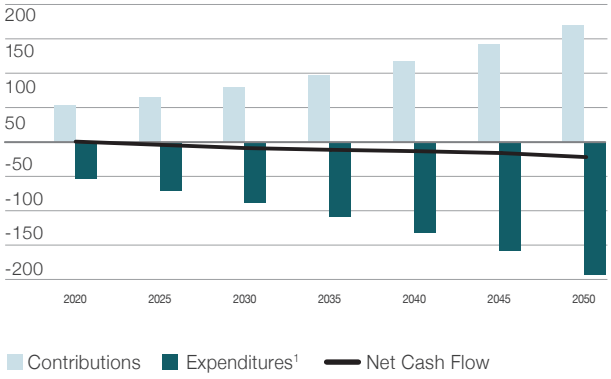
CPPIB expresses the absolute risk target for each Investment Portfolio (that is, the Investment Portfolio for each of the additional CPP and base CPP) as being equivalent to that of its Reference Portfolio. The higher the risk target, the higher the long-term expected returns but also the greater the shorter-term volatility and potential for losses. (The role of the Reference Portfolios is explained in further detail on page 30.) For the base CPP, CPPIB has adopted a Reference Portfolio of 85% global equity/15% Canadian governments nominal bonds. By contrast, the additional CPP will be fully-funded, and as a result, has a lower risk target. This is appropriate even in the early years when invested assets are relatively small. Our analysis shows that adopting a higher risk is not warranted, given our longer-term investment perspective. For the additional CPP account, CPPIB has adopted a Reference Portfolio of 50% global equity/50% Canadian governments nominal bonds.

CPPIB will review the Reference Portfolios for both of the base CPP and the additional CPP at least every three years, following the publication of each applicable Actuarial Report.

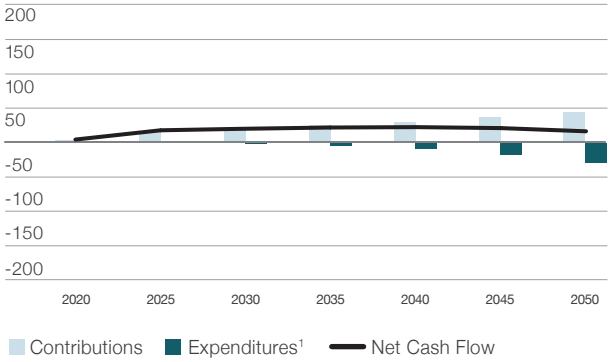
Projected Growth of Base and Additional CPP

($ billions)

Base CPP Contributions, Expenditures[1] and Net Cash Flow



Additional CPP Contributions, Expenditures[1] and Net Cash Flow



1 CPP benefits plus CPP operating expenses.

Two-pool investment structure

We have considered investment structures that would enable us to maintain different levels of total risk in each of the two parts of the CPP while also ensuring that the additional CPP account can benefit from all of CPPIB's comparative advantages, operational capabilities and the investment programs we have developed.

The economic benefits of CPPIB's investments (whether public securities or private assets) must be equitably allocated between the base CPP and additional CPP. To do so, we must:

- Account for the base CPP and the additional CPP separately, including their respective cash flows, assets and economic interests in shared investments;
- Invest (or generate when needed) new weekly CPP net cash flows for both the base CPP and the additional CPP in an equitable manner and at the same time; and
- Manage each account cost-efficiently.

To meet these objectives, CPPIB established two investment pools, each divided into units that are valued daily. Each of the base CPP and additional CPP accounts will invest their long-term Investment Portfolios through holdings of these units.

The "Core Pool" initially consisted of CPPIB's existing long-term portfolio. Future net cash flows to or from the base CPP will be allocated to/from the Core Pool, and it will be managed to the risk level appropriate for the base CPP Investment Portfolio. Also, a substantial proportion of additional CPP cash inflows – 55% to 60% – will be allocated to the Core Pool. This unitized-pool structure will allow the base and additional CPP Investment Portfolios to share proportionately in all the investment programs in the Core Pool.

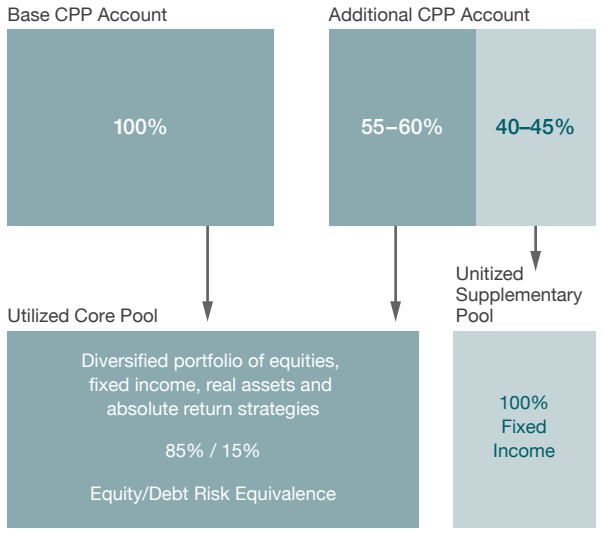
To maintain the lower-risk target of the additional CPP, the remaining assets of the additional CPP Investment Portfolio are invested in a lower-risk "Supplementary Pool." This pool is composed of fixed-income securities. When the Supplementary Pool is combined in the right proportion with the additional CPP's investments in the Core Pool, the resulting overall risk and the underlying market and currency exposures are appropriate for the additional CPP's Investment Portfolio.

Because returns in the Core and Supplementary Pools will differ, the proportions of the two pools held by the additional CPP account will drift over time. CPPIB will rebalance the proportions primarily by adjusting how much of the weekly incoming cash flow from the additional CPP goes into each pool.

The two-pool structure allows CPPIB to apportion all opportunities, individual investments and investment programs fairly, continuously and efficiently between the base CPP account and additional CPP account. The structure respects the distinct risk targets of the base CPP and additional CPP Investment Portfolios while avoiding the significant costs and complexity that would be associated with entirely separate management of each account.

Both the base CPP and the additional CPP accounts include their own Investment Portfolio and Cash For Benefits Portfolio. CPPIB manages cash on a short-term basis in the Cash for Benefits portfolios to support monthly benefit payments made by the CPP. The Cash for Benefits portfolios are segregated from the long-term Investment Portfolios and invested only in liquid money market instruments. The primary objective is to ensure the CPP can meet benefit payment obligations on any business day.

Two-Pool Investment Structure



Financing Social Insurance Programs

The financing of a social insurance program may be characterized by the importance of investment income in the program's total revenues over the projection period.

For a fully funded program, such as the additional CPP, investment income is expected to represent about 70% of total revenues (investment income plus contributions). As a result, a fully funded plan is directly sensitive to:

> Any changes in the assumed rate of return on investments; and

> Any difference in the returns subsequently achieved, compared to those expected.

At the other end of the funding spectrum, a completely unfunded plan (or "pay-as-you-go" plan) holds very little assets. It must balance total contributions paid in and total benefits paid out each year. It is most sensitive to demographics – life expectancy, birth rate, immigration rates – and economic changes, including the level of employment and rate of real wage growth.

The base Canada Pension Plan (base CPP) is a partially funded plan. The Chief Actuary estimates that the investment income will represent about 30% to 35% of total revenues. A partially funded plan is sensitive to all risks discussed above in differing amounts, depending on the relative size of investment income and contributions. Most important, it is less sensitive to investment returns than a fully funded plan. However, the base CPP's current investments plus future contributions are nevertheless expected to fully pay for all accrued and future benefits, assuming a stable contribution rate for current and future contributors.

Governance

The new two-account structure prompted a review of all our governance policies and procedures. An internal committee was charged with ensuring that the two-account, two-pool investment structure continues to serve CPPIB's statutory objectives and maintains fairness between the base and additional CPP accounts. Specific accountabilities include overseeing an annual review of the investment structure and reporting these findings to the Board.

We have enhanced certain aspects of our risk governance framework (described on page 47) to reflect the additional CPP. Certain governance protocols have been expanded to include the additional CPP as well as the base CPP. In particular, each account will have its own risk limits within the Risk Policy.

OUR INVESTMENT STRATEGY

In this section, we explain CPPIB's investment approach to meet the Fund's objectives.

Our investment strategy has a dual focus. It is designed to:

- Achieve long-term total returns that will best sustain the CPP and pay pensions, and
- Use our comparative advantages to earn long-term dollar value-added returns materially above what could be achieved through a low-cost, passive investment strategy.

What differentiates CPPIB's investment approach

To succeed in highly competitive global financial markets over the long term, an investor must have – and make use of – significant comparative advantages. The durable nature of the CPP Fund, our governance, our culture and the strategic choices we make help differentiate CPPIB from other investors.

A number of comparative advantages drive CPPIB's global competitiveness and determine our strategies to maximize long-term CPP Fund returns.

Our inherent advantages

The nature of the CPP Fund itself carries three distinct investing advantages:

Long horizon – The CPP must serve Canadians for many generations to come. As a result, the CPP Fund has a much longer investment horizon than most investors. We can assess the prospects of our strategies and opportunities over decades, as well as over quarters or years. And we can withstand short-term downturns to pursue higher returns and create enduring value over the long run. Most investors take a shorter-term approach, whether by choice or because business pressures or regulation forces them to do so. As such, they are limited in their ability to access or retain certain investments. We can actively but patiently pursue these opportunities to the long-term benefit of the CPP Fund.

Certainty of assets to invest – The CPP Fund's future asset base is largely predictable, and its pattern of cash flows into the future is generally stable. Expected combined contributions from both parts of the CPP are expected to exceed combined benefits paid for many years to come. As a result, we are not forced to sell assets to pay benefits and can design and build programs in reliable anticipation of future investment needs. This certainty of assets and cash flows underpins our ability to act as a long-term financial partner in major transactions.

Scale – As the CPP is one of the largest retirement funds in the world, we can access opportunities globally for which few others can compete. We are able to make major investments in private markets and to engage in public market strategies that are not readily accessible to many investors. In addition, our size enables us to maintain highly skilled in-house teams and to access major external partners. Scale also allows us to develop the investment technology and operational capabilities needed to support those teams as they execute our wide range of strategies. By handling many investment and operational activities ourselves, we achieve a cost-effective global investing platform.

Our developed advantages

The choices we make as an organization afford us three key strategic advantages:

Internal expertise and brand – Our expertise, local knowledge and reputation allow us to source and develop the best opportunities across the globe, in both private and public markets. Headquartered in Canada, we employ professionals working from eight international financial centres. The global team creates enduring value by combining best practices, depth, skill, experience and expertise to manage assets both internally and with external partners. Our brand and reputation allow us to attract, motivate and retain high-calibre executives, investment professionals and operational specialists from around the world.

Expert partners – Through our scale and other advantages, we are able to engage the specialized resources and expertise of many top-tier external partners around the world. Our internal expertise allows us to work as equals with these long-term partners to maximize benefit for the Fund. Through these partnerships, we gain additional access to major investment opportunities, especially in emerging markets. We enter co-investments and other joint efforts with them, in ways beyond the reach of many investors. Our external partners provide further rigorous research, in-depth, on-the-ground analysis and local knowledge, as well as supplying ongoing asset management services.

Total Portfolio Approach – We believe that broad asset class labels such as "real estate" or "equities" do not sufficiently capture the more complex variety of factors that influence the risks and returns of investments. As a result, we consider the fundamental and more independent return-risk factors that underlie each asset class, strategy and type of investment. This allows us to better understand and quantify the distinct return-risk characteristics of each investment and program. Armed with this understanding, we can more effectively combine them into a truly diversified total portfolio that more accurately achieves our targeted overall risk and preferred mix of global exposures designed to maximize returns overall.

How we create value for the CPP Fund through active management

In 2006, CPPIB made the strategic decision to actively manage the Fund to a much greater degree, with the Reference Portfolio(s) as the performance benchmark(s). The combined value of the total Fund now stands at $392.0 billion. That is more than $29.2 billion higher than would have been the case had the assets at April 1, 2006 (plus all subsequent cash flows) earned the Reference Portfolios' rates of return.

Pursuing an active, global strategy was a fundamental strategic decision. We review this decision on an ongoing basis. We recognize that many investors seek above-market, risk-adjusted returns; few consistently achieve them. Active management is not a low-cost approach. It increases complexity and resource requirements as we deal with additional sources of risk and return. But we believe that applying our comparative advantages in actively managing the Fund to achieve above-average returns is prudent, responsible and consistent with our statutory objectives. We remain confident that our active management approach will generate sustained value over the long term.

Success in active management requires not only deep investment insights but also well-structured processes to capitalize on them. It means having the right resources to access and negotiate large, often complex, deals in private markets, and to manage and grow these assets over time. And, it requires expertise to identify and execute the best strategies in public markets. The leading long-term investors in the world's marketplaces will be those with the most talented and disciplined investment teams. As we coordinate our value-creating investment programs, we allocate our resources and skills where they will have the greatest impact in diversifying risks and maximizing long-term returns after all costs.

CPPIB's stature as a global investor also enables us to engage constructively with governments, corporations and like-minded investors to improve public policy and promote best practices with a view to better long-term returns for all stakeholders. This includes engaging as an active owner or lender in the companies in which we invest. We believe that responsible conduct not only increases corporate profits, but also improves the functioning of capital markets for all participants.

In 2016, CPPIB, along with McKinsey & Company, BlackRock, Dow Chemical and Tata Sons founded FCLTGlobal as a non-profit organization dedicated to developing practical tools and approaches that encourage long-term behaviours in business and investment decision-making. Today, the organization comprises more than 40 leading asset managers, asset owners, corporations and professional services firms. For more information, see fcltglobal.org.

The three sources of total portfolio return

Through active investment decision-making, we pursue absolute returns and value-added greater than the benchmark Reference Portfolios. We do this through three basic sources:

1. Diversification
Diversification is the most powerful way to enhance investment returns at a targeted level of total risk. The key to optimal diversification is to understand both the short-term volatilities and the long-term risk-return factors underlying each broad investment area and each investment program. It is also important to understand how investment areas relate to each other, rather than simply looking at each in isolation.

The Three Sources of Total Portfolio Return

Systematic and non-systematic risks

Investment returns cannot be earned without accepting some form of risk. Investors face two general types of risk: systematic and non-systematic.

> Systematic risks stem from common factors that affect all investments of a particular type. These risks can be diminished through diversification, but not eliminated. We believe that, over sufficiently long periods, in aggregate, market asset prices and income will adjust to deliver the returns required by investors to justify exposure to systematic risks. The market returns earned over time from systematic risk factors are often called "beta."

> Non-systematic or "idiosyncratic" risks are those that are unique to a particular selected asset, investment or strategy. The gains or losses, beyond beta, that arise from intentional exposure to non-systematic risks are often called "alpha." Non-systematic risk can be substantially reduced through diversification within specific investment types, but this also reduces potential alpha.

As research into markets continues, the line between market-based beta and skill-based alpha is increasingly blurred. Regardless of the label, CPPIB balances risk exposures to focus on maximizing total net return, at the targeted total risk level, from all sources.

To do this, we use the Total Portfolio Approach, one of our developed advantages (see page 23). Our operating principle is that only those investment areas and programs that have fundamentally different sources of value creation offer true diversification. The risk and expected return of the total portfolio depend primarily on how we combine systematic and non-systematic risk exposures to meet our investment goals (see the call-out box on page 25).

The passive Reference Portfolios contain only global public equities and nominal bonds issued by Canadian governments. These are weighted by market capitalization. Our decision to diversify very broadly beyond the Reference Portfolios, without increasing total risk, provides the most reliable source of additional long-term returns. We maintain significant investments in almost all primary asset classes, both public and private, and in both developed and emerging markets around the world. These investments are of three broad types:

a) Public market securities – The Fund profits from global economic growth through equity ownership and credit investments in public companies around the world. To help diversify exposures and sustain necessary liquidity, the Fund also maintains meaningful holdings of government bonds.

b) Private company investments – We invest in the equity and debt of privately held companies, both directly and through funds and partnerships. These investments generate returns from underlying corporate earnings in the same way as comparable public companies. As a group, they generate additional returns to compensate for complexity and illiquidity. We expect well-selected private company investments to deliver higher average returns for "alpha" (see call-out box at left for more about "alpha"), that more than cover the much higher costs and any additional risks associated with these investments. Further, we believe these assets provide additional diversification that benefits the total Fund.

c) Real assets – These investments generate returns from tangible assets through very different fundamental sources, including property income, facility-user fees, oil and gas revenues, etc. They include investments in real estate, infrastructure, renewable energy and natural resources. We access and hold real assets primarily through private corporations, partnerships or other entities, in the form of both equity and debt interests.

The chart below shows the growth of our public market investments and the growth of our private investing programs.

Growth of Investment Programs

($ billions)	2019	2018	2016	2011	2006
Balancing Programs	172.6	176.6	131.7	97.5	88.9
Active Public Programs[1]	4.9	1.6	14.5	2.6	0.2
Private Credit Investments	32.7	25.1	21.1	5.1	–
Private Equity	87.7	69.3	51.5	22.4	4.4
Real Estate Investments	47.5	46.1	36.7	10.9	4.2
Energy and Resources	8.2	6.1	1.4	0.3	–
Infrastructure	33.3	28.6	21.3	9.5	0.3
Power and Renewables	5.1	2.9	0.9	–	–
Total Net Investments	**392.0**	356.3	279.1	148.3	98.0

1 Absolute Return Strategies within Active Public Programs hold offsetting systematic exposures through long and short investments. As a result, their net asset values greatly understate their size and impact on the portfolio.

To capitalize on our comparative advantages, we have successfully committed a major portion of the Fund – approximately 55% – to very broadly diversified investments in private markets. CPPIB's reputation gives us access to private market opportunities around the world, especially in places where public markets are less well developed. With their potential for large transactions, private markets leverage our advantages of scale and certainty. As previously noted, private investments generally offer a higher return to compensate for their illiquidity, which the Fund can absorb due to its long investment horizon and certainty of assets. Most important, the special expertise that we and our partners bring greatly increases the likelihood of success in these markets. The chart on page 25 shows the growth in our private market investments of all types.

2. Investment selection

Investment selection means how we select, buy, weight and sell specific securities, investments and sectors. This activity offers the widest set of opportunities to the skilled internal or external manager, in both private and select public markets.

The potential amount of dollar value-added from investment selection (in a reasonably diversified portfolio) is comparable to that from diversification. However, due to the highly competitive nature of investment selection, the long-term reliability of this dollar value-added is less than that from diversification. Seeking to outperform a market index through active management requires both covering its costs and achieving better returns than the average. And finally, markets become more "efficient" and harder to outperform as they mature. Clearly, however, over any given period within a particular market there will be both winning and losing active managers, with wide variation between their returns. That is why successful investment selection requires employing the most skillful professionals, both internally and externally.

We believe that many of CPPIB's comparative advantages increase the long-term likelihood of investment selection success. First, our scale and asset certainty enable us to identify and access appropriate talent. Second, our long horizon provides an advantage in selecting investments. Because of the shorter-term investing pressures and practices found in many markets, individual asset prices and current valuations are often different from the long-term intrinsic value and earnings potential. This difference creates opportunities over longer time horizons. We believe that investment selection focused on the long term can succeed in most asset classes, particularly so in less-developed markets. Further, skilled management using long/short strategies in public markets can add value whether markets are rising or falling. Such pure alpha return is extremely valuable. When properly controlled, it adds relatively little to total risk in the portfolio while contributing significantly to total return.

Outperforming competitive markets is a challenging task, and doing so sustainably is even more so. We diversify investment selection across multiple active programs, drawing upon distinct investment perspectives to increase portfolio breadth and risk-adjusted returns. Several programs involve more than one strategy, and some employ many. These include:

a) Large, complex transactions – Taking advantage of opportunities available only to large investors. Alone or with partners, we can access, structure and carry out major, complex transactions globally in private and public equity, principal lending, infrastructure, real estate, natural resources and renewables.

b) Private markets deals – Skillfully selecting, negotiating, financing and managing individual private equity and debt investments. As owners with large stakes – and in some cases board representation – we can make meaningful contributions to improving the operation of businesses and properties. Not being forced to sell, we can exit or realize investments at a time of our choosing.

c) Long-term value investing – Buying and selling individual public securities or sectors that we believe are mispriced relative to their long-term intrinsic value. With our long investment horizon, we can be patient and profit from longer-term indicators more than most other managers.

d) Thematic investing – Investing through "themes" by anticipating long-term structural changes and broad trends such as demographic shifts or alternative energy transitions. These are developments, which emerge over the longer term, that we expect will influence the growth, earnings and stock prices of a particular segment of companies, whether directly or indirectly.

We regularly review the premises underlying all investment selection programs, as well as the demonstrated skill of their execution. This lets us assess whether the programs remain likely to deliver meaningful and sustained value for the costs and risks involved. If our conclusion changes, we adjust or curtail the strategies.

Long and short investing

A "long" investment generates a positive return when the underlying asset increases in value. An example is a price increase following a traditional stock purchase. A "short" investment is a means to generate a positive return when the underlying asset decreases in value. In short selling, the investor sells a stock that he/she has borrowed and buys it back later to pay off the stock loan. If the stock's price then is lower, the investor makes a profit. Taking both kinds of positions simultaneously can be structured to greatly reduce the impact of overall market movements. The results of the long/short strategy then depend almost entirely on the selection of individual long and short positions.

3. Strategic tilting

Strategic tilting is a deliberate, meaningful but temporary shift of asset allocations and factor exposures away from the total portfolio's established targets. We can achieve appropriate strategic positions by exploiting gaps between current market prices and long-term fundamental values.

For example, we may increase our exposure to public equities in a geographic region where the market is falling and prices have become unduly depressed. Or, we may sell in over-valued markets when we project nearer-term future returns will be below long-term expectations. Tilting is thus a value-oriented contrarian strategy, which may go against prevailing market trends.

Two key beliefs underlie our use of strategic tilts to help generate additional returns for the Fund:

1. We observe that asset prices have shorter-term momentum but tend to revert to their fundamental value over time. We believe that in the medium term, the general directions of asset class or factor returns are somewhat predictable, although timing and their path are much less so.
2. The strategy aligns with our long investment horizon and the ability to withstand short-term adverse movements. This allows us to be more concerned with the potential size and likelihood of the opportunity or risk, and less concerned with precisely when the assets will return to their fundamental values.

We continue to develop our Strategic Tilting program internally, subject to Board-approved risk limits. While strategic tilting is not typically as powerful in the long run as the other two sources of returns, it can at times add materially to total returns, or protect Fund asset values, or both.

Our view on currency

Currency exposure is a substantial driver of short-term investment performance. Some investors manage this risk with currency hedging, which reduces the shorter-term impact of foreign exchange rate changes on their returns. Hedging has a cost, however, and requires setting aside cash or generating it quickly to meet hedging contract obligations. Also, some currencies are expensive to hedge.

We believe extensive hedging of foreign investments is not appropriate for the CPP Fund for the following reasons:

1. For a Canadian investor, hedging foreign equity returns tends to increase, rather than reduce, inherent risk. The Canadian dollar tends to strengthen when global equity markets are rising and weaken when they are falling. This is partly due to the Canadian dollar's status as a commodity currency. We believe that the Canadian dollar will continue to behave in this way.
2. When the Canadian dollar strengthens against other currencies as a result of higher commodity prices, especially oil, the Canadian economy is also likely to be stronger. This in turn should mean increased earnings for CPP contributors as a result of higher real wages. As earnings rise, so will contributions into the Fund, which will help offset reported losses in the same period due to currency. Accordingly, this represents a natural hedge for the CPP and reduces the need for explicit currency hedging of the CPP Fund's foreign investments.
3. The cost of hedging currencies of many developing countries is high. And if these countries continue to experience higher productivity and economic growth as their economies mature, their currencies should tend to strengthen over time. That would make a hedging program a long-term drag on returns.
4. We substantially mitigate the volatility of individual exchange rates by holding a broadly diversified set of currency exposures across the world, as shown on page 54.

Accordingly, for the most part, we do not hedge foreign currency exposures to the Canadian dollar.

In the short term, the decision not to hedge currency can impact our returns in either direction. In years of major strengthening or weakening of the Canadian dollar, total performance of the CPP Fund will differ from funds with a standing policy of greater hedging. For example, when the Canadian dollar strengthened along with global equities and commodity prices in fiscal 2010, the Fund generated $16 billion in overall investment returns. This occurred despite a $10 billion loss in the Canadian dollar value of our foreign holdings. On the other hand, in fiscal 2014 we realized a currency gain of $9.7 billion as foreign currencies strengthened against the commodities-driven Canadian dollar.

Climate change

At CPPIB, we seek to be a leader among asset owners and managers in understanding the investment risks and opportunities presented by climate change. This aligns with our legislative mandate.

As part of our climate change work, CPPIB has been a strong supporter of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). CPPIB is aiming for full adoption of these recommendations by the end of fiscal 2021. The recommendations have four pillars. CPPIB's approach to each is detailed below.

1. Governance

The Board of Directors oversees CPPIB's efforts to understand and manage climate-related risks and opportunities. They receive updates about broad trends and specific investment-related developments through ongoing risk reporting.

Our CEO sets Management's overall tone and approach for governance and risk management. CPPIB's Chief Financial and Risk Officer (CFRO) has explicit accountability to oversee and enhance the risk management framework and to ensure that it is appropriate given CPPIB's unique mandate and risk profile. The CFRO is working closely with the Risk Committee of the Board to advise Management and the Board on the evolution of our risk management practices.

The CFRO was the Senior Management Team (SMT) sponsor of CPPIB's climate change initiative. He also chaired the Climate Change Steering Committee, which included SMT representatives from Active Equities, Total Portfolio Management, Public Affairs and Communications and Real Assets. This committee oversaw the work of CPPIB's Program Management Office and Climate Change Management Committee.

The Program Management Office and Climate Change Management Committee together guide and support climate-related work streams.

2. Strategy

By taking climate change specifically into account in our investment activities, we are better positioning ourselves to make appropriate investments over the long term. Portions of our portfolio, including airlines, fossil-fuel, steel and cement producers and many other companies, are exposed to climate change transition risks. These include policy, legal, technology and market risk. Some assets are also potentially vulnerable to physical risks like natural disasters. At the same time, new investment opportunities in sectors such as renewable power and resource efficiency will continue to emerge. To help address risks and opportunities, CPPIB has established a Climate Change Program with six work streams.

CPPIB's "Total Fund Exposure – Appetite and Portfolio Design" climate change work stream takes a top-down approach to, eventually, directly factor risks and opportunities into investment strategy and total portfolio design. It works to understand potential climate change and energy transition paths for various countries and the resulting economic and market impacts. This work stream is also developing energy scenarios and reference cases to guide investment reviews and portfolio allocation decisions.

CPPIB's "Security Selection" initiative takes a bottom-up approach and enhances our current review process for individual investments. The initiative has produced a framework that allows investment teams and approval committees to identify and act on key climate change risks and opportunities that are likely to have an economic impact on investments. Our investment process has been modified to require use of this framework for our more material investments.

The "Total Fund Exposure – Risk Measurement and Scenario Analysis" initiative will identify, assess and monitor key risk events across different time periods and measure CPPIB's carbon footprint. This will help ensure the resilience of CPPIB's strategy.

The remaining three work streams, which help support and facilitate the first three, are "Data and Information," "Fund-wide Learning and Knowledge Sharing" and "External Communications."

CPPIB created a stand-alone Power & Renewables group in late 2017. This better positions the Fund to invest in climate change-related opportunities. Since then, CPPIB has invested more than $2.1 billion in renewable energy projects. This helps diversify the portfolio as the world transitions to a lower-carbon energy supply, production and use. In fiscal 2019, CPPIB became the first pension fund manager in the world to issue a green bond, which was then followed by the issuance of our first euro-denominated green bond. These transactions will further enhance our ability to make investments in this area. (See page 69 for more details.)

In addition, CPPIB's Energy & Resources group launched an Innovation, Technology and Services strategy. It capitalizes on opportunities created by the global energy transition, such as networks to charge electric vehicles.

3. Risk Management

Climate change is an integral part of CPPIB's Board-approved Integrated Risk Framework. The Climate Change Steering Committee is guiding a multi-year effort to identify, assess and manage climate-related risks at both the Fund and investment group levels.

One element of risk management is engaging with companies to improve their climate change-related disclosures. As part of our ongoing engagement process, we have pressed large greenhouse gas emitters in oil and gas, utilities and other sectors for improved disclosure on this issue. For over a decade, CPPIB has also used its voting power to support shareholder proposals that encourage companies to improve disclosure of climate change-related risks. See page 73 for more details.

CPPIB's support for the recommendations of the Task Force on Climate-related Financial Disclosures should result in better disclosure of climate change risks. This, in turn, should help asset owners better assess these risks and make sounder investment decisions.

Additionally, CPPIB has a structured approach for the due diligence and monitoring of environmental, social and governance (ESG) risks, including climate-related ones, in our direct equity investments.

The significant continuing work that CPPIB is undertaking helps address climate change risk at the total portfolio level and advances our understanding of the potential implications for our investments.

CPPIB continues its efforts to develop and refine methodologies for stress testing and scenario analysis. For example, we are in the process of identifying and monitoring climate-related factors that may have an impact on CPPIB's investment portfolio and implementing controls to reduce the risk. Our assessment considers various time horizons and will allow us to quantify the potential financial impact and assess compliance with CPPIB's Risk Appetite Statements, which are an integral part of our Integrated Risk Framework.

4. Metrics and Targets

CPPIB published the first carbon footprint of its public equities portfolio in its *2018 Report on Sustainable Investing*. Metrics including total carbon emissions and carbon intensity can be found in the Report. The organization is now working to include our private investments, providing a more comprehensive metric.

We consider key performance indicators for greenhouse gas (GHG) emissions, water consumption and energy efficiency in our individual investments.

Balancing internal and external expertise

Because of our size and professional environment, we can maintain expert internal teams to manage large parts of the CPP Fund. Internal management avoids external fees and lowers other management costs. We often have the skills to carry out investing activities similar to those of external management firms with comparable expertise but at a materially lower cost. For example:

- Our Active Fundamental Equities group has the management experience to make a major contribution to the corporate growth and operational strategies of selected public companies in which we take a substantial stake.
- Our Quantitative Strategies & Risk Premia and Macro Strategies groups can bring to bear the advantage of using longer horizon indicators combined with analytical and modelling capabilities.
- Our Capital Markets and Factor Investing department can draw on specialized strategies, trading and structuring capabilities. These are designed specifically for best execution of our internal active and balancing programs and their execution.
- Our Real Assets, Private Equity, Credit Investments and Active Equities departments have the ability to invest directly in many areas, and also to co-invest with well-aligned external partners. These partners provide access and specialist capabilities in a wide range of private investments around the world.
- Our international offices are a critical component in maintaining valuable relationships and partnerships in all international markets.

Equally, however, we also recognize the enormous breadth of external expertise that can benefit the Fund. We will consider engaging an external manager in any strategy that we cannot execute as effectively on our own. These strategies must be relevant, distinct and meaningful, and we must be able to scale them up as the Fund grows. Expert external managers not only provide specialist strategies, they often also share valuable knowledge with us as long-term partners.

The Board of Directors approves all external manager appointments above certain limits. The manager must demonstrate expertise and, equally important, must be judged capable of providing risk-adjusted value that will more than offset the cost of external fees. We are mindful of principal/agent conflicts. As such, we structure external contracts and mandates with great care to align our partners with the interests of the Fund. We strongly favour the use of performance-based fee structures that have three key features:

- Sharing gains only beyond threshold performance levels;
- Increasing performance fees only with progressively demonstrated skill levels; and
- Partially deferring conditional payouts.

Our teams from the Private Equity Funds, Private Equity Asia, Secondaries and External Portfolio Management groups have the internal depth and knowledge to successfully evaluate strategies and managers in both public and private markets around the world. Selecting, mandating, monitoring, managing and replacing external organizations demands skills that are quite different from those required to select individual investments. The experience and insights of our teams enable us to distinguish solid, sustainable opportunities from those that are fleeting, weakly founded or poorly executed.

A strategic direction for CPPIB in 2025

Over the past two years, the Board and Management have worked to develop a strategy, CPPIB 2025, which positions CPPIB as a world-class investment organization – the standard by which the industry compares itself for governance, performance, talent, partnership and delivering superior financial returns. Approved in April 2018, CPPIB 2025 positions CPPIB to scale into 2025 and beyond, including being resilient to the possibility of increased market volatility and uncertainty in the years ahead, and potential impacts from forces such as disruptive technology, climate change and geopolitical shifts.

In October 2018, the Board approved an implementation plan and roadmap to CPPIB 2025.

CPPIB 2025's four areas of focus are:

> Our Investing Strategy – scaling our private and public investment programs, creating investment agility and investing up to a third of the Fund in emerging markets;

> Putting technology and data at the core of everything we do;

> Developing core services that are increasingly efficient, agile and scalable, adding value to our investment process and international competitiveness; and

> Evolving our culture to be more innovative, ambitious and agile, as well as more diverse and inclusive.

Our Total Portfolio Investment Framework

To successfully maximize returns from all three sources – diversification, investment selection and strategic tilting – while controlling the variety of risks, our Total Portfolio Investment Framework has four principal components:

1. Risk Appetite – expressed primarily by the Reference Portfolios for the base and additional CPP;
2. Diversification – guided by the Strategic Portfolios for the base and additional CPP;
3. Portfolio Management – executed through the Target Portfolios for the base and additional CPP, and the Active and Balancing Portfolios used to manage the Core Pool (see page 21); and
4. Risk Monitoring and Management – maintained by holding the absolute risk of the Investment Portfolios within a narrow range around the risk of their respective Reference Portfolios.

1. Risk appetite – the Reference Portfolios

The foundation of the investment strategy for any portfolio is to determine a prudent and appropriate risk appetite. At a minimum, we must accept a level of risk for the Fund that would be expected to generate the net real return required to sustain the CPP (all other assumptions being met). Depending on long-term return assumptions, we believe that the base CPP cannot ultimately be sustained at a risk/return level below that of a portfolio with approximately 50% global public equities and 50% Canadian governments nominal bonds. For the additional CPP, the corresponding minimum level is that of a portfolio comprising 40% global public equities and 60% Canadian governments nominal bonds. However, there are significant potential benefits to achieving better long-term returns, and better sustaining the CPP, by undertaking a higher – but still prudent – overall risk level.

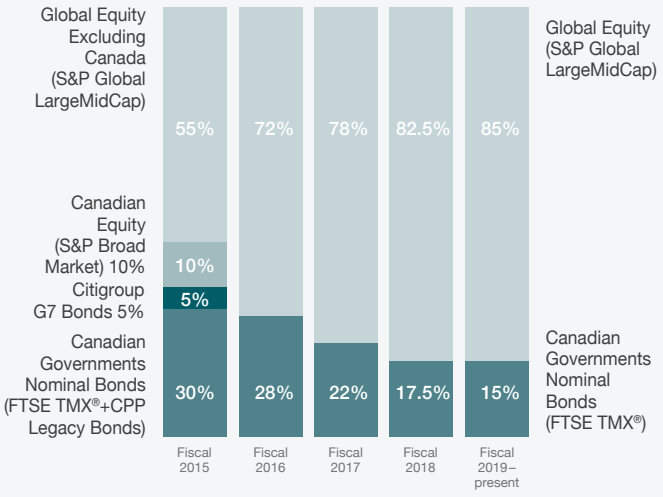
Based on very long-term projections, the Chief Actuary estimates that contributions for the base CPP will finance 70% of future base CPP benefits. Investment returns will finance 30%–35%. In other words, contributions will be about twice as important as investment returns in sustaining future base CPP benefits. For the base CPP, short-term volatility in returns has much less impact on assessed sustainability than it has for fully funded plans. Accordingly, positioning the base CPP account at a higher equity/debt risk equivalence significantly reduces the medium- and longer-term risks of adverse adjustments to the base CPP.

We currently express the appropriate risk targets for the base CPP and additional CPP by means of their Reference Portfolios. Both of these portfolios comprise only public market global equities and fixed-payment bonds issued by Canadian governments. Each class is represented by broad market indexes that could be passively invested in at minimal expense. The chart at right shows the progression of the Reference Portfolio for the base CPP since fiscal 2015, after the Board and Management decided to progressively take on a higher level of risk.

CPPIB Management and the Board of Directors review the Reference Portfolios at least once every three years. They take into account the increasing maturity of the CPP, the evolving funded status of each part of the Plan, and CPPIB's best estimates for long-term economic and capital markets factors. Our methodology uses a model that simulates both the likelihood and potential size of the impact of investment returns and risks over 75 years. It does this for a variety of portfolio asset allocations. It looks at a potential range of positive and negative impacts on future contributions and benefits, calculated over successive future actuarial review periods and multiple economic/investment scenarios. When evaluating prospective portfolio designs, we give more weight to adverse impacts than we do to favourable impacts. We also discount more distant events relative to nearer-term ones.

After analyzing these simulations for each account, we have concluded that the following Reference Portfolios' asset class weights are currently appropriate:

Reference Portfolio – A Shift Along the Return-Risk Spectrum (base CPP)



"Global equities" includes both developed and emerging markets; it takes into account their evolving market capitalization. Because we do not make a separate allocation to Canadian equities, the composition of the S&P Global LargeMidCap equity index effectively determines the weighting of Canadian equities in the Reference Portfolios. As of March 31, 2019, this weighting was approximately 2.7%. However, the actual Investment Portfolios will likely continue to contain a higher percentage of effective exposure to Canadian equities as we take advantage of our home-country knowledge and access.

Breakdown of Asset Class Weights for Additional CPP and Base CPP Reference Portfolios

Account	Effective	Global Public LargeMidCap Equities	Canadian Governments Nominal Bonds
base CPP	April 1, 2018	85%	15%
additional CPP	January 1, 2019	50%	50%

To achieve these distinct risk targets:

- 100% of the Investment Portfolio for the base CPP is invested in units of the Core Pool, which is maintained close to 85%/15% equity/debt risk equivalence.
- Approximately 57% of the Investment Portfolio for the additional CPP is invested in units of the Core Pool. The remainder is invested in units of the low-risk Supplementary Pool, which is composed entirely of Canadian federal and provincial governments nominal bonds. See a diagram of the two-account, two-pool structure on page 22.

Investment Portfolio return benchmark

In addition to serving as the expression of long-term average appetite for absolute risk, the passive Reference Portfolio performs a second function as the benchmark for the total net return of the applicable Investment Portfolio. While the applicable Investment Portfolios generally have a risk level similar to their all-public Reference Portfolios, there are wide differences of composition between the two portfolios:

- The Investment Portfolio has a much broader range of asset classes and is actively managed; and
- The long-term active strategies of the Investment Portfolio take time to show results relative to the Reference Portfolio benchmark. As a result, we focus ongoing performance assessments on the outcomes over five- and 10-year periods. See page 55 for more details.

Characteristics of Investment Portfolio with Enhanced Return-Risk Profile

Simple Portfolio in Two Asset Classes

85/15	Equity/Debt Risk Equivalence	85/15
None	Active Programs Contribution	High
High	Public Equity Allocation	Moderate
Low	Diversification	High
Low	Comparative Advantage Alignment	High
High	Major Loss Potential in Market Extremes	Moderate
No	Best Return-Risk Profile	85/15

Illustrative Portfolio in Multiple Asset Classes

2. Diversifying sources of return and risk – the Strategic Portfolios

As noted, we manage each of the Investment Portfolios to closely match its total absolute risk with that of the associated Reference Portfolio. But that does not mean that we simply hold 85% of the base CPP account in equities, or even in equity-like exposures. We believe this would be imprudent as the portfolio's downside risk would be almost completely dominated by a single risk factor – that of the global public equity markets.

We can, however, build a portfolio with a higher expected return profile for a similar amount of risk by blending a variety of investments and strategies that fit CPPIB's comparative advantages. Each of these strategies offers an attractive return-risk tradeoff of its own, and their addition clearly reduces the dependence on public equity markets.

First, we can invest in a higher proportion of bonds and add two major asset classes with stable and growing income: core real estate and infrastructure. By themselves, these lower the risk of the overall portfolio. This risk saving then allows us to add a wide variety of higher return-risk strategies, such as:

> Replacing publicly traded companies with privately held ones;

> Substituting some government bonds with higher-yielding credits in public and private debt;

> Using leverage in our real estate and infrastructure investments, along with increased investment in development projects;

> Increasing participation in selected emerging markets; and

> Making use of pure alpha investment strategies, which rely on the skills and experience of our internal and external managers.

However, even with these additions, the resulting diversified portfolio would have a lower risk level than targeted. To raise the risk level back to the targeted level and increase expected returns, we introduce a carefully calibrated degree of leverage through the issuance of CPPIB short- and medium-term debt and the use of derivatives. Leverage enables us to:

- Increase our gross holdings of all asset classes, but particularly of lower-risk asset classes that generate attractive risk-adjusted returns;
- Increase overall diversification;
- Maximize return potential at the targeted overall risk; and
- Maintain sufficient liquidity at all times.

Using these tools, we build the Strategic Portfolios in three steps:

1. We first design the optimal strategic mix of key return-risk factor exposures (the "Strategic Exposures") best suited to meet each Investment Portfolio's objectives. This exercise recognizes the practical market limitations facing a fund of our size and the feasibility of CPPIB investing within five years. The mix of factor exposures and leverage is designed to maximize expected long-term returns while maintaining the same total absolute risk as the associated Reference Portfolio.
2. We review our current and anticipated active investment programs to determine the appropriate portion that each should have in the Core Pool. The goal is to ensure that the active investment programs contribute sufficiently to the desired exposures and to returns generated by the managers' skill. We also review the resulting balancing programs and borrowing that are necessary to achieve overall targets.

3. We then translate these planned program allocations into the resulting long-term weightings of six distinct public and private asset classes, as shown at right. This Strategic Portfolio also expresses our long-term plan for allocating assets to three geographic regions – Canada, developed markets excluding Canada and emerging markets. the result is a very broadly diversified aspirational portfolio of investment programs at the intended total risk level. It has significantly higher expected return than the Reference Portfolio and greater resilience to extreme downturns.

The strategic factor allocations we choose provide a clear guide for our selection of investment programs and strategies as the Fund continues to grow. They provide clear guidance for investment departments to ensure each investment program executes its specific mandate and that they collectively deliver the targeted factor exposures over time. For each investment group, our guidance sets out:

- The nature, areas and types of investments;
- Intended contributions to total portfolio return-risk profile;
- Targeted size of assets and/or risk allocation in five years' time;
- Long-term expected risk and returns characteristics; and
- Geographic, sector and other guidelines.

We review both Strategic Portfolios at least every three years, when we review the Reference Portfolios.

3. Portfolio Management – the Target, Active and Balancing Portfolios

The Strategic Exposures and corresponding Investment Department guidance represent a long-term plan to deliver on the objectives for both the base and additional CPP. However, the actual Investment Portfolios must also take into account the practical business and investment plans of each investment department and group. In addition, the values of portfolio investments change daily as investments are bought, sold and re-priced. That means there is inevitable movement in the weights of portfolio holdings and risk-return factor exposures.

We address these naturally changing weights with our current-year Target Portfolio allocation bands and our Balancing Process. The Target Portfolio bands use the same asset classes and geographic regions as the Strategic Portfolio, setting out their permitted ranges in terms of percentage weights for each. We may also add more specific limits, such as investments allowed in a single country and the minimum overall Canadian currency exposure.

As always, our individual investment groups will only make an investment when there is sufficient prospect of an appropriate risk-adjusted return. We never make an active investment simply because it fills a gap in a particular asset class or geographic region. However, the Target Portfolio bands ensure that we achieve the desired growth, balance and control of total portfolio asset allocations. They enable us to direct available resources to the best areas of long-term opportunity.

The Core Pool contains many active investment programs, each with its own varying exposures. To achieve the overall targeted exposure weights, the Core Pool has two components – the Active Portfolio and the Balancing Portfolio:

- The Active Portfolio is the collective holdings that directly result from the specific investment selections of the investment departments, guided by their programs' guidance.
- The Balancing Portfolio comprises the remainder of total assets, held entirely in readily tradable public market securities. By knowing the return-risk factor exposures delivered by the Active Portfolio at any time, we can adjust the Balancing Portfolio to maintain the currently targeted mix of exposures for the total portfolio, subject always to the Target Portfolio bands, absolute risk limits and sufficient liquidity.

The Balancing Process aggregates the risk and factor exposures of the Active and Balancing Portfolios daily. When these aggregate exposures vary too far from the intended Core Pool allocations, or total risk varies excessively from its target, we make trades within the Balancing Portfolio to bring the Core Pool back into line.

The Balancing Process is completed by periodically rebalancing the additional CPP Investment Portfolio's mix of unit holdings in the Core and Supplementary Pools by appropriately allocating incoming additional CPP cash flows.

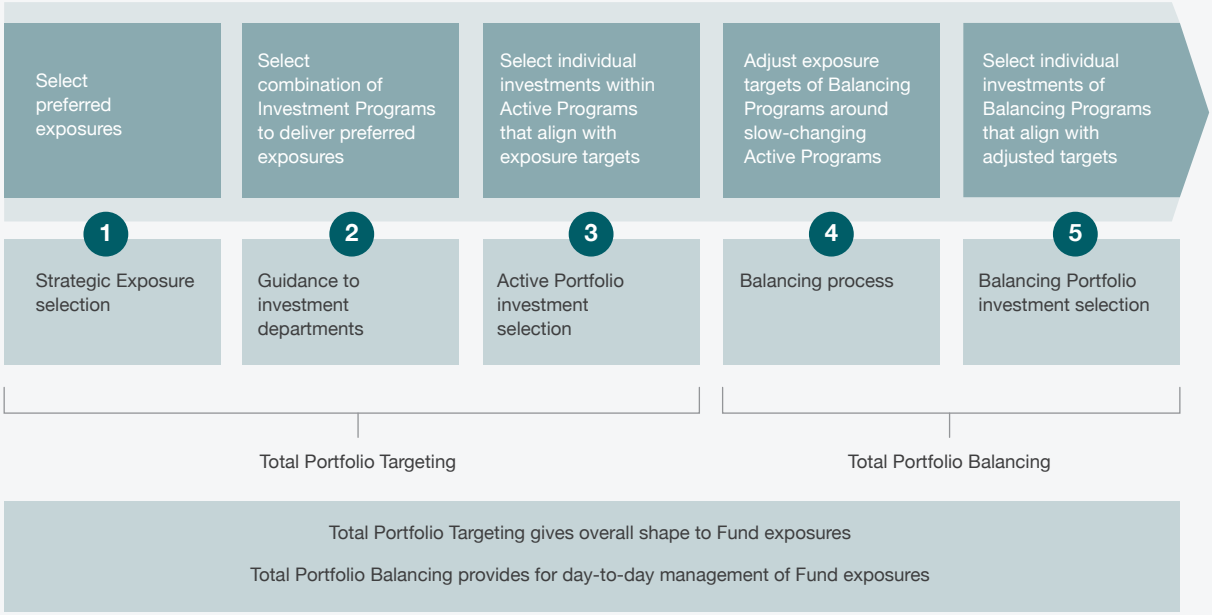
Strategic Portfolio Asset Class and Geographic Classifications and Percentage Weights

Asset Class	base CPP % Weight	additional CPP % Weight
Public Equity	26%	14%
Private Equity	20%	11%
Public Fixed Income (high-quality government issues)	27%	60%
Credit Investments (private debt and public fixed income excluding high-quality governments)	13%	7%
Real Assets (public and private, including real estate, infrastructure, resources, agricultural land)	34%	19%
Cash and Absolute Return Strategies[1]	-20%	-11%
	100%	**100%**

Geographic Region	% Weight	% Weight
Canada	11%	51%
Developed Markets ex-Canada	56%	31%
Emerging Markets	33%	18%
	100%	**100%**

1 Sustained explicit and implicit financing of the investment holdings of the Investment Portfolio, partially offset by net assets in Absolute Return Strategies and short-term holdings. The controlled use of such financing enables the optimal diversification of the portfolio at the targeted risk level and helps maintain necessary liquidity.

Total Portfolio Investment Framework



Factor investing – Implementing the Total Portfolio Approach

By themselves, asset class labels do not fully convey the highly diverse nature of the investments within each class. For example, real assets such as property and infrastructure investments clearly have attributes of both equities and fixed income in addition to their own specific attributes. Private and public investments may appear fundamentally similar, but their liquidity is very different, as their internal financial leverage or debt level often is. Debt securities carry a wide range of durations and credit risk. Equities vary in their country, sector and financial leverage exposures.

Because of all these variables, we need a unified measure of total exposures to each of the key return-risk factors that can be used throughout the Total Portfolio Investment Framework. We achieve this by modelling and mapping each investment or program based on the extent to which each risk factor affects it. The key factors identified in our risk model include the returns, risks and correlations in:

- Developed and emerging market economic growth;
- Real and nominal government bond yields;
- Credit spreads (over government bond yields);
- Firm size (excess of small cap versus large/mid-cap equity returns); and
- Cash/short-term interest rates.

When we construct portfolios, we take into account desired exposure to each factor, as well as to different geographic areas, sectors, currencies and private versus public assets. We also look at the additional risk/net return of active programs. We use these factors to analyze how potential major new investments or divestments will affect the exposures of the total portfolio. As markets, security prices and investment values change, the Total Portfolio Approach drives how we rebalance our portfolios and avoid unintended risk exposures. For example, it has enabled us to prevent equity-like risk from accumulating in the Core Pool through alternative asset classes.

4. Risk Monitoring and Management

In fiscal 2018, CPPIB completed development of its Long-Term Risk (LTR) model. We use this model to measure and compare potential investment losses over longer horizons. It also compares the risk of the Investment Portfolios with the Reference Portfolios for overall governance and control purposes. The LTR model encompasses five key principles:

1. Historical data is a reasonable starting point. The model is informed by a long time period (since 1971) with a sufficiently wide range of economic and market conditions.
2. Risk is forward looking. The model incorporates forward-looking views on key factors driving potential returns, positive and negative, over longer time horizons.

3. Primary quantification of potential reported loss is expressed over a five-year horizon. It uses a form of risk measurement known as Conditional Value-at-Risk. This incorporates both the size and likelihood of potential reported losses beyond a specified threshold.
4. All major contributors to returns and risks including systematic risks. These risks are particular to an asset and active portfolio management decisions.
5. The absolute value of the LTR risk metric into its equivalent equity/debt allocation percentages, represented by the same market indexes as in the Reference Portfolio.

Using the LTR model, the Balancing Portfolio is managed so as to maintain the equity/debt equivalent risk of the Investment Portfolios at all times within Board-approved limits around the Reference Portfolios.

Financial status and potential impact of extreme market conditions

Under normal volatility in global capital markets, the financing of the CPP and the risk positioning of the CPP Fund are designed to provide a measure of resilience for sustaining existing CPP contributions and benefits. Nevertheless, CPPIB also considers the potential impact of more extreme market "stress" scenarios.

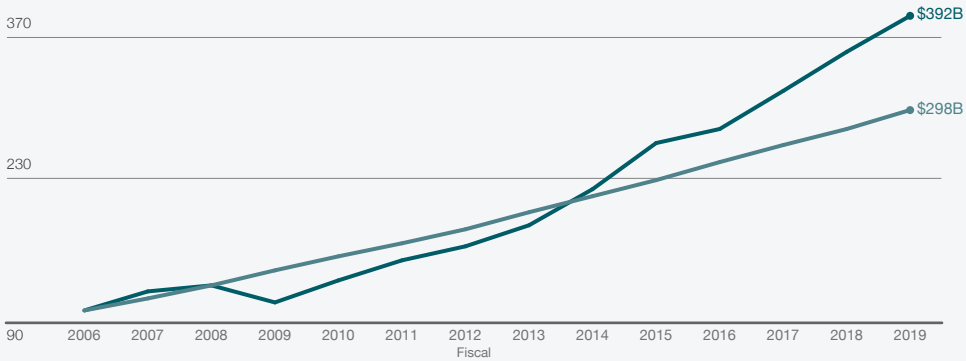
1 Estimates derived by CPPIB from Actuarial Reports

The Excess Return chart shows (1) how the Fund has grown under CPPIB's active management strategy since April 1, 2006, against (2) the lower cumulative Fund growth had returns simply matched the long-term minimum net real returns required for CPP sustainability[1]. The chart also compares the $94 billion in excess return achieved by CPPIB's investment strategy against potential losses that might be expected if (1) market declines similar to those during the 2008-9 Global Financial Crisis (GFC) were to repeat, or (2) the more adverse scenario outlined in the Federal Reserve's 2019 Comprehensive Capital Analysis and Review (CCAR) framework were to eventuate. Currently, the accumulated excess returns of $94 billion would approximately suffice to offset a repeat of the GFC experience; however future stresses of the magnitude forecast under the CCAR severely adverse scenario would not be fully covered by past excess returns. While the above describes notional cumulative effects, in practice all investment gains and losses are immediately recognized in the Actuarial Reports as they occur; gains are not held in reserve as a buffer.

This excess return is only one factor related to the likelihood of an adjustment to contributions and benefits. This likelihood is also dependent on many other factors, such as changes in future return expectations, real earnings growth, mortality rates, and population growth. As such, even in periods where the Fund outperforms the long-term minimum net real returns required for CPP sustainability, adjustments may be needed to either contributions or benefits due to sufficiently large impacts of these other factors.

Excess Return since Inception of Active Management ($B)

Versus long-term minimum return required for Plan sustainability*



* Based on CPPIB's estimate of the minimum required rate of return, plus annual CPI, necessary to ensure long-term CPP sustainability.

Stress Scenarios

Estimated losses based on the following stress scenarios:

1 Market declines similar to those during the 2008-9 Global Financial Crisis (GFC): -$60 billion

2 Federal Reserve's 2019 Comprehensive Capital Analysis and Review (CCAR): -$103 billion

Aligning the Investment Framework Throughout the Organization

How the Board governs investment strategy

Board governance of the investment strategy has four basic approval elements:

1. Risk Appetites and Risk Policy – The Board approves these internal documents annually. The Risk Policy formalizes risk-related constraints on the Investment Portfolios and sets out the measures the Board and Management will use to monitor and control risks. It also spells out limits on non-market risks, such as liquidity, credit risk and the exposures to counterparties. The Board also approves the Absolute Risk Operating Range (AROR) for the upcoming fiscal year. Expressed in equity/debt equivalent terms, the AROR limits how far the total risk of the Investment Portfolios can stray from that of the Reference Portfolios without specific Board approval.
2. Reference Portfolio – This expresses the risk target for each Investment Portfolio as being on a long-term average basis equivalent to that of its simple, low-cost, readily investable Reference Portfolio. It is set to operate within the Board-approved risk appetite and limits. It is also the benchmark for total net return performance of the Investment Portfolio.
3. Business Plan – This annually sets out the current and longer-term investment and operating plans for each department, including operating and capital budget. The plan includes confirmation or adjustment of the Strategic Portfolios' and the Target Portfolios' allocation bands.
4. Investment Statement – The Board approves this external document annually. Required by the Regulations to the *CPPIB Act* and published on our website, it sets out the investment objectives, policies, long-term return expectations and risk management for the Investment Portfolios and the Cash for Benefits Portfolios.

As required under the *CPPIB Act*, the Board also approves:

- Investments above authorized size thresholds, and
- The appointments of external managers, delegating to the CEO those appointments where assets under management will be below a defined level.

Oversight of the Fund's development, composition and performance is a critical element of Board governance. The Board receives comprehensive quarterly reports on the Fund in order to monitor:

- The growth and composition of the Investment Portfolios and Accounts;
- Management's progress against the year's investment plans;
- Total portfolio risk and other risk measures;
- Total returns and individual program contributions; and
- Dollar value-added, net of all costs, versus the Reference Portfolios and other benchmarks.

How we maintain Management accountability for risk-taking and performance

Successful investing requires clear decision-making, accountability and informed risk-taking. It also requires competitive compensation and carefully aligned performance-based incentives. The diagram on page 34 shows how we align all our activities throughout the organization.

Investment Planning Committee

The Investment Planning Committee (IPC) is the primary Management committee with investment responsibilities. It has overall accountability for the long-term Investment Portfolios. The IPC proposes the Risk Policy and other governance elements to the Board. It is then responsible for ensuring control of overall portfolio return-risk exposures within the Board governance framework. Each year, the IPC also approves the investment plans and Investment Department guidance (as described on page 38) for all investment departments, and recommends them for CEO approval.

Taking into account recommendations by departments and IPC subcommittees, the IPC approves the framework for governing, targeting, measuring and managing investment risk and the Total Portfolio Investment Framework described on page 29. The IPC specifically approves:

- Long-term strategy to balance and optimize the three sources of returns (see page 24);
- Definition and appetite for distinct return-risk factors in the Investment Portfolio;
- Approach for managing other broad factors, such as emerging markets exposure, climate change and sustainable investing practices;
- Appropriate use and limitation of leverage in various forms including recommending to the CEO and Board the level and form of full recourse borrowing by CPPIB;
- New investment programs and their mandates, as well as recommendations to curtail programs; and
- Principles and frameworks for key models and methodologies.

The IPC is also responsible for monitoring performance and risk exposures of the Investment Portfolios and Accounts, and evaluating the success of programs. The IPC delegates specific authorities and responsibilities to investment and operational departments for certain recommendations, next-level-down decisions, implementation and program monitoring.

The IPC may undertake strategic investments that will fall under its accountability while delegating their day-to-day management to a particular investment group.

The IPC has designated two subcommittees, one dealing with strategic tilts and the other with liquidity. The former oversees the activities of the Strategic Tilting team, as described on page 39. The latter oversees the overall liquidity position of the Fund. CPPIB has the ability to raise funds through the issuance of commercial paper and medium-term notes, as well as other methods. These

provide flexibility in managing Fund liquidity. During the fiscal year, CPPIB expanded both our commercial paper and medium-term note programs as described on page 49. This included a new program of Green Bonds dedicated to the finance of new environmentally sustainable investments. All these borrowings continue to carry the highest AAA credit ratings from Standard & Poor's, Moody's and DBRS.

Measures of success for the IPC are:

- Absolute returns on each Investment Portfolio;
- Net dollar value-added relative to each Reference Portfolio; and
- The delivery of portfolios at the targeted risk level, which are soundly diversified across return-risk factors and progressing efficiently as planned towards their Strategic Portfolio.

Risk management

The Risk group within the Finance, Analytics and Risk department independently provides standard risk metrics and supplementary risk assessments to the Board, the Senior Management Team and the IPC on a regular basis. These assessments include sensitivity tests and various stress scenarios to estimate the potential impacts of major events. For example, we model the potential impact of historical incidents similar to the global financial crisis of 2008–09 and other predictive stresses based on realization of material geopolitical events.

We use multiple statistical techniques including Value-at-Risk to measure the aggregated level of potential losses, which includes equity, currency, interest rate, credit and other risks within our portfolios over a specific timeframe (see page 34). Potential losses are measured over a variety of time horizons and include losses if borrowers default on loans from CPPIB, or if counterparties in financial contracts fail to meet their financial obligations to CPPIB.

CPPIB's risk management framework is further described on page 49.

Transaction approvals

Investment Management Authorities established by the CEO set out the authorities of investment departments to make specific investment transactions for the Fund. The Authorities include the requirement that the Investment Department Decision Committee (IDDC) approve transactions above certain sizes under its terms of reference. Approval by the Investment Committee of the Board is also required for transactions above certain amounts.

Alternative Sources of Liquidity

CPPIB has the ability to raise funds through several channels and instruments. By leveraging our teams' capabilities, our relationships with financial market participants, our scale, and our AAA credit rating, we are able to optimize our funding mix on attractive terms to both maintain our liquidity targets and enable our investment strategies. Our primary means of generating cash funding include:

> We issue debt securities to investors through our Commercial Paper (short-term) and Term Debt (medium- and long-term) programs.

> We obtain desired investment exposures using derivatives in place of physical holdings in certain instances; and

> We borrow and lend securities through our i) prime broker accounts, ii) direct bilateral arrangements with leading financial institutions and iii) repurchase agreements.

Risk/Return Accountability Framework

Accountability	Risk/Return
Board of Directors[1]	> Reference Portfolios > Strategic Portfolios
Human Resources and Compensation Committee[1]	> Compensation and incentive frameworks
Investment Planning Committee	> Ranges of Target Portfolios > Departmental asset and risk targets > Program approvals and investment department guidance > Total portfolio risk management > Returns and DVA of Investment Portfolios
Investment Departments	> Active programs to generate exposures, returns and value-added
Total Portfolio Management	> Balancing programs to deliver intended total return-risk factor exposures

1 Approval of Management recommendations.

Investment departments and groups

Each investment department or group therein is accountable for:

- Decisions to propose or reject new strategies, and to resize or reposition existing strategies, within the overall IPC and Investment Department guidance for total portfolio exposures;
- Identification, access, selection, sizing and exit from investment opportunities and partners;
- Individual investment transactions to build and manage portfolios as guided by the applicable Investment Department guidance; and
- Cost-effective execution of active portfolio management programs within their mandates.

Measures of investment success for each department or group include both absolute returns and the value-added, after all costs, compared to appropriate risk-adjusted performance benchmarks. Equally important is their contribution towards delivering the targeted return-risk factor exposures and total return of the Investment Portfolios.

How we measure and compensate performance

Each year, the Human Resources and Compensation Committee (HRCC) of the Board of Directors approves the compensation structure for all levels of employees. The structure ties incentive compensation to the following elements:

1. Total Fund investment results, with equal weighting given to total return and dollar value-added relative to the Reference Portfolios. Both are calculated over rolling five-year periods, aligning with our long-term perspective;
2. Department and group performance, measured against a variety of objectives set in the annual business plan; and
3. Individual performance.

Full details of our compensation system are provided in the Compensation Discussion and Analysis section, beginning on page 87.

All returns used for incentive compensation purposes are calculated after deducting all investment costs, external manager and other fees, as well as internal operating expenses.

How we set performance benchmarks and value-added targets

At the total portfolio level, returns on the Reference Portfolios form the benchmarks. At the investment group level, the Finance, Analytics and Risk department recommends and measures specific benchmarks and long-term competitive value-added targets for each program. These targets represent the broad investment characteristics of each program, its risk exposures and its inherent opportunities. The targets are then used as part of the annual assessment of each investment group's success.

Our external auditors examine the methods and results for determination of actual and benchmark returns at the total Fund level.

Specific benchmarks are used for individual investment programs, to which a value-added target spread is added for each program:

- Public Markets absolute return strategies: Most public market active programs aim to generate returns that are largely independent of market movements. At the start of each year, we establish risk allocations and target Information Ratios for all programs. An Information Ratio is a risk-adjusted measure of performance, calculated as the net value-added divided by its annualized volatility. The combination of risk allocation and Information Ratio gives us return targets for the respective programs. For any program incorporating deliberate systematic risk, a representative public index (or blend of indexes) is used as the benchmark
- Private Equity: Large/mid-cap public equity index for developed or global markets depending on the program
- Natural Resources: Developed Energy large/mid-cap public equity index
- Infrastructure: Weighted blend of indexes of global large/mid-cap public equities and G7 government bonds
- Private Credit Investments: Weighted blend of three indexes – U.S. leveraged loans, U.S. high-yield corporate bonds, and emerging market bonds
- Private Real Estate Equity: Global Property Fund Index
- Private Real Estate Debt: Weighted blend of indexes of investment-grade Real Estate Investment Trust (REIT) bonds and leveraged loans

INVESTMENT DEPARTMENTS OVERVIEW

This section provides an overview of the responsibilities of our investment departments:

> Total Portfolio Management (TPM)
> Capital Markets and Factor Investing (CMF)
> Active Equities (AE)
> Credit Investments (CI)
> Private Equity (PE)
> Real Assets (RA)

Details about the fiscal 2019 and longer-term performance for each investment department begin on page 63.

Total Portfolio Management

The primary focus of the Total Portfolio Management (TPM) department is long- and medium-term design of the Investment Portfolios, and ongoing implementation of the Total Portfolio Investment Framework (see page 29). TPM's mission is to coordinate and guide the organization's investing activities for both the base CPP and additional CPP accounts to collectively manage a total portfolio that maximizes long-term returns without undue risk. To achieve this mission, TPM has the following broad responsibilities:

- Develop the recommended Reference Portfolios, and the long-term return-risk factor allocations leading to the Strategic Exposures, for each of the Investment Portfolios.
- Develop the ranges for the current-year Target Portfolios, and the shorter-term path for the composition of the Investment Portfolios within those ranges.
- Develop the medium-term construction of the Core Pool in which both Investment Portfolios invest.
- Align the investment activities of other departments and investing groups to help ensure that each contributes effectively to the Investment Portfolios in a coherent way.
- Manage the Core Pool Balancing Portfolio components such that they achieve and maintain intended total portfolio exposures on a day-to-day basis. TPM works closely with the Financing, Collateral and Trading (FCT) group to optimize the efficient construction of the Balancing Portfolio components through public securities selection.
- Guide the Investment Portfolios' overall foreign currency exposures (excluding active tactical currency allocation). Our currency hedging approach is described on page 27. Centralized currency management is more cost-effective and provides better control of overall exposures than managing currencies within each investment department.

TPM is organized into four investing groups:

Portfolio Design
The Portfolio Design group identifies and analyzes the return-risk factors it believes sufficiently characterize the behaviours of the global markets in which CPPIB invests. The group determines the long-term aspirational allocation of the Investment Portfolio for each of the two CPP accounts within the specific risk appetites set by the Board and Management. Based on these decisions, the group annually constructs targeted ranges of asset and risk allocations to each of the investment programs in the Active Portfolio in a systematic and well-diversified manner, subject to liquidity and other constraints. The group is also responsible for the asset/liability modelling of the CPP for portfolio design purposes, including the periodic review of the Reference Portfolios.

Active Portfolio Management
The Active Portfolio Management group is responsible for aligning active program activities with CPPIB's desired long-term portfolio and for optimizing CPPIB's intellectual capital. Applying its ongoing research on investment strategies, the group annually provides the coordinated strategic factor allocations and other characteristics, described more fully on page 32, that guide each of the managed programs in the Active Portfolio on the types and amounts of investments they should target in their specific portfolios. The Investment Department guidance ensures the optimal diversification benefits of factor exposures and active management strategies across investment programs.

Balancing Portfolio Management
The Balancing Portfolio Management group is responsible for the day-to-day management of the Balancing Portfolio. The objective of managing this portfolio is to ensure the Core Pool has each of the desired exposures, once the active and balancing portfolios are combined. Monitoring the exposures of each Investment Portfolio, the group determines when, to what extent and by what means rebalancing is required to adjust exposures. This group also works with the Financing, Collateral and Trading (FCT) group to design and execute appropriate and cost-efficient re-balancing trades.

Portfolio Engineering
The Portfolio Engineering group designs and builds fully systematized investment processes that affect the design of CPPIB's investment strategy and the management of the Investment Portfolios. Its ongoing research also provides value-added analytics and insights to support total portfolio management decision-making.

TPM's annual portfolio design process is integral to the ongoing development of the total Fund. TPM and the other investment departments first scope out the full range of potentially attractive investment areas in each active program over five- and one-year periods. Considering the Fund as a whole and taking into consideration both accounts, TPM works with each of the other investment departments to narrow down these areas to the preferred five-year deployment range for each program. This enables the Fund to achieve the aspirational return-risk factor allocations in a feasible and practical manner, through the long-term portfolio construction and Investment Department guidance annually approved by the Investment Planning Committee.

Capital Markets and Factor Investing

In fiscal 2019, the Capital Markets and Factor Investing (CMF) department was created. Its primary goal is to ensure that CPPIB will have the flexibility to efficiently gain access to a broad array of sources of return in public equities, fixed income securities, currency, commodities and derivatives on a global basis. It also engages investment managers and makes co-investments in public market securities. CMF adds value primarily through diversification and strategic tilting. These exposures complement and extend the returns that CMF can achieve through other investment programs, which are primarily based on security selection.

CMF's activities can broadly be broken down into the following categories:

1. Using CPPIB's comparative advantages to generate alpha in a variety of systematic and discretionary investment programs, including our external investment management partners.
2. Generating sustainable and scalable investment income from risk premia programs, which earn returns from a diversified portfolio of systematic risk factors. CMF is responsible for managing the Fund's overall public markets exposures in close co-operation with Total Portfolio Management (TPM), and under the supervision of the Investment Planning Committee (IPC).
3. Managing collateral, financing and trading needs, which includes the total Fund liquidity and CPPIB's secured and unsecured debt programs.

To carry out these activities, CMF is organized into five groups:

Quantitative Strategies & Risk Premia

The Quantitative Strategies & Risk Premia (QSRP) group delivers returns by building and maintaining a portfolio spanning both systematic alpha and risk premia factors across global asset classes. The group's approach is to invest in well-defined systematic factors providing compensated sources of risk that drive asset returns. The group manages mathematical and statistical modelling (quantitative strategies) to combine sources of return from alpha and risk premia into a portfolio with an attractive risk-return profile. The portfolio also has a lower correlation to broad market indexes and other standard sources of return.

External Portfolio Management

External Portfolio Management (EPM) oversees a portfolio of externally managed funds and separate accounts that complement CPPIB's internal investment programs. The group has relationships with 58 asset managers globally across mandates covering public market equities, credit, interest rates, currencies and commodities. EPM forms long-term partnerships, irrespective of whether the underlying fund strategy is short- or long-term in nature. The group also makes co-investments alongside our fund partners. EPM collaborates with all CMF groups to share ideas and best practices.

Macro Strategies

Macro Strategies (MS) manages five discretionary investment programs for CMF, including strategic tilting (see page 27). The group invests across multiple asset classes in all major developed and emerging markets, utilizing CPPIB's structural advantages of scale, long time horizon and learned expertise to generate returns in excess of market benchmarks.

Financing, Collateral and Trading

The Financing, Collateral and Trading (FCT) group is responsible for CPPIB's financing activities. This includes managing collateral and sourcing liquidity by issuing secured and unsecured debt. It also sources liquidity using synthetic financing. The group is also responsible for the asset/liability management of the firm's portfolio. Finally, FCT oversees CPPIB's centralized trading in major markets across all public asset classes (excluding credit) on behalf of CPPIB's investment teams and the balancing portfolio.

Research & Innovation Group

The Research & Innovation Group (RIG) focuses on defining and leading the global research process in CMF, developing the research agenda in partnership with the department's groups. Additionally, this group has a strong focus on innovation. It actively pursues unique approaches to the development and application of novel forecasting, analysis and portfolio construction techniques. As data is a critical input for both research and portfolio management, RIG is focused on data sourcing and data engineering. RIG also works on data discovery as part of its research, to identify valuable new sources of information and incorporate them into research and investment programs.

Active Equities

Active Equities (AE) invests globally in public (or soon-to-be-public) companies via common shares or equity-linked securities, across all sectors in the Americas, Europe and Asia. It also invests in long-term themes through public equities and the engagement of investment managers, as well as in select earlier-stage private companies. The Sustainable Investing group looks at environmental, social and governance (ESG) factors to assist investment teams.

AE is organized into the following investment groups:

Active Fundamental Equities

Active Fundamental Equities (AFE) invests in public equities across global markets using long-term fundamental analysis to inform our security selection. This results in a collection of single-company investments that can be left largely unmonitored and unchanged for periods of time. AFE assembles these investments into a long/short, market-neutral portfolio using an optimization process that aims to minimize or remove unintended factor exposures. The result is a portfolio with maximum exposure to fundamental research insights and little else.

Fundamental Equities Asia

Fundamental Equities Asia (FEA) is a new group formed in fiscal 2019, combining the AFE Asia and Relationship Investments Asia teams. FEA performs fundamental research on public equities, or soon-to-be-public equities, and invests in quality companies throughout Asia. The group incorporates both a fundamental long/short strategy and significant direct minority ownership investments for transformative growth. FEA aims to generate alpha over the long term in Asia with a market-neutral portfolio.

Relationship Investments

Relationship Investments (RI) makes significant, direct minority ownership investments in public or soon-to-be-public companies. It chooses situations in which capital from CPPIB can make a meaningful difference to the success of the company and therefore help it outperform relative to peers in the long term. RI has expanded its geographic reach to include companies in Canada, the United States, South America and Europe. In particular, the group focuses on transformative growth opportunities and transactions involving large ownership blocks.

In most cases, RI obtains governance rights commensurate with the importance of its stake. In turn, the company benefits from having a supportive cornerstone investor with a longer time horizon. Furthermore, through its Direct Equity Investments (DEI) arm in São Paulo, RI invests in equities in Latin America, with the ability to purchase both private and public equities as well as equity-linked instruments. This flexibility allows DEI to maximize its revenue-generating opportunities in those markets. It also enables the program to invest in listed entities and in private companies, either before or during initial public offerings. This helps align CPPIB's long-term interests with those of other investors.

Thematic Investing

Thematic Investing (TI) conducts research and makes investments to gain exposure to long-horizon investment themes across the globe. Since these themes evolve over many years (in some cases decades), they align well with CPPIB's long-term investment strategy. Capital may be deployed using public or private asset classes as well as fund investments.

Sustainable Investing

The Sustainable Investing (SI) group brings expertise in environmental, social and governance (ESG) matters to its work with investment professionals across all of CPPIB's investment departments. We believe that considering ESG factors in investment decisions and asset management activities will lead to better long-term investment performance across the Fund. A company's approach to ESG often serves as a good indicator of the quality of the business and its management and board oversight. It is also an indicator of corporate performance over the long term.

SI works with the investment teams to ensure that ESG risks and opportunities are incorporated into investment decision-making and asset management activities. The group also supports CPPIB's role as an active, engaged owner. It works to enhance the long-term performance of companies in which CPPIB invests by engaging, either individually or collaboratively, with other investors. Engagement activity is directed at companies that present material ESG risks and opportunities. This is determined by research into the company, industry and region, along with an examination of industry standards and global best practices related to ESG. Rather than excluding companies from CPPIB's Investment Portfolios based on ESG factors, SI works with them to promote positive changes on ESG issues that we believe are material to investment value. Sustainable Investing has five engagement focus areas: climate change, water, human rights, executive compensation and board effectiveness.

SI's climate change work supports CPPIB's broader efforts on this issue, as outlined on page 28.

In addition to engagement work done by the SI group directly, CPPIB also has a global collaborative engagement with Hermes Equity Ownership Services (Hermes EOS). Hermes EOS's work on behalf of SI focuses on sectors most exposed to climate change, including oil and gas, mining, metals, materials, utilities, automotive and financial services, as well as supply chain considerations in the retail and consumer goods sectors.

We continue to support the annual Climate Change Information Request by the CDP (formerly the Carbon Disclosure Project). It seeks increased disclosure and management of climate change risks from more than 6,900 companies globally on behalf of investors.

The SI group has taken over responsibility for the ESG integration and due diligence for direct private equity investments. This complements and builds on its ESG skill and expertise in public equities. As an extension of this, SI is now responsible for a newly defined framework aimed at considering climate change risks in material security selection decisions.

The approach and activities of the Sustainable Investing and investment teams are described in detail in the *Report on Sustainable Investing*. This report is published annually and is available on the CPPIB website.

Credit Investments

Credit Investments (CI) is responsible for all of CPPIB's public and private credit investments globally. CI invests in all credit and credit-like products across the capital structure, in all sectors and at all levels of risk, with the exception of local-currency sovereign bonds. The department focuses on liquid/syndicated and direct investing in both investment and sub-investment grade corporate and consumer debt or credit. CI invests in both the physical and synthetic markets.

Direct investing made by CI may include corporate debt, consumer credit, structured credit, real asset-backed financing and royalty-related income streams. These are sourced through participation in custom event-driven opportunities such as acquisitions, refinancings, restructurings and recapitalizations. In select cases, CI also commits to debt funds to access manager expertise or existing strategic benefits, such as origination or due diligence capabilities. To achieve scale, CI invests in platforms and deployment vehicles and may achieve this exposure through an equity investment.

The CI department is organized into six investment groups:

Americas Leveraged Finance

Americas Leveraged Finance (ALF) invests in sub-investment grade credit or credit-like opportunities in both the primary and secondary markets across the Americas. Typical investments include leveraged loans, high-yield bonds, unitranche loans, bridge financings, convertible bonds, mezzanine debt and preferred equity. ALF's portfolio also includes Antares Capital, a leading provider of financing solutions to middle-market private equity sponsors in North America.

Americas Structured Credit and Financials

Americas Structured Credit and Financials (ASCF) invests in sub-investment grade structured credit and debt capital solutions for financial institutions. It also invests in intellectual property in markets across the Americas. Typical investments include purchasing or financing whole loan portfolios, residential mortgages, consumer credit, other smaller-scale credit and collateralized loan obligations (CLO) equity. The group also invests in royalty-related income streams backed by tangible and intangible assets globally.

APAC Credit

APAC Credit (APAC) focuses on sub-investment grade corporate and structured credit in the Asia-Pacific region, with the ability to provide both U.S. dollar and local currency solutions. Typical investments include leveraged loans, high-yield bonds, convertible bonds, mezzanine loans and structured credit products. The group invests in both primary and secondary credit markets.

European Credit

European Credit (EC) focuses on all types of sub-investment grade corporate and structured credit in Europe, including leveraged loans, high-yield bonds, convertible bonds and structured products. The group has a mandate to invest across Europe in any sector, with the flexibility to fund in multiple European currencies. EC invests in both liquid and illiquid credit instruments in both primary and secondary markets, including performing and non-performing loan portfolios.

Public Credit

Public Credit (PC) invests in investment and sub-investment grade, public, single-name credits and credit indexes globally. Instruments used by PC include corporate bonds, hard currency sovereign debt, credit exchange-traded funds, credit derivatives, asset-backed securities, residential mortgage-backed securities and collateralized loan obligations. PC also manages the balancing credit portfolio to balance the credit exposure for the Fund (see page 32 for more details about the Fund's Balancing Portfolio). The group also executes trades for all strategies in CI.

Real Assets Credit

Real Assets Credit (RAC) invests in public and private markets in the following asset classes: real estate (first mortgages, B-notes, mezzanine debt, preferred equity and single-asset commercial mortgage-backed securities); energy and resources (senior debt, subordinated debt, preferred equity and mineral royalties), infrastructure and renewables (project finance, loan finance and bond finance).

Private Equity

The Private Equity (PE) department makes private equity investments globally. These investments are well suited for large, patient and knowledgeable investors. PE focuses on high alignment of interests between shareholders and management and emphasizes long-term value creation to deliver attractive risk-adjusted returns. PE maintains relationships with over 140 private equity fund managers and other specialized partners. It seeks to generate additional investment opportunities to both scale assets under management and add incremental returns in the most efficient manner.

The PE department is organized into four investment groups:

Private Equity Funds

With a diverse and well-established portfolio of private equity managers, Private Equity Funds pursues investments that are expected to outperform public benchmarks and create CPPIB-wide partnering opportunities. The group makes multi-year commitments to established large- and middle-market buyout and growth equity funds in the Americas and Europe. It selectively backs emerging managers with limited track records or institutional history. The group also makes minority, passive direct investments alongside our private equity fund partners.

Direct Private Equity

Direct Private Equity (DPE) focuses on making direct investments in private companies across North America and Europe. DPE considers the full spectrum of ownership structures from passive, minority positions to 100% control. The group invests in all sectors except real assets, with a focus on sizeable investments alongside aligned partners. These partners include family offices, like-minded long-term investors, corporations, entrepreneurs and management teams.

Private Equity Asia

Private Equity Asia focuses on private equity investments in the Asia-Pacific region through commitments to private equity funds, participation in the secondary market and direct investments in private companies alongside our private equity fund partners (GPs) and other like-minded partners.

Secondaries

Secondaries participates in the private equity secondary market in North America, Europe and Latin America. The group has three core strategies:

> The acquisition of limited partnership interests (LP Secondaries);

> GP-led transactions that provide partial or whole-fund liquidity solutions (GP-led Secondaries); and

> Structured investments in a portfolio of private equity assets to provide capital to private equity funds and to GPs (Structured Secondaries).

Real Assets

Real Assets (RA) is focused on building a globally diversified portfolio that delivers stable and growing income to the Fund. The RA portfolio consists of investments in the real estate, infrastructure, power and renewables, agriculture and energy and resources sectors. Investments in these sectors are typically long-term, capital-intensive businesses that generate relatively predictable cash flows that rise with inflation over time. Exposure to real assets, which is generally under-represented in the public markets, also provides significant diversification benefits to the Fund. The Real Assets department comprises four investment groups: Real Estate, Infrastructure, Energy & Resources and Power & Renewables. It also includes the Portfolio Value Creation group.

Real Estate

The Real Estate (RE) group invests in high-quality commercial properties globally through both the private and public markets. The group takes a targeted approach by focusing on investing with experienced partners, allowing for sufficient scale to investment activities.

The group's portfolio consists primarily of investments in top-tier, income-producing properties that generate a stable income stream and are suitable for long-term ownership. RE also pursues development-oriented strategies where attractive risk-adjusted returns are supported by favourable supply and demand dynamics. This "build to core" strategy is designed to develop high-quality assets that will be suitable for long-term investment once completed. As the portfolio has matured, select value-added investments have been included with the goal of enhancing the portfolio's core return profile. Such programs are typically asset rehabilitation or repositioning strategies that require active asset management.

RE remains focused on core geographic markets and sectors:

- The key developed markets of Canada, the U.S., the U.K. and Australia, as well as the key emerging markets of Brazil, Greater China and India; and
- The four main commercial property sectors: office, retail, industrial and housing.

These markets and sectors are among the largest and most liquid in the real estate investable universe and continue to form the majority of our portfolio.

In addition, the group recently established the Listed Real Estate (LRE) program to further enhance the risk-return characteristics of the portfolio by investing in public real estate. The mandate of this program is to gain exposure to countries and sectors that are absent or under-represented in the private real estate portfolio, and to invest in situations where real estate exposure is fundamentally cheaper in the public market than in the private market.

Infrastructure

The Infrastructure group invests globally in large-scale infrastructure companies that provide essential services within the utilities, transport, telecommunications and energy sectors. The group focuses on investing in lower-risk, asset-intensive businesses with stable and predictable long-term returns. These businesses typically operate within strong regulatory or contracted frameworks and afford us significant shareholding stakes and meaningful governance rights.

The Infrastructure group targets private and public-to-private equity investment opportunities in both developed and emerging markets and often invests with other like-minded partners. The group can also deploy additional capital to support growth opportunities in its existing portfolio companies and work alongside management teams to drive operational and financial improvements through proactive asset management initiatives.

Energy & Resources

The Energy & Resources (E&R) group, formerly called Natural Resources (NR), has a diversified investment mandate across oil and gas, energy midstream, merchant power and liquefied natural gas, mining and energy-related technology. Specifically, the E&R group focuses on key investment themes around energy transition, global gas, electrification and energy infrastructure. This has led to partnerships in upstream, midstream, merchant power and technology.

E&R pursues investments in wholly owned platforms to focus on building companies with strong management and long-term value creation. The group is also involved in direct resource investments, where it provides financial solutions in special situations such as joint ventures, add-on financings and royalty-related income streams. In addition, E&R provides private equity capital, which is generally for shorter-duration investments, including the backing of management teams.

To further broaden its range of opportunities, the group launched its Innovation, Technology and Services strategy this year, with a mandate to seek early-stage investments in technologies that are aligned with the group's broader sub-sector strategies and energy transition. E&R has noted that the industry is undergoing significant change from new, earlier-stage technology companies that are both creating and improving existing processes and technologies. This increased industry focus on energy transition is resulting in many new innovative technologies and numerous investment opportunities.

Power & Renewables

The mandate of the Power & Renewables (P&R) group is to invest globally in the power and renewable energy sector. P&R invests in companies, joint ventures or platforms that own, operate and manage portfolios of conventional power, wind, solar, hydro and other assets. The group is building a balanced portfolio composed of projects that are under development, under construction or already operating. It has a mix of lower-risk, longer-term contracts and power market exposure.

The group seeks to deliver attractive risk-adjusted returns for CPPIB by leveraging CPPIB's comparative advantages. It is investing in a large, dynamic and capital-intensive industry created by the transition from carbon-intensive economies to greener, electric energy-intensive markets. The decreasing cost of renewable energy and global and regional climate change policies are creating new investment opportunities. Increased electrification and energy intensity in emerging markets, increasingly delivered through renewable energy, enables P&R to deliver meaningful emerging market exposure to CPPIB.

P&R will look for opportunities of significant influence or control and larger investments, which typically present diversified regional or global portfolios. The P&R team also manages CPPIB's agriculture investments.

Portfolio Value Creation

Portfolio Value Creation (PVC) is responsible for value creation initiatives across CPPIB's global portfolio of material direct equity investments. PVC works closely with deal teams, portfolio company management and deal partners to create value within portfolio companies. The group works across all sectors and geographies and in every phase of the deal life cycle. PVC assists in due diligence, enhances governance, actively monitors portfolio companies and drives operational change. It also ensures the transfer of best practices across all CPPIB's asset management and value creation activities.

OUR PEOPLE AND CULTURE

As CPPIB continues to grow and evolve, our purpose-driven culture drives our global reputation and success. Our unique culture is strong and anchored by our Guiding Principles and Code of Conduct. It remains dynamic and adaptable – as it must. Our CPPIB 2025 strategy calls for evolving *how* CPPIB employees work, encouraging them to strive for agility, ambition, innovation and inclusion. It also focuses on becoming a truly global enterprise in which employees across our locations feel fully included, collaborate with peers and have a consistent workplace experience.

In support of these objectives, we are making efforts to drive a more integrated, holistic approach to culture, engagement and employee experience – an effort led by our Chief Talent Officer. CPPIB also continues to innovate our employee communication activities through enhanced internal channels and compelling content, including expanded use of a leader blog platform.

Global workforce

CPPIB's workforce continues to grow across our global locations to support our mandate. Our offices in priority emerging markets, where we experienced 15% employee growth since the end of fiscal 2018, are a particular strength. We also continue to encourage transfers and secondments across locations. These internal opportunities help us meet our business needs and bring important benefits in professional development. They also foster inter-office alignment and collaboration. This fiscal year the volume of our international assignments and transfers increased by 58%, compared to the prior year. At the end of fiscal 2019, we had 1,661 full-time employees. The totals in each location were: Toronto – 1,310, London – 156, Hong Kong – 105, New York – 42, São Paulo – 21, Mumbai – 13, Sydney – 10, and Luxembourg – 4.

Talent development

CPPIB continues to make important progress on our comprehensive talent management strategy, which we introduced in 2018. Our goal has not changed: we aspire to hire, develop and retain high-performing individuals in an environment of apprenticeship, opportunity and recognition. We continue to make important enhancements to our workplace programs informed by employee preferences and feedback. Notable highlights this year include the introduction of "gigs" (short-term assignments that provide development opportunities outside formal job descriptions), a toolkit and resources to support apprenticeships and an Integrated Career Framework. The framework is designed to ensure that conversations and assessments about performance are consistent and transparent across levels, groups and locations. We have also made efforts to become more aligned, proactive and forward-looking in our talent acquisition strategy.

Throughout these efforts, we continue to strive for transparency in our workplace communications. For example, we are sharing more information around our annual senior leadership promotions and compensation rewards. We are also providing more context on the rationale for program changes.

The data below highlight key progress areas:

- Participation in organization-wide development programs increased by 14% (381 employees).
- About 39% of our top performers took on new career opportunities (e.g., "gigs," promotions, transfers, secondments, special projects and international assignments), an increase of 8% over fiscal 2018.
- Overall, almost 28% of our global workforce enjoyed new career opportunities.

Culture

At CPPIB, we care deeply about our distinctive culture and workplace experience. As such, we put heavy emphasis on programs and activities that reinforce our core values and foster the engagement of our employees.

Our annual Living our Guiding Principles day takes place across our global locations. It features group discussions exploring select scenarios related to the concrete application of integrity, partnership and performance. Employees value the Guiding Principles day highly, and it serves as an important reinforcement of our public accountability, ethical priorities and professional collegiality. Our annual employee engagement survey, meanwhile, points to areas of progress as well as opportunities for improvement. Overall the results remain largely positive. Almost 80% of employees completed the survey. Similar to last year, responses relating to teamwork and collaboration scored the highest, while questions related to inclusion and diversity saw the largest improvement – including one question about bringing one's true self to work gaining 5%. A third party conducted a complementary targeted survey with a smaller sample of employees. It found that CPPIB's purpose is prominent across the organization and employees have strong alignment with our mandate and strategic direction.

Our global team continues to put a premium on community engagement and corporate citizenship. Our Get Involved program, for example, provides the structure and guidance for a range of charitable and volunteer activities, including annual participation in the United Way Toronto campaign – which generated almost $550,000 from employee donations.

Inclusion and diversity

We believe our inclusive culture and diverse perspectives lead to exceptional outcomes for the Fund. In support of that, we must continue to attract and retain the brightest people in our field and ensure that we provide an inclusive environment where everyone can feel able to perform at the absolute best of their abilities. Our inclusion efforts, in turn, support our business priorities of driving innovation and agility, among others. We have made notable progress in fiscal 2019 in our inclusion and diversity efforts, including:

- Establishing a new Inclusion & Diversity Steering Committee of senior executives, chaired by CEO Mark Machin;
- Appointing a new full-time leader as Director, Inclusion & Diversity (I&D), who will drive our efforts to embed inclusion and diversity across CPPIB;
- Creating the cross-functional I&D Council, to sponsor the execution of our inclusion and diversity activities;
- Delivering Respect in the Workplace training to 100% of the workforce; and
- Engaging with our Employee Resource Groups to generate continued guidance and insight: Women's Initiative Network (WIN), Out@CPPIB for LGBT members and allies, and Mosaic, supporting awareness of cultural differences.

Our grassroots groups continue to coordinate internal activities and participation in key industry events, providing an organic way for employees to gain awareness, show support and get involved.

Our internal research – including a fact-finding tour – confirms our progress in our inclusion and diversity efforts. The research also shows there is room for improvement, both in representation and true inclusion and acceptance. Perhaps the most compelling finding is the strong sense of shared cultural experience, anchored by our Guiding Principles, across our teams and locations. This provides a positive and promising foundation for continued improvement.

We have also updated our representation goals based on our 2025 strategy, which calls for an agile, innovative culture that embraces diversity and higher percentages of female investment professionals and visible minorities in senior roles. In support of these efforts, we are introducing a self-disclosure global survey to better understand our current workforce and remove barriers inhibiting engagement, development and advancement.

Even as we evolve our focus on diversity beyond gender, we are pleased to make continued progress in the advancement of women in CPPIB. This year, we achieved our goal of a gender hire ratio of 50%/50%. Today, about 45% of our employees are female – including 36% of our Senior Management Team (SMT).

Addition to the senior leadership team

There was one notable addition to the SMT since the leadership changes mentioned in last year's report. Kelly Shen joined CPPIB in November 2018 as Senior Managing Director & Chief Technology and Data Officer, responsible for accelerating CPPIB's technology and data infrastructure. Kelly joins her colleagues on the SMT with a shared mandate to advance the next stage of CPPIB's evolution and execute CPPIB 2025.

FURTHERING OPERATIONAL CAPABILITIES

Our operational capabilities aim to support the growth and globalization of CPPIB's investment programs. During fiscal 2019, we continued to advance our processes and controls to protect our assets and increase the efficiency of our operations. In particular, we realigned certain internal functions to better position these groups to be able to deliver operational excellence and a scalable support model for the projected growth across all global investment activities.

We continued to mature our risk management practices by establishing a new Risk Committee of the Board. We also finalized a new Integrated Risk Framework and a multi-year plan for implementation. The Framework describes the scope of our risk management activities and ensures that risk principles and practices are applied systematically across the organization. Working with the Board, we refreshed our risk appetite statements, which are critical to risk governance. We also continued to build our risk functions, establishing distinct independent Liquidity Risk and Valuations groups.

During the year, we created a focused Technology & Data department headed by a new Senior Managing Director & Chief Technology and Data Officer. We also launched a Knowledge Management team and new tools to improve knowledge sharing and collaboration across the Fund. We continued to develop core investment research capabilities and build, test and scale up an inventory of data and analytics tools.

We established a permanent Project Management Office (PMO) that will oversee many of our large-scale programs. These include supporting our efforts on climate change, Knowledge Advantage, and, more broadly, the implementation of our 2025 strategy.

We also made numerous updates to our compliance and legal processes, including the design of our transaction support model and piloting enhancements, updates to our business records governance and the launch of a new legal e-billing and matter management system.

We completed the final stage of preparation for the arrival of funds for the additional CPP in January 2019. All systems and business process changes were implemented in October 2018 as planned. We are now operating under the two-account, two-pool investment structure. On the governance front, changes to all polices, standards and procedures were completed and approved.

In addition, in fiscal 2019, we updated our balancing process to use an expanded multi-factor approach with improvements on the existing process. This resulted in a more efficient portfolio based on improved diversification of the underlying drivers of risk and return. It also created a more systematic process that allows for clearer attribution and transparency and more checks and balances to limit operational risk.

ACCOUNTABILITY

CPPIB is accountable to Parliament and to the federal and provincial finance ministers who serve as the joint stewards of the CPP. We report to Parliament through the federal Finance Minister, who tables our annual report in Parliament. We share quarterly financial statements with the federal and provincial finance ministers, publish them on our website in both official languages and disseminate related news releases publicly. We also engage with news organizations, reaching millions of stakeholders, and we are committed to timely and continuous disclosure of significant investments and corporate developments.

In addition, we hold public meetings every two years in the provinces that participate in the CPP. These meetings offer Canadians and stakeholder groups the opportunity to ask questions and learn more about CPPIB. This fiscal year, public meetings were held between October and November 2018 across nine provinces.

CPPIB has committed to appearing annually before the House of Commons Standing Committee on Finance to deliver an update and respond to questions by Members of Parliament.

As required for Crown corporations, every six years we undergo an external Special Examination of our records, systems and practices. The most recent Special Examination was completed in early 2016 and validated our approach to governance and compliance; strategy and planning; investments, risk management and operations; talent and IT infrastructure. A copy of the report is available on our website. The next Special Examination will be in 2022.

All public financial reports issued by CPPIB are subject to review by the Audit Committee of our Board of Directors, which then recommends their approval to the full Board. This includes the Financial Statements and the financial information within the annual report.

We seek to meet or exceed both legislated requirements and industry norms in maintaining high standards of conduct and business practice, including our commitment to ethical conduct and disclosure practices. Our comprehensive governance and accountability framework includes measures designed to preserve public trust.

One of these measures is our Code of Conduct for Directors and employees. This Code, which is available on our website, requires everyone at CPPIB to act as whistleblowers if they become aware of a suspected breach. They can report confidentially to an external conduct review advisor who is not part of Management or the Board of Directors. The advisor submits a report and meets in person with the Board at least once a year to discuss the advisor's activities. Sheila Block, an internationally recognized litigation and dispute resolution lawyer, has served as CPPIB's Conduct Review Advisor since January 2018.

In addition to the Conduct Review Advisor, our Whistleblower Hotline allows employees to report wrongdoing or unethical behaviour related to CPPIB anonymously and securely.

We also have internal standards and policies to ensure that we act responsibly at all times as a major capital markets participant.

Disclosure

We believe in transparency as the foundation of public trust.

Our disclosure policy reflects the level of information that will help inform CPP contributors and beneficiaries about how we are making investments on their behalf. This policy is designed to foster a better understanding of what drives performance, stability and sustainability of the Fund over time.

We are committed to timely and continuous disclosure of significant new investments and asset dispositions. We disseminate performance results quarterly and publish an annual report, which contains extensive information about our strategy, Fund performance, investment activities governance, costs and compensation.

We strive for consistent disclosure at the organizational level and within investment programs, recognizing that each program has unique legal, competitive and practical requirements.

Our website contains information about how we operate. This includes details of our investments and partners. It also provides access to CPPIB's governing legislation and regulations, bylaws, governance manual and policies. These policies include the investment statements that guide us in managing the long-term CPP Fund Investment Portfolios. We also maintain digital channels to widely communicate new developments.

We exceed our statutory disclosure requirements. We are committed to reviewing our disclosure policies and practices on an ongoing basis to ensure that they keep pace with the evolution of the organization and the needs of Canadians.

Beyond statutory disclosure, CPPIB undertook programs in 2018 to directly reach CPP contributors and beneficiaries and help them better understand how management of the Fund is intended to work for them. We also addressed topics affecting public trust. Public opinion research conducted by CPPIB found consistently low public confidence in the sustainability of the Fund and in understanding how the Fund is managed. Informing Canadians is important because CPPIB's investment strategy exposes the Fund, by design, to a number of risks. Moreover, trust is the lifeblood of any significant financial system, and the national retirement program is no exception.

We want Canadians to be informed about our investment strategy and what this means for how we manage their money. Our efforts in fiscal 2019 furthered this goal by enhancing our digital presence so that we share information about CPPIB to a broader group of Canadians; engaging with media across Canada to help articulate our investment approach; and implementing a public awareness initiative to inform Canadians that the CPP will be there for them and for generations to come.

RISK MANAGEMENT

CPPIB's activities expose us to a broad range of risks. Our Integrated Risk Framework considers all key risks, including both investment and non-investment risks. It helps ensure that the risks we take are prudent and commensurate with the long-term benefits we expect to receive.

We define a key risk as one that could have a significant impact on our ability to execute our mandate. In our assessment of key risks, we consider how different risks are interconnected and/or correlated.

Risk environment

The environment in which CPPIB operates is dynamic, and the pace of change is high. These changes may impact our risk profile, the development of our risk-management practices and our ability to achieve our investment objectives. This past year, we closely monitored the following developments to assess their potential impact on our investments and operations over time:

- Global uncertainty remained a top risk throughout fiscal 2019. Political events in the U.S. continued to dominate the headlines, which increased uncertainty. Concerns also persist around the changing political landscape in Europe and the Brexit negotiations. We expect the geopolitical environment to remain uncertain in fiscal 2020 as Democrats in the U.S. look to oppose Republican policies, and U.S.-China negotiations continue.
- Increasing capital inflows into alternative assets have resulted in high valuations in private markets. This has made it increasingly difficult to source opportunities with attractive risk-adjusted returns. It also elevates the risk of a fall in prices across public and private markets, given extended stock market gains in the past several years.
- The strong U.S. dollar and labour markets have made it more challenging to attract and retain a diverse talent base of specialized investment professionals with global expertise.
- Growing competitive pressures from new technologies and business models. Our investments and operations could feel the impact if we fail to anticipate the degree of these pressures. This is particularly true in the medium to long term.
- Cyber security breaches in both the public and private sectors have illustrated the difficulties organizations are facing trying to keep pace with the rapidly evolving cyber threat environment. We continually enhance our practices to ensure our information is protected.
- Climate change presents a complex array of physical and non-physical risks and opportunities across our investment activities. This is discussed more thoroughly in the Climate Change section on page 28.

Risk Management Objectives

CPPIB's risk management objectives are to ensure that we:

1. Understand and clearly articulate the organization's appetite for risk, including defining "undue risk of loss" in the context of our mandate, considering both the short and long term;
2. Are appropriately rewarded for risks we take on in pursuing both our overall investment strategy and specific investment opportunities;
3. Operate within our stated risk appetite by monitoring our risk exposure and by evaluating the design and operating effectiveness of our controls; and
4. Clearly define who is accountable for various risks and the related controls.

Enhancing our risk management practices

Effective risk management, along with our comparative advantages, allows us to capitalize on opportunities when others cannot. As part of our efforts to continuously improve our risk management practices, we made several enhancements this year. We:

- Worked with the ad hoc risk committee of the Board to evolve our risk management practices. The Board formally constituted a standing Risk Committee in late fiscal 2019 that will be chaired by Jo Mark Zurel. Its purpose is to oversee risk governance and management practices and make recommendations to the Board.
- Enhanced our Integrated Risk Framework. This is based on:
  - A strong governance structure that includes a risk-aware culture, risk policies, defined risk appetite and risk limits;
  - Processes for identifying, assessing, controlling, monitoring and reporting all key existing and emerging risks; and
  - Clear separation between front-line management, risk oversight functions and independent assurance (the "Three Lines of Defence").
- Amended our risk appetite statements, which are a critical component of CPPIB's overall governance and risk oversight framework. While we have changed the way we articulate our risk appetite, which sets the upper and lower limits for risk taking, we did not materially change the level of risk the Fund is targeting. We continue to believe the current level of investment risk is appropriate.

The above changes will also position us for the future when the Fund will be much larger.

Risk culture

We believe that formally documented controls can only be effective with a sound organizational risk culture. This is characterized by open dialogue, a willingness to raise concerns and clear accountabilities.

Our Guiding Principles and Code of Conduct provide a strong foundation for our culture, which is reinforced by a strong tone from the top.

Risk governance

The Board, Management and their respective committees are responsible for risk governance at CPPIB. The Board of Directors oversees our efforts to act in accordance with CPPIB's mandate. This requires us to seek a "maximum rate of return, without undue risk of loss, having regard to the factors that may affect the funding of the CPP."

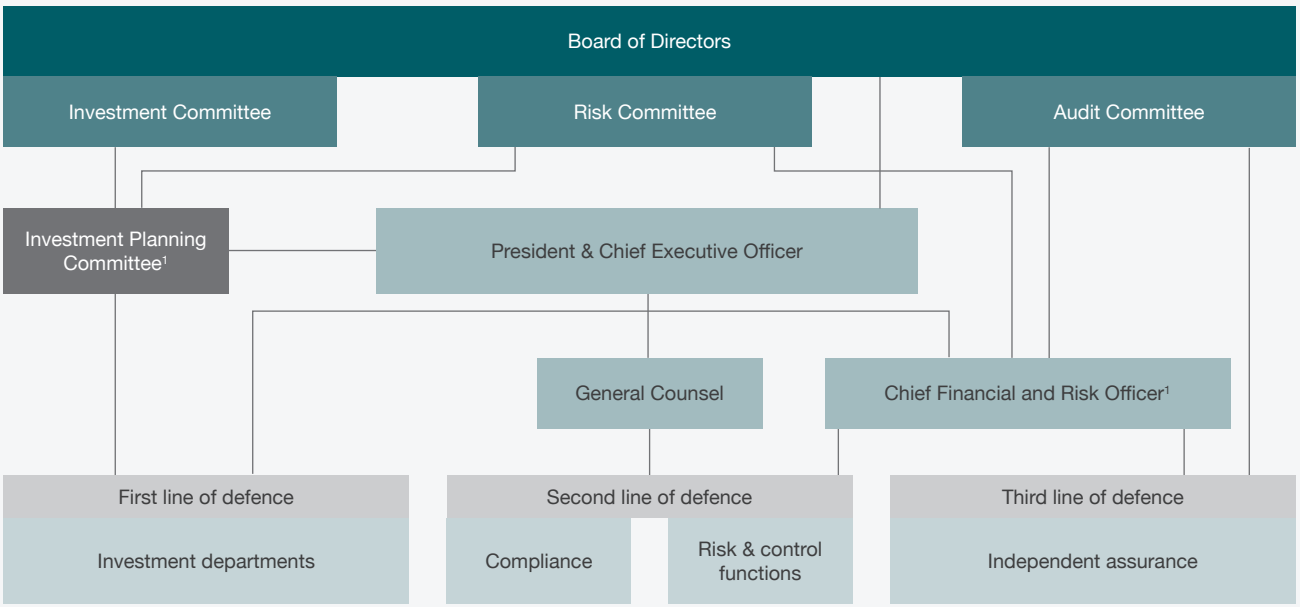
To this end, the Board is responsible for the oversight of risk. It ensures that Management has identified key risks and established a separate risk appetite for each key risk and appropriate strategies to manage them. Board committees have the following risk-related responsibilities:

- The mandate of the Risk Committee is to oversee risk governance and management practices.
- The Investment Committee recommends CPPIB's investment policies to the Board and approves and monitors investment activities and risk levels.
- The Audit Committee oversees financial reporting, tax, external and internal audit and internal control policies and practices.
- The Human Resources and Compensation Committee (HRCC) is responsible for overseeing risks related to our employees and employment practices. The HRCC reviews and recommends the compensation framework, reviews organizational structure, and ensures that a succession planning program is in place.
- The Governance Committee ensures that CPPIB follows appropriate governance best practices and monitors application of the Code of Conduct and conflict of interest guidelines.

For a more detailed description of these responsibilities, see page 103.

The diagram below shows CPPIB's risk management structure.

Risk Management Structure



1 The Chief Financial and Risk Officer is a member of the Investment Planning Committee.

The President & CEO, by way of delegation from the Board of Directors, is accountable for all risks beyond those matters specifically reserved for the Board or Board committees. The responsibility for risk management is further distributed throughout the organization, starting with the Chief Financial & Risk Officer (CFRO) and Senior Management Team (SMT).

The CFRO ensures that risk management is integrated with strategic and business planning. Through the business planning process, the CFRO ensures that plans align with our overall strategy and risk appetite and that adequate resources and processes are in place to identify and effectively manage key risks.

As shown above, we have three lines of defence that help ensure clear separation between front-line management, risk oversight functions and independent assurance:

First line of defence: The leaders of each department are responsible for appropriately managing the risks assumed within their areas of responsibility.

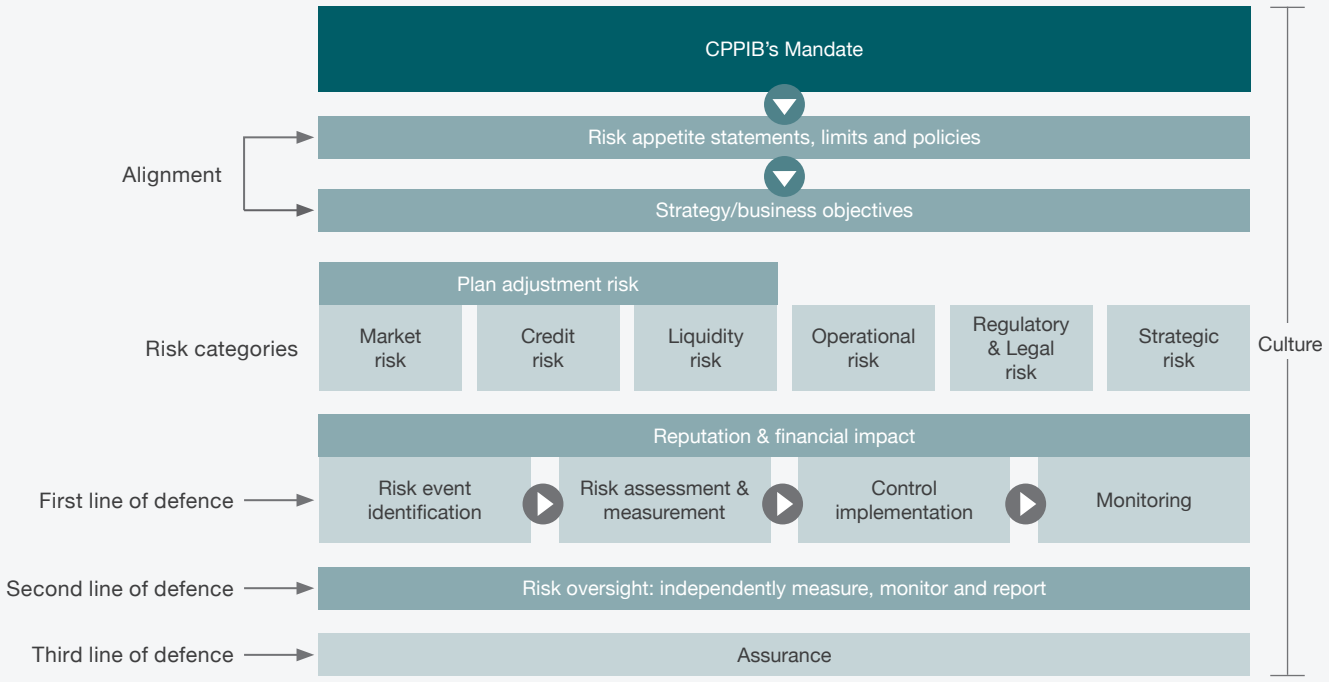
Second line of defence: The CFRO is responsible for risk oversight at CPPIB. The Risk group is responsible for independently challenging the front-line's identification, assessment and management of risks; develops, measures and monitors compliance with all approved risk appetites; and assesses emerging risks for the organization.

Third line of defence: The Assurance & Advisory group (AA) provides independent assurance over risk governance and internal controls.

Our approach to investment risk governance is described further on page 35.

The diagram below shows CPPIB's Integrated Risk Framework.

Integrated Risk Framework



Risk categories and risk management strategies

Plan adjustment risk: This is the risk of increases in the Minimum Contribution Rates due solely to adverse investment experiences. It is an overarching risk to Market Risk, Credit Risk and Liquidity Risk. Calculated by the Chief Actuary, the Minimum Contribution Rates are considered the rates required to sustain the base CPP and the additional CPP, as applicable.

Market risk: This is the risk that the value of an investment will fluctuate because of changes in market prices and rates. Market risk includes changes in value due to underlying shocks in equity markets, interest rates, currency exchange rates and credit spreads.

CPPIB manages market risk through the Risk/Return Accountability Framework, as described on page 36. It includes investing across a wide spectrum of asset classes and investment strategies to earn a diversified set of risk premia over the long term at the total Fund level. The management of market risk is supported by a comprehensive set of risk limits and controls established at various levels within the organization.

In fiscal 2019, CPPIB implemented additional predictive scenarios and quantified the potential impact to the total portfolio if these scenarios were to unfold. In addition to these bespoke scenarios, we also applied the severe scenario outlined in the Comprehensive Capital Analysis and Review framework developed by the Federal Reserve Board to our portfolio to further supplement the range of potential impacts we monitor as part of our stress-testing program.

Credit risk: This is the risk of financial loss due to a counterparty failing to meet its contractual obligations. This risk also includes potential reductions in the value of the assets due to a decline in the credit quality of the underlying entity.

We mitigate credit risk exposure on certain financial assets and financial liabilities through conditional offset rights in the event of default, insolvency or bankruptcy. In the case of reverse repurchase agreements, we mitigate risk exposure through collateral from counterparties.

Liquidity risk: This is the risk of failing to obtain the funds needed to meet our payment obligations as they become due, or to fund investment programs or to optimize/rebalance our portfolio in periods of stress, all without realizing unacceptable losses.

CPPIB supplements its management of liquidity risk through its ability to raise funds by issuing commercial paper and term debt and by transacting in securities sold under repurchase agreements. CPPIB also maintains unsecured credit facilities to meet potential liquidity requirements. In addition, CPPIB maintains sufficient liquid assets, which can be easily converted to meet liquidity requirements.

Liquidity risk is managed and monitored according to the Liquidity Management Standards. Market and credit risk are managed and monitored in accordance with the Risk Policy approved annually by the Board of Directors.

In fiscal 2019, CPPIB conducted a financial crisis management simulation to better understand how we can ensure that we have sufficient liquidity to meet our obligations during a market downturn.

Risk Oversight

We have committees to oversee our various investment risk (plan adjustment risk) exposures. The Investment Committee of the Board has traditionally received regular reporting on our assets, investment income, investment returns, risk measures and stress-testing results. Going forward, the Risk Committee will assume certain of these responsibilities consistent with its mandate to provide a focus on risk governance and management. Management's Investment Planning Committee (IPC) receives risk-related information weekly. It reviews the risks in the Investment Portfolio at least monthly through commentaries prepared by TPM and the Risk group. See page 35 for more details about the IPC.

Additional information related to our investment risk exposures and risk measurement and management processes is included in the section called *How We Maintain Management Accountability for Risk-taking and Performance* on page 35. There is also further information in note seven to our Financial Statements on page 142.

Operational risk: This is the risk of loss due to actions of people or inadequate or failed internal processes or systems. It can be the result of either internal or external factors. Operational risk encompasses a broad range of risks, including those associated with:

- Model risk;
- Human capital management;
- Information integrity and cybersecurity;
- Business interruptions;
- Process management and execution; and
- Integrity of financial reporting.

Risk can take the form of:

- Direct financial losses;
- Indirect financial losses appearing as operating inefficiencies;
- Regulatory sanctions or penalties; and
- Damage to our reputation.

Operational risk can also directly impact our ability to manage other key risks.

Each member of the Senior Management Team bears primary accountability for managing operational risks within their department. CPPIB manages operational risk through internal controls that are subject to internal audit reviews. We also conduct an annual review as part of the CEO/CFRO certification of internal control over financial reporting.

The Finance, Analytics and Risk department, and the Technology and Data department, maintain formal protocols for:

- Implementing new investment products and technologies;
- Managing data, models and user-developed applications;
- Ensuring information security; and
- Establishing continuity plans for potential business interruptions.

In addition, we purchase property and casualty insurance and director and officer liability coverage.

In fiscal 2019, CPPIB continued to increase the effectiveness of cyber-security controls through the implementation of advanced technologies. We also built awareness of cyber risks during our firm-wide cyber-security awareness month.

Regulatory and legal risk: This is the risk of loss due to changes to or non-compliance with applicable laws, regulations, rules, contractual obligations, CPPIB's Code of Conduct or other internal policies. This includes those defined in the *CPPIB Act*. Failure to comply could result in fines, regulatory sanctions and/or harm to our reputation.

Our compliance program is designed to promote adherence to regulatory obligations worldwide. It helps ensure awareness of the laws and regulations that affect CPPIB and the risks associated with failing to comply. We monitor emerging legal and regulatory issues as well as proposed regulatory changes. We also take a constructive role in these developments when appropriate. CPPIB regularly seeks input from external legal counsel to keep us informed on emerging issues.

Compliance with tax laws is a particular type of risk under this category. As with any other risk, our aim is to mitigate tax risk while taking into account our investment mandate. CPPIB does this by adhering to the controls and procedures embedded in our internal policies. Tax risks can be technical, operational or regulatory in nature and can have financial or reputation implications.

To help ensure that CPP's contributors and beneficiaries do not pay tax twice on income earned by the Fund, we employ judicious and prudent investment structures designed to maximize after-tax investment returns. Our Tax group plays a key role in evolving CPPIB's tax strategy. It supports decision-making, oversees tax-risk management and evaluates overall tax practices. We review key tax risk both as part of due diligence for individual transactions and at the total Fund level. For more information about CPPIB's tax strategy, please visit our website at www.cppib.com.

The Board, through its various committees and processes, reviews internal controls and systems designed to address key risks for the Fund. This includes tax risk. At the Management level, CPPIB's CFRO is responsible for CPPIB's tax strategy. Day-to-day management of tax risk sits with the Head of Tax, who periodically reports to the Audit Committee.

Strategic risk: This is the risk that CPPIB will make inappropriate strategic choices, will be unable to implement strategies or will fail to be agile enough to respond to changes in the external environment over the long term. Managing strategic risk effectively is critical to achieving our mandate.

A number of important processes control and mitigate strategic risks:

- The Board discusses and reviews our business plan at least annually.
- Each department carries out detailed business planning that takes into account our strategy and longer-term objectives. The President & CEO reviews these plans, leading to an annual business plan approved by Management and the Board.
- We prepare specific guidance for each investment program to ensure alignment with CPPIB's overall strategy and comparative advantages.
- We complete quarterly reviews of the portfolio and associated investment risks in the context of capital market and emerging economic conditions.
- Both Management and the Board conduct quarterly reporting and discussion of our progress, challenges and risks related to achieving the approved business plan.

Impact Assessments of Risks to CPPIB

The above investment and non-investment risks can have both financial and reputational impacts on CPPIB.

Financial: Financial impacts can take many forms including investment losses, unplanned operational expenses and regulatory fines. The higher the risk target, the higher the long-term expected returns but also the greater shorter-term volatility and potential for reported losses. For a description of how we achieve long-term total returns that will help sustain the CPP and pay pensions while ensuring that we manage CPPIB's investments responsibly for current and future generations, please refer to page 29 for Our Total Portfolio Investment Framework.

Reputation: In managing our reputation we seek to avoid the loss of credibility due to internal or external factors. Many types of risk have the potential to negatively impact our corporate reputation. Internal business practices, or those of our business partners or the companies in which we invest, may generate reputation harm. Consequences include diminished brand efficacy in commercial markets, impeding our ability to execute our strategy and our status as investor, partner and employer of choice.

The responsibility to protect our reputation extends to every employee, Management and Board Directors. We continue to proactively build our reputation and brand with key stakeholders globally to support our business objectives and mitigate risk. The Senior Managing Director & Global Head of Public Affairs and Communications oversees CPPIB's corporate reputation and brand management activities, including our issues management framework. Our Issues Management Executive Committee addresses significant issues as they arise. We also require reputation assessments as part of the investment decision-making process through the Reputation Management Framework protocol.

This year, we expanded our efforts to monitor and manage areas of concern across more of our investment portfolio beyond new investments, including a universe of public equities that could potentially become part of our portfolio in the future. This ongoing work to extend existing reputation management programs will help form a more holistic picture of issues that could sway perceptions about the organization. This also helps ensure consistency across the various dimensions of risk.

FINANCIAL REVIEW

This annual report contains forward-looking statements reflecting Management's objectives, outlook and expectations as at May 8, 2019.

These statements involve risks and uncertainties. Therefore, our future investment activities may vary from those outlined herein.

03

Performance and Governance

Management's Discussion & Analysis 52
- Financial performance 53
- Performance of the Investment Departments 63
- Fiscal 2020 objectives 85
- CEO/CFRO Certification 86
- Accounting policies and critical estimates 86

Compensation Discussion and Analysis 87
- Report of the Human Resources and Compensation Committee 87
- Compensation Discussion and Analysis 89

Governance 102
- Governance Practices of the Board of Directors 103
- Board of Directors 112

The following information provides analysis of the operations and financial position of the Canada Pension Plan Investment Board and should be read in conjunction with the Financial Statements and accompanying notes for the year ending March 31, 2019. The Financial Statements have been prepared in accordance with International Financial Reporting Standards.

FINANCIAL PERFORMANCE

Fiscal 2019 produced positive returns across all major asset classes despite an equity market downturn in the third quarter of our fiscal year. The fiscal year began on a positive note with global equity markets broadly rising as key economic indicators outlined continued momentum in the economic cycle, particularly in North America. Central banks in both the U.S. and Canada recognized those economic conditions by slowly raising interest rates toward more neutral levels. However, sentiment changed direction in the third quarter as growing concern surrounding the U.S.-China trade conflict, as well as the global economy's vulnerability to higher interest rates in the U.S., and rich valuations led to a stock market sell-off. Third-quarter losses in global equity markets reversed the gains from the previous two quarters and put major indexes in negative territory. Government bonds benefited from a flight to safety, while the outlook for interest rates reversed, as the market consensus shifted from expecting further interest rate hikes from central banks, to anticipating near-term interest rate cuts, which resulted in yield curve inversions in both the U.S. and Canada. In the fourth quarter, global equity markets rebounded, bringing broad indexes back into positive territory, while government bonds extended their gains from December. The Canadian dollar's performance was mixed this year, having little overall impact on Fund results, weakening slightly against the U.S. dollar, while strengthening against the euro and British pound.

The total CPP Fund earned a net return of 8.9% for the year, delivering net income of $32.0 billion after all CPPIB costs. Starting in January 2019, CPPIB received and invested its first contributions to the additional Canada Pension Plan (additional CPP) account. The base Canada Pension Plan (base CPP) account, which at $391.6 billion represented 99.9% of the net investments at the end of the fiscal year, earned a return of 8.9%, or $32.0 billion, net of all costs. The additional CPP account, which at $0.4 billion comprised 0.1% of the net investments, earned a net return of 5.0% since January 2019, or $11.0 million (exclusive of start-up expenses of $9 million). The chart below provides the weightings of the CPP Fund by asset category, as described on page 32.

Asset Mix

	As at March 31, 2019		As at March 31, 2018[1]	
Asset Class	($ billions)	(%)	($ billions)	(%)
Public Equities				
Canadian	7.9	2.0%	8.7	2.4%
Foreign	82.7	21.1%	103.3	29.0%
Emerging	39.4	10.1%	26.4	7.4%
	130.0	33.2%	138.4	38.8%
Private Equities				
Canadian	1.0	0.2%	1.0	0.3%
Foreign	80.0	20.4%	61.8	17.3%
Emerging	12.1	3.1%	9.6	2.7%
	93.1	23.7%	72.4	20.3%
Government Bonds				
Non-marketable	22.2	5.7%	23.6	6.6%
Marketable	63.9	16.3%	53.2	15.0%
	86.1	22.0%	76.8	21.6%
Credit Investments	35.8	9.1%	22.6	6.3%
Real Assets				
Real estate	47.5	12.1%	46.1	12.9%
Infrastructure	33.3	8.5%	28.6	8.0%
Energy and Resources	8.2	2.1%	6.1	1.7%
Power and Renewables	5.1	1.3%	3.0	0.9%
	94.1	24.0%	83.8	23.5%
External Debt Issuance	(30.9)	(7.9%)	(24.1)	(6.7%)
Cash and Absolute Return Strategies[2]	(16.2)	(4.1%)	(13.6)	(3.8%)
Net Investments[3]	392.0	100.0%	356.3	100.0%

1 Certain comparative figures and percentages have been updated to be consistent with the current year's presentation.

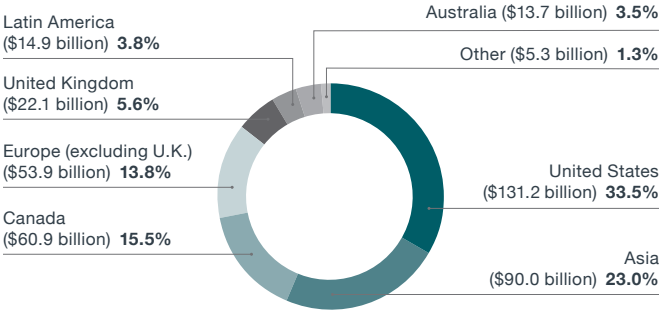
2 The negative balance of $16.2 billion in Cash & Absolute Return Strategies represents the net amount of financing through derivatives and repurchase agreements, and the current net position from Absolute Return Strategies.

3 Includes $391.6 billion of base CPP and $0.4 billion of additional CPP.

The charts below illustrate the global diversification of our portfolio, by region or country and by currency exposure. Canadian assets represented 15.5% of the Fund at the end of fiscal 2019, and totalled $60.9 billion. Foreign assets represented 84.5% and totalled $331.1 billion. Foreign currency exposures represented 84.7% of the Fund. Currency diversification represents the underlying currency exposure of our investments whereas global diversification represents the geographic markets exposure. Private assets made up 54.7% of the portfolio.

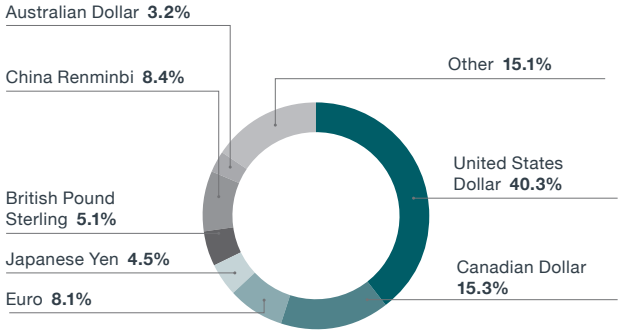
Global Diversification

As at March 31, 2019



Currency Diversification

As at March 31, 2019



Total Fund performance

The CPP Fund ended its fiscal year on March 31, 2019, with net assets of $392.0 billion, an increase of $35.9 billion from the prior year. This increase consisted of $32.0 billion in net income after all CPPIB costs and $3.9 billion in net CPP contributions.

The base CPP net return of 8.9% was driven by strong results from our active programs, as well as a moderate contribution from the Balancing Portfolio, which saw gains across equities, fixed income and credit investments. While global equity markets sold off sharply in Q3, a strong rebound in Q4 put most major indexes firmly in positive territory for the year. The S&P Global LargeMidCap Index gained 6.1% in local currency terms, with most of those gains driven by developed markets, which outperformed emerging markets this year. Among developed markets, the United States and Canada earned 9.5% and 8.1%, respectively, in local currency terms. China's CSI 300 Index was relatively unchanged, with a gain of 1.6% in local terms, and largely contributed to a decline in broader emerging markets measures. China's underperformance reflected ongoing U.S.-China trade tensions, as well as a slowdown in economic growth and domestic deleveraging. India and Brazil earned local gains of 13.2% and 13.3%, respectively.

Fixed income investments performed well this year, reflecting the flight to safety and a reversal in the interest rate outlook in North America. The Canadian and U.S. government bond markets returned 5.4% and 4.2%, respectively, in local currency terms. The U.S. Federal Reserve raised its benchmark interest rate three times for a cumulative increase of 75 basis points to 2.50%, while the Bank of Canada raised its benchmark rate twice for a cumulative increase of 50 basis points to 1.75%. Despite higher rates at the short end of the term structure, medium and long-term rates moved significantly lower in the latter portion of the year, driving positive bond returns and leading to the inversion of yield curves in both the U.S. and Canada.

The impact from foreign currency was small this year, contributing a $0.7 billion gain to the CPP Fund, as the Canadian dollar was slightly weaker against the U.S. dollar in fiscal 2019. Gains from exposure to the U.S. dollar were reduced by losses in the euro and British pound, which weakened against the Canadian dollar. The CPP Investment Portfolio is a global portfolio that holds assets denominated in many foreign currencies. We generally do not hedge these widely diversified currency exposures back to the Canadian dollar – our view on currency hedging is explained on page 27.

The very first contributions related to additional CPP started at the beginning of January 2019. As such, all sums associated with the additional CPP account are very small in absolute terms, and especially in relation to the base CPP account managed by CPPIB, which has benefited from 20 years of cumulative net inflow contributions, not immediately needed to meet current pension obligations, cumulative investment income, and the legacy bond portfolio in place before inception of CPPIB. The amounts of contributions related to additional CPP are also scheduled to be phased in gradually over seven years.

For the first three months of calendar 2019 the additional CPP account delivered an investment return of $11.0 million or 5.0% after all costs, excluding start-up expenses of $9 million. The additional CPP delivered lower net returns compared to the base CPP, mainly due to additional CPP's higher fixed income composition of 53.7% consistent with its structural design to meet its lower risk target.

As a long-term investor, five- and 10-year periods provide a more meaningful assessment to evaluate the performance of CPPIB's investment strategy. For the five-year period ending March 31, 2019, the CPP Fund generated total net income of $152.0 billion or an annualized nominal return of 10.7% after deducting all CPPIB costs. For the 10-year period, the CPP Fund generated $239.0 billion or an annualized nominal return of 11.1% after all CPPIB costs. In the 27th Actuarial Report on the CPP, it was assumed that the base CPP Fund's long-term prospective net real rate of return will average 3.9% over the 75-year projection period of the Report, after all CPPIB costs and adjusting for inflation. The CPP Fund generated annualized net real returns of 8.9% and 9.2% for the most recent five- and 10-year periods. The next Actuarial Report by the Chief Actuary, expected before the end of the calendar 2019 year, will reflect projections including the additional CPP.

Total Fund Returns[1]

Asset Class	Fiscal 2019	Fiscal 2018
Public Equities		
Canadian	**7.9%**	2.2%
Foreign	**7.5%**	11.0%
Emerging	**(1.7%)**	18.6%
Private Equities		
Canadian	**5.7%**	1.8%
Foreign	**18.0%**	16.0%
Emerging	**11.8%**	19.5%
Government Bonds		
Marketable	**5.3%**	1.6%
Non-marketable	**4.8%**	2.7%
Credit Investments	**8.7%**	6.9%
Real Assets		
Real estate	**6.4%**	9.4%
Infrastructure	**14.0%**	15.2%
Other[2]	**0.0%**	(9.8%)
Total Fund[3]	**9.3%**	11.9%

1 Total Fund returns by asset class are inclusive of both the base and additional CPP accounts, before CPPIB operating expenses.

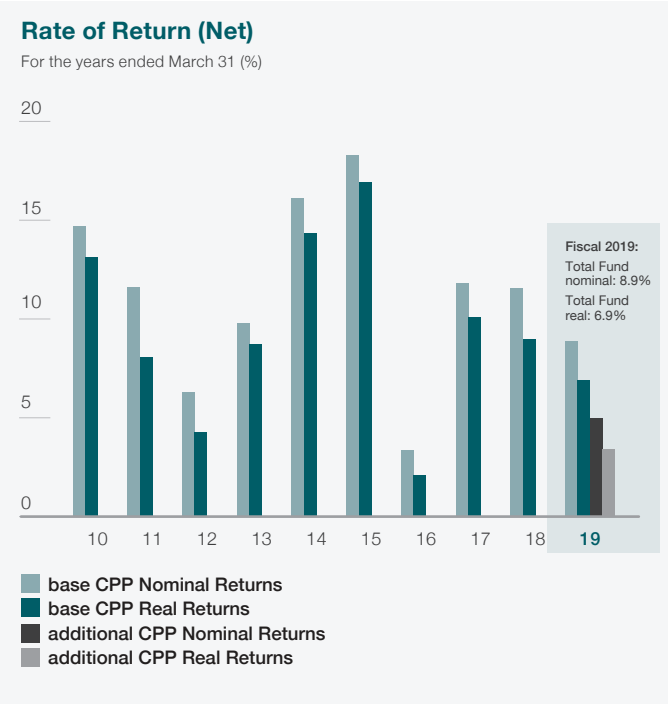
2 Other real assets consist of Energy & Resources and Power & Renewables investments, including Agriculture.

3 The total Fund return in fiscal 2019 includes performance of $(1.2) billion from currency management activities ($1.5 billion in fiscal 2018), $(0.7) billion from cash and liquidity management activities ($(0.6) billion in fiscal 2018), and $0.6 billion from absolute return strategies ($2.9 billion in fiscal 2018). They are not attributed to an asset class return reported in this table.

Net Returns

	Fiscal 2019		Fiscal 2018	
	% (annualized)	$ billions (cumulative)	% (annualized)	$ billions (cumulative)
base CPP				
1-year return	**8.9%**	**32.0**	11.5 %	36.7
5-year return	**10.7%**	**152.0**	12.1%	150.1
10-year return	**11.1%**	**239.0**	7.9%	183.3
additional CPP				
1-year return[1]	**5.0%**	**0.0**		

1 Return is not annualized given additional CPP inception in January 2019. Additional CPP net return excludes $9 million in start-up expenses.



Reference Portfolios returns

The CPP Reference Portfolios are two-asset passive portfolios comprising public market global equities and nominal bonds issued by Canadian governments, each represented by broad market indexes. As such, they provide a clear benchmark for long-term total returns on the additional CPP and base CPP Investment Portfolios at their respective targeted level of risk. The Reference Portfolios differ between the additional and base CPP accounts to reflect the different risk levels prudently targeted for each of their long-term investment portfolios. See page 22 for more information.

On a longer-term basis, Reference Portfolios rates of return have been as follows:

% (annualized)	Fiscal 2019	Fiscal 2018
base CPP Reference Portfolio Returns		
1-year	**6.6%**	9.8%
5-year	**9.3%**	11.2%
10-year	**10.7%**	7.7%
additional CPP Reference Portfolio Returns		
1-year[1]	**7.0%**	

1 Return is not annualized given additional CPP inception in January 2019.

Performance against Reference Portfolios

The CPP Fund earned a net return of 8.9% and net income of $32.0 billion in fiscal 2019 after deducting all costs. This result is above the aggregated Reference Portfolios' returns of both base and additional CPP accounts leading to a net dollar value add of $6.4 billion. The gain of the aggregated Reference Portfolios reflected the moderate return from global equities for the year and the relatively strong performance of Canadian government bonds.

To quantify the value generated by CPPIB's active management, each year we measure the difference between the annual performance of each account and that of its Reference Portfolio in dollar terms, or dollar value-added (DVA), after deducting all costs. For the year ending March 31, 2019, the base CPP Reference Portfolio return of 6.6% resulted in a net DVA of $6.4 billion. The additional CPP account had a very minor effect on this year's DVA result given its recent inception date and relative small asset size. See page 24 for more details on active management and the sources of return.

In single years, differences between the actual net returns and Reference Portfolios' returns are often substantially affected by three factors:

1. Diversification – By design, the Investment Portfolios are more broadly diversified than the Reference Portfolios. The base CPP Investment Portfolio includes major commitments to private asset classes such as private equity, real assets, compared to only two asset classes in the Reference Portfolio with a heavy weight in public equities (85% for fiscal 2019). The additional CPP Investment Portfolio also participates in the same broad range of asset classes and strategies, tempered by its higher weight in government bonds.

Asset Class	Benchmark	2019 Return (%)	2018 Return (%)
Equity	S&P Global LargeMidCap Index[1]	**6.7%**	11.6%
Fixed Income	FTSE TMX Canada All Governments Nominal Bond Index	**5.4%**	1.2%
Total base CPP Reference Portfolio[2]		**6.6%**	9.8%
Total additional CPP Reference Portfolio[2]		**7.0%**	

1 Net of CPPIB withholding tax, unhedged.

2 Component returns for base CPP and additional CPP Reference Portfolios are the same, but the aggregated returns differ due to different component weighting between the two benchmarks (Equity/Fixed Income weights of 50/50 and 85/15 for additional CPP and base CPP, respectively). In addition, additional CPP Reference Portfolio has partial year results given additional CPP inception in January 2019.

The diversified allocation of CPP Fund assets to major asset classes on average in fiscal 2019 is shown below:

		Fiscal 2019
Average Asset Class Weights	base CPP	additional CPP[1]
Public Equities	36%	19%
Private Equities	22%	13%
Government Bonds	22%	53%
Credit Investments	8%	5%
Real Assets[2]	24%	14%
Cash and Absolute Return Strategies[3]	(12%)	(4%)
Total	100%	100%

1 Three months average.

2 Includes 13% for real estate, 8% for infrastructure, 2% for energy and resources, and 1% for power and renewables for base CPP, and 7% for real estate, 5% for infrastructure, 1% for energy and resources, and 1% for power and renewables for additional CPP.

3 Net of external debt issuances.

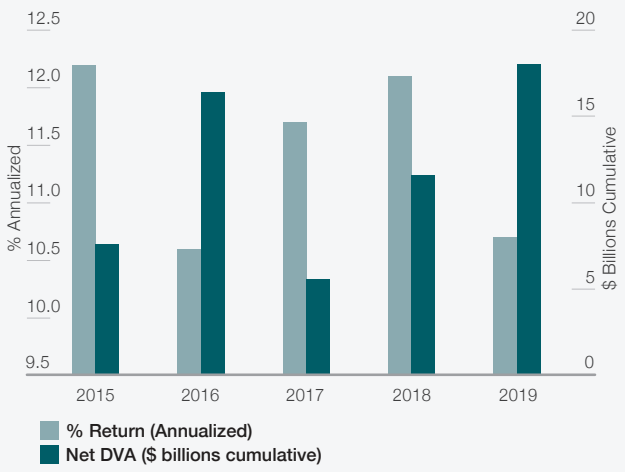
When global public equity markets have a strong year, the public equities-dominated Reference Portfolios' returns will naturally tend to be higher than the more diversified Investment Portfolios. In years when asset class returns are more mixed across the spectrum, and especially when public equity markets are falling, the Investment Portfolios will tend to outperform. Combining a limited degree of leverage in the Fund with much more widely diversified asset class allocations leads to overall positive dollar value-added expected from diversification over the long term.

2. Investment selection – Investment selection refers to how we select, buy, sell and weight individual assets in line with their program's mandates and intended factor-exposure appetite, through internal or external management. Generating value-added in the wide set of opportunities in both private and selected public markets requires manager skills. Outperforming markets sustainably is a very challenging task. Nevertheless, we believe that the variety and breadth of our investment programs help stabilize our overall performance.

3. Valuations – The values placed on private investments are determined by processes that include independent valuation procedures and the use of external appraisers and valuators. See page 86 for more details about the valuation process. In the short term, private assets tend to exhibit reported investment values that are less volatile than the daily-moving prices of comparable public market equivalents. In periods when public equities rise rapidly, we expect little or even negative reported dollar value-added in private investments, which now comprise 54.7% of the portfolio. Conversely, in periods of sharp public market losses, we expect reported private investments values to be relatively resilient, and thus generate positive reported value-added versus public market equivalents.

We do not place undue emphasis on results in any single year, whether positive or negative. Our investment strategy and decisions intentionally look through horizons spanning multiple years and decades. We focus on tracking absolute and dollar value-added performance over rolling five-year periods. This measurement period aligns with our long-term investment mandate and our compensation framework, as described on page 87. While it does not necessarily represent a full-market cycle, based on historical patterns the five-year period provides a reasonable basis for assessing longer-term performance over multiple such periods.

5-Year Rolling Net Return and DVA



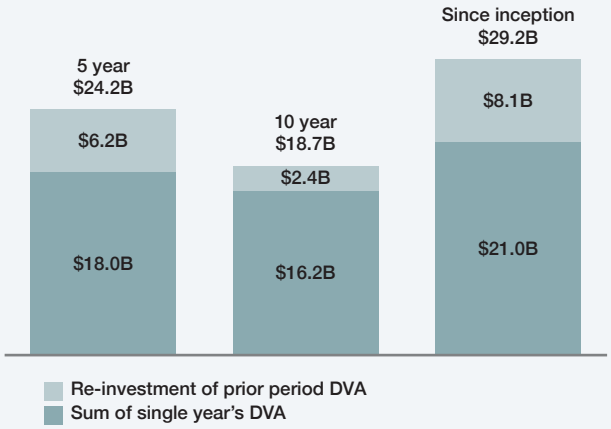
At March 31, 2019, CPPIB has generated $29.2 billion of compounded DVA since inception of active management at April 1, 2006.

The chart at right shows the compounded DVA for the full period since inception, and for the past 10 and five years.

Compounded Dollar Value-Added

Over multiple years, the dollar value-added is not only the sum of every single year's value-added but also the compounding effect of continuous reinvestment of gains (or losses). We therefore calculate compounded dollar value-added as the total net dollar value that CPPIB has added to the Fund over the long term through all sources of active management, above the value that the Fund would have generated had it earned Reference Portfolio returns alone.

Compounded Dollar Value-Added from Active Management



Figures do not add up due to rounding.

Managing total costs

Building CPPIB today and for the future

CPPIB seeks to maximize investment returns without undue risk of loss having regard to the factors that may affect the funding of the CPP. This objective guides all decisions, whether it is creating a new investment program, investing in technology systems, or opening a new office. As a result, we only incur internal or external costs when we are sufficiently confident of enhanced long-term returns for the Fund net of all costs. Further, a decision to either carry out activities with internal resources, or to do so through external partners, is purely an economic calculation in the best interest of the Fund. If we can achieve higher returns using internal resources, we will do so. If the particular program requires more unique capabilities not cost-effectively available internally, we will seek partners. We remain vigilant as we continue to build an organization designed to realize our public purpose.

In 2006, CPPIB made the decision to adopt an active management strategy to build value and generate investment returns that will exceed passive management in the long run after all costs. Our decision to manage the Fund actively was not made lightly. This approach presents significant complexity and comes with costs as it requires resources to build an enduring, skills-based organization with diverse, internationally competitive investment programs each designed to maximize long-term, risk-adjusted returns after all costs.

To evaluate active management, we continually measure results relative to risk against available alternatives. This positions us to deliver superior returns over numerous economic cycles and multiple generations. Ultimately, the benefits of our active management can be distilled down to one word: sustainability. Generating above-market returns over time can help cushion the impact of other factors affecting the sustainability of the CPP in the long term. These include wage growth, demographics, fertility rates, immigration and longevity, all of which are outside the control of CPPIB.

Consistent with the growth in the CPP Fund and the development of our active management strategy, CPPIB's costs have also grown correspondingly over the years. We are continuously building the in-house capabilities required to operate as a global investment organization focused on the future. These capabilities include investment skills, expertise in critical corporate functions, new systems, and the establishment of a local presence in key regions to access investment opportunities and closely manage our investments over the ownership period. It is in the CPP Fund's best interest, from both cost and competitive perspectives, to continue building internal investment expertise and capabilities where CPPIB has comparative advantages. Infrastructure investing is a case in point. We estimate that the costs for an externally managed $21.6 billion pool of committed capital would range on average from $900 million to $1 billion per year. By contrast, the fully costed internal management of our infrastructure portfolio is approximately $88 million.

To obtain the diversification and skills we require, it is not practical to build all capabilities in-house. As a result, we use external managers to complement our internal programs. To ensure we derive the appropriate value from managers, we only partner with top-tier managers and fee arrangements are structured to ensure our interests are aligned. See page 61 for more details.

Our global scale allows us to attract and retain expert professionals from across the world, compete realistically for the world's most attractive investments and win against formidable competitors. It has allowed us to establish and effectively manage 25 distinct investment programs, meeting the goal of diversification and to leverage insights from one program to enhance others.

Scale allows CPPIB to realize the financial benefits of spreading costs over an increasing amount of assets under management. One trend that demonstrates economies of scale is the decreasing ratio

of core service professionals to investment professionals. Core services represent business areas such as information technology, legal, operations and finance that partner with and support the investment teams. While the assets we manage and oversee have grown significantly over the years, the ratio of core services to investment professionals has declined. In fiscal 2006, the ratio was 1.18 and has decreased to 0.94 in fiscal 2019.

We regularly assess our cost-effectiveness through participation in external benchmarking studies. Results from the 2018 benchmarking study completed by CEM Benchmarking[1] indicates that CPPIB staffing levels for investment departments are aligned with the benchmark. Meanwhile, the number of full-time equivalent[2] staff in CPPIB's core services remains about 8% lower than the peer comparator benchmark developed by CEM. We continue to monitor these relationships closely and we are comfortable that this level of core services staffing provides us with the resourcing necessary to support investment activities and properly govern and administer the assets we manage. This is especially the case considering the overall profile of the Fund, which gives management considerably more certainty about the amount of capital to be deployed in future decades relative to more significant short-term liabilities associated with most peers. While we benchmark our costs to ensure they are reasonable, CPPIB also participates in benchmarking of our net returns through CEM. For the five-year period ended March 31, 2018 (the most recent data available), our net annualized return of 12.1%, after all costs, was 1.9% higher than the median of our global peer groups and 3.3% higher than the Canadian median.

Growth of CPPIB

The CPP Fund assets are expected to grow to approximately $800 billion by 2030. Given this expected growth, we need the capacity to deploy capital prudently to maximize returns, which requires CPPIB to build capabilities today for the growth of tomorrow.

	Fiscal 2019	Fiscal 2006[1]
Net Assets[2]	**$392.0 billion**	$98.0 billion
% foreign investments	**84.5%**	35.7%
Total employees (full-time)	**1,661**	164
Number of offices	**Eight**	One
Number of investment programs	**25**	Six
Number of external partners	**274**	62

1 Current year results are compared to fiscal 2006 prior to implementing our active management programs.
2 Includes net assets of $391.6 billion for base CPP and $0.4 billion for additional CPP in fiscal 2019.

Cost governance framework

We apply the resources required with the objective to deliver above-market returns. At the same time, we are diligent in exercising control and ensuring value for money spent is delivered to the Fund. Our cost governance framework includes expense-management policies and authorities as well as expense reporting to the Senior Management Team and the Board of Directors. This ensures that we pursue growth in a responsible and cost-effective manner consistent with the Board-approved business plan and operating budget.

In addition, enforcement of our employee travel and expense policy ensures that the expenses incurred are appropriate to the needs of our business. Oversight includes regular reviews by the Assurance & Advisory group. To ensure objectivity, Assurance & Advisory is an independent corporate function that reports functionally to the Chair of the Audit Committee and administratively to the Chief Financial and Risk Officer.

Fiscal 2019 costs

To manage the $392.0 billion portfolio (as at March 31, 2019) and to generate the $32.0 billion of net income after all costs, CPPIB incurred costs of $3,266 million for fiscal 2019.

The costs summarized in the diagram on page 60 reflect the internal and external resources required to invest, manage and govern the CPP Fund assets across 25 distinct investment programs, in 52 countries around the world.

1 CEM Benchmarking Inc. is an independent provider of objective and actionable benchmarking information for large pools of capital including pension funds, endowments/foundations and sovereign wealth funds.
2 Full-time equivalent staffing includes full-time CPPIB employees, contractors and interns.

CPPIB Costs to Invest the CPP Fund

INVESTMENT MANAGEMENT FEES

PAID ON COMMITMENTS AND ASSETS INVESTED

PAID WHEN RETURNS REALIZED

Management fees
$1,138 million

What do they pay for?
Payments to external fund managers to pay for the operating costs they incur in managing the fund.

Why do we incur the costs?
External managers help produce exceptional performance, net of all costs, and diversify the Fund through different strategies and regions.

Performance fees
$448 million

What do they pay for?
High performance and alignment of interests between CPPIB and the external fund managers.

Why do we incur the costs?
A form of profit sharing when returns exceed a predefined percentage hurdle.

Transaction costs
$477 million

What do they pay for?
Legal, financial and tax advisors, consultants and trading commissions.

Why do we incur the costs?
Pursuing complex, large investment opportunities in public and private markets requires us to conduct greater due diligence including complying with international regulatory and tax regimes.

Operating expenses
$1,203 million

What do they pay for?
Personnel, global offices, technology, data and other operating costs.

Why do we incur the costs?
To prudently manage the CPP Fund, we employ top-tier talent and have offices in key markets to access and monitor the best investment opportunities.

Management fees, performance fees and transaction costs are incurred by CPPIB or one of its wholly owned investment holding companies.

The table below illustrates the investment income generated and the associated costs incurred by each investment department to support their activities. Further details are available starting on page 63.

Net Income by Investment Department

	Fiscal 2019							Fiscal 2018[1]	5-year[1]
($ millions)	Total Portfolio Management	Capital Markets and Factor Investing	Active Equities	Credit Investments	Private Equity	Real Assets	Total	Total	Total
Investment Income	**10,379**	**143**	**1,323**	**3,161**	**12,853**	**7,417**	**35,276**	39,931	166,222
Investment Management Fees	**–**	**730**	**12**	**24**	**562**	**258**	**1,586**	1,738	7,372
Transaction Costs	**44**	**68**	**76**	**48**	**82**	**159**	**477**	401	2,035
Net Investment Income	**10,335**	**(655)**	**1,235**	**3,089**	**12,209**	**7,000**	**33,213**	37,792	156,815
Operating Expenses	**253**	**182**	**173**	**113**	**205**	**277**	**1,203**	1,053	4,858
Net Income	**10,082**	**(837)**	**1,062**	**2,976**	**12,004**	**6,723**	**32,010**	36,739	151,957

1 Certain comparatives have been updated to conform with the current year's presentation.

Investment management fees

In order to obtain broad diversification, we seek exposure to a wide range of asset classes, geographic markets and active strategies. In some cases, it would not be practical or cost efficient to build a dedicated in-house team. As a result, we seek well-aligned external managers who have demonstrated the highest capabilities and strong prospective returns, net of all costs incurred. In addition to delivering attractive returns through our fund investments, many of our external manager partners generate attractive investment opportunities for our direct investment platforms.

Investment management fees include payments to private equity fund and hedge fund managers who invest and manage capital committed by CPPIB. They also include performance fees paid when CPPIB earns a return above pre-determined hurdle rates.

The $1,586 million in fiscal 2019 reflects $1,138 million in management fees paid primarily to private equity funds and hedge funds, and $448 million related to investment performance. Investment management fees decreased by $152 million in the fiscal year, driven by lower performance fees paid to external fund managers as a result of underperformance in public market strategies in our second and third fiscal quarters.

Net Income by Account

			Fiscal 2019	Fiscal 2018
($ millions)	base CPP	additional CPP	Total	Total
Investment Income	**35,265**	**11**	**35,276**	39,931
Investment Management Fees	**1,586**	**–**	**1,586**	1,738
Transaction Costs	**477**	**–**	**477**	401
Net Investment Income	**33,202**	**11**	**33,213**	37,792
Operating Expenses	**1,194**	**9**	**1,203**	1,053
Net Income	**32,008**	**2**[1]	**32,010**	36,739

1 Additional CPP net income of $2 million includes $9 million of start-up costs in fiscal 2019.

Use of external fund managers

Over the most recent five-year period, external fund managers for both Capital Markets and Factor Investing (CMF) and Private Equity (PE) funds and secondaries programs have delivered $31.8 billion of net investment income relative to the $4.2 billion in management fees as well as $2.3 billion in performance rewards once certain return hurdles were achieved. Our private equity fund partners have also generated a large number of attractive direct investment opportunities for PE, resulting in $32.2 billion of invested capital since inception and $16.7 billion of net investment income over the last five years with no associated fees.

CMF's External Portfolio Management (EPM) group invests in managers that are expected to generate attractive, sustainable results on a risk-adjusted basis, net of all costs. PE invests in funds managed by private equity partners that we expect will outperform public alternatives on a risk-adjusted basis. When negotiating fees and other terms, our primary focus is achieving alignment between the manager's incentives and our investment goals. Some examples of our approach to improve alignment, reduce costs and increase net returns are noted here.

EPM achieves this by:

- Trading lower management fees for higher performance fees;
- Considering longer commitment periods in exchange for lower fee structures;
- Structuring some management fees as an advance on performance fees;
- Making co-investments to increase net returns to the Fund;
- Instituting performance hurdles; and
- Investing in emerging managers, where we can usually achieve lower fees and secure scarce investment capacity.

Fee arrangements are reviewed regularly, and we negotiated improved fees with several of our managers in fiscal 2019.

PE achieves this by:

- Securing direct investment opportunities while paying no fees by being a large investor in the funds that we select;
- Using our scale to secure larger allocations at reduced fees; and
- Making commitments early in the fundraising process when this allows us to obtain lower fee structures.

We can be limited in our ability to negotiate lower fees when managers are unable to accept significant new commitments, but we have declined allocations to potential target managers when we were unable to negotiate acceptable terms.

Transaction costs

Transaction costs for fiscal 2019 totalled $477 million compared to $401 million in the prior year, an increase of $76 million. This year, we completed 69 transactions valued at more than $300 million, each involving complex due diligence and negotiations.

Transaction costs include a variety of non-recurring expenses, including due diligence consulting services. They also include legal and tax advisory fees required to support the acquisition and disposition of private market assets, or, in the case of public markets, commissions paid when trading securities.

Given the nature of these costs, they will vary from year to year according to the number, size and complexity of our investing activities in any given period. These costs are expected to increase over time as we continue to increase our private asset holdings and dispositions, as well as our public markets trading activities in both developed and emerging markets given the expected growth in the Fund.

Further details on transaction costs are included in the investment department performance sections starting on page 63.

Note 5.1 to the Financial Statements provides additional transaction cost information on page 139.

Operating expenses

Total operating expenses were $1,203 million this year representing 32.8 cents for every $100 of invested assets compared to $1,053 million in fiscal 2018 or 31.5 cents.

Total operating expenses increased $150 million year-over-year due to higher personnel costs and general operating expenses as described below.

Total personnel expenses were $802 million in fiscal 2019, an increase of $90 million versus the prior year. The higher personnel costs reflect the increase in staffing levels from 1,498 to 1,661 regular full-time employees in fiscal 2019 required to manage the growing size of the Fund, and for the incentive compensation which reflects the Fund's strong results. The increase also includes the cost of the re-organization of the investment departments to align with CPPIB 2025 strategy.

To support a growing CPP Fund as well as continued diversification of assets across sectors and geographies, CPPIB has expanded its international operations in key markets over the past five years, particularly in the emerging markets of China, India and Latin America. In fiscal 2014, there were fewer than 50 employees in the Hong Kong, Mumbai and São Paulo offices combined. Today, there are almost 140 employees supporting those offices which will continue to grow in the future as CPPIB looks to manage a higher percentage of assets in fast-growth emerging markets.

General operating expenses of $401 million were $60 million higher on a year-over-year basis. This was largely due to increased strategy development work and business initiatives across the organization, and higher investments in technology and data.

Allocation of costs between the base CPP and the additional CPP

In preparation for the investment, reporting and governance responsibilities associated with additional CPP contribution amounts, CPPIB incurred $23 million of start-up costs. These costs were funded by the base CPP during the start-up period in fiscal 2019. To ensure that these costs and the related accrued interest are ultimately borne by additional CPP rather than base CPP, CPPIB has reimbursed the base CPP account, with interest, using funds transferred to CPPIB on account of the additional CPP before March 31, 2019.

In fiscal 2019, $9 million of the start-up costs were expensed. This amount is excluded from the additional CPP's calculation of net investment returns, since it represents one-time, non-recurring costs that will not be part of normal course additional CPP's operations. However, the $9 million start-up costs are included in the calculation of the total Fund net return.

The remaining $14 million of the start-up costs were incurred in connection with system changes required to establish and manage the new unitized pool structure. These costs are capitalized and included in CPPIB's assets as they reflect an enduring benefit.

CPPIB's total costs consist of investment-related expenses and operating expenses (including the amortization of capital expenditures). CPPIB attributes investment-related expenses to the investment programs that directly incur those expenses and attributes operating expenses arising from investment activities to programs based on underlying cost drivers. Operating expenses arising from governance activities are allocated to programs based on assets under management.

This cost allocation process results in allocations to each of the investment pools based on the investment programs within that pool, and therefore to the base CPP and the additional CPP based on their proportionate holdings of the two pools. As a result, regardless of either account's portfolio composition or the weighting of its investments between the two pools, each account is allocated its proportionate share of costs on a fair and consistent basis.

PERFORMANCE OF THE INVESTMENT DEPARTMENTS

The following section provides details about the assets, activities and performance of each investment department for fiscal 2019. A description of each department's responsibilities is found on page 38. We conduct all of our investment activity in accordance with the Statement of Investment Objectives, Policies, Return Expectations and Risk Management, and the Policy on Sustainable Investing discussed on page 40. These and other Board-approved policies are available on our website, www.cppib.com.

The table below shows the year-end composition of total Fund net investments:

Year-End Composition of Net Investments by Department and Asset Class

($ millions)	Total Portfolio Management	Capital Markets & Factor Investing	Active Equities	Credit Investments	Private Equity	Real Assets	Total
Public Equities	128,645	–	–	–	1,390	–	130,035
Private Equities	–	–	–	6,769	86,314	–	93,083
Government Bonds	85,883	–	–	227	–	–	86,110
Credit Investments	6,155	–	–	29,586	–	–	35,741
Real Assets	–	–	–	–	–	94,125	94,125
External Debt Issuance	(30,861)	–	–	–	–	–	(30,861)
Cash and Absolute Return Strategies[1]	(17,209)	(31)	1,047	(3)	(8)	(35)	(16,239)
Net Investments	172,613	(31)	1,047	36,579	87,696	94,090	391,994
Absolute Return Strategies – Assets[2]		*66,528*	*63,206*				
Absolute Return Strategies – Liabilities[3]		*(66,559)*	*(62,159)*				

1 Absolute Return Strategies hold offsetting systematic exposures through long and short investments. As a result, their net asset values greatly understate their size and impact on the portfolio.

2 To calculate the size of Absolute Return Strategies on a comparable basis with long-only programs, we calculate Assets (or Assets Under Management) as the sum of the long investments in each of the programs.

3 Includes short positions and hedges of systematic risks arising in Absolute Return Strategies.

This year, we continued to implement a wide range of investment programs, expanded our internal capabilities internationally and further broadened our global reach in pursuit of our long-term objectives. We believe that a local presence in key markets contributes to broader access to investment opportunities around the world. This ensures diligent asset management, while maintaining professionals with expertise specific to each market.

The table below shows the contributions of each investment department to net income, after all CPPIB costs, for the current fiscal year. It also shows the historical five-year period.

Net Income by Investment Department

($ millions)	1-Year	5-Year
Total Portfolio Management	10,082	58,918
Capital Markets and Factor Investing	(837)	5,861
Active Equities	1,062	2,693
Credit Investments	2,976	10,671
Private Equity	12,004	44,284
Real Assets	6,723	29,530
Total[1]	32,010	151,957

1 After all CPPIB costs.

The dollar value-added (DVA) contributions of the investment departments shown in the chart below are measured relative to the respective portfolio's return comparators. The definition of those comparators take into consideration the underlying return-risk factors that represent the specific programs in each department. In the case of the Total Portfolio Management department, it also includes a variety of other impacts contributing to total net dollar value-added, such as foreign currencies, which is excluded from the value-added shown for the other investment departments.

Net Dollar Value-Added Contributions by Investment Department[1]

($ billions)	1-Year	5-Year
Total Portfolio Management	(0.7)	(5.3)
Capital Markets and Factor Investing	(0.8)	3.2
Active Equities	1.1	2.7
Credit Investments	1.3	3.4
Private Equity	3.4	5.4
Real Assets	2.1	8.6
Total	6.4	18.0

1 Foreign currency fluctuations have no impact on value-added of investment departments other than Total Portfolio Management. The currency impact is reported under Total Portfolio Management. See page 66 for more details.

TOTAL PORTFOLIO MANAGEMENT

Fiscal 2019 Net Return ($ billion/%)

$10.1 billion / 6.3%

Net Investments

$172.6 billion

Key Focus this Year

- Launching portfolio design and management of the additional CPP
- Enhancing the Total Portfolio Investment Process and evolving the Exposures Balancing Process
- Developing investment strategy to address climate change risk
- Advancement of Knowledge Sharing and Collaboration framework and tools

SUMMARY

Total Portfolio Management

(%)	Fiscal 2019	Fiscal 2018
Returns		
1-year	**6.4%**	10.0%
1-year net	**6.3%**	9.8%
1-year return comparator[1]	**6.7%**	9.2%

($ billions)	Fiscal 2019	Fiscal 2018
Contribution to Dollar Value-Added[1]		
1-year	**(0.7)**	(0.5)
5-year	**(5.3)**	(4.8)

1 Includes net dollar value-added from Balancing Portfolio and diversification.

Total Portfolio Management (TPM) contributes to total Fund investment performance in two major ways, by (1) managing the Balancing Portfolio to achieve the desired set of investment exposures in the Core Pool (see page 21) utilized by the Investment Portfolios of both the base CPP and additional CPP; and (2) designing and directing the construction of the long-term Investment Portfolios given CPPIB's mandate. Global public equity markets have experienced strong performance over the past five years. As a result, the largest element of the contribution to dollar value-added was the broader diversification of the Investment Portfolios beyond the public equity-dominated Reference Portfolios.

Balancing Portfolio Fiscal 2019 Performance

The Balancing Portfolio, which includes leverage and foreign exchange positions, does not itself have targeted asset class or factor weights. Rather, it acts as a completion portfolio of public securities that continuously brings the actual exposures of the Core Pool into alignment with its targeted exposures, once the contributions of the investment programs have been taken into account.

During the fiscal year, the Balancing Portfolio experienced a net return of 6.3% and net income of $10.1 billion, primarily driven by positive returns from Balancing Equity and Balancing Fixed Income programs. Balancing Credit program also added to the net return. The returns are net of TPM's $297 million of costs and comprises transaction costs and operating expenses. Transaction costs of $44 million represent primarily public market commissions and trade settlement costs. Operating expenses were $253 million for the year and include $9 million of additional CPP start-up costs. Operating expenses represent allocations from other departments such as trading execution teams, investment service functions and core services groups as well as TPM's direct expenses. Operating expenses are lower than last year as a result of lower allocated investment service costs.

Balancing Portfolio Composition and Trading Activity:

We have increased the Balancing Portfolio holdings of public equity, fixed income and leverage over the past five years, with more recent

increases in emerging market and credit holdings. These changes progressively aligned the total Investment Portfolio more closely with our desired long-term exposures.

Over fiscal 2019, TPM sold public developed market equities mainly to offset the equity exposure of a strong pipeline of private deals. We also reduced Canadian equity holdings slightly to make room for additional emerging market equities.

In addition, we deployed capital into China A shares during the fiscal year using our QFII (Qualified Foreign Institutional Investor) quota and the Hong Kong-Shanghai/Shenzhen Stock Connect mechanism.

We traded Balancing Fixed Income portfolio to maintain total portfolio exposures. The Balancing Credit program grew from $3.4 billion to $5.4 billion over the fiscal year.

Net Income for Total Portfolio Management

($ millions)	Fiscal 2019	Fiscal 2018	5-Year
Investment Income	**10,379**	16,730	60,223
Investment Management Fees	**–**	–	–
Transaction Costs	**44**	40	203
Net Investment Income	**10,335**	16,690	60,020
Operating Expenses	**253**	270	1,102
Net Income	**10,082**	16,420	58,918

Major impacts on Investment Portfolio five-year performance (Fiscal 2015–2019):

Two key decisions that have a significant impact on total Fund performance, and for which TPM develops Investment Planning Committee and Board recommendations for each Investment Portfolio, are the overall targeted risk level and the approach to foreign currency exposures. Both of these are longer-term decisions, so they are addressed with a five-year perspective.

Overall, Investment Portfolio[3] returns include the effects not only of these two basic decisions, but also diversification decisions (for example across programs and strategies) and investment selection decisions within active programs.

Risk Level

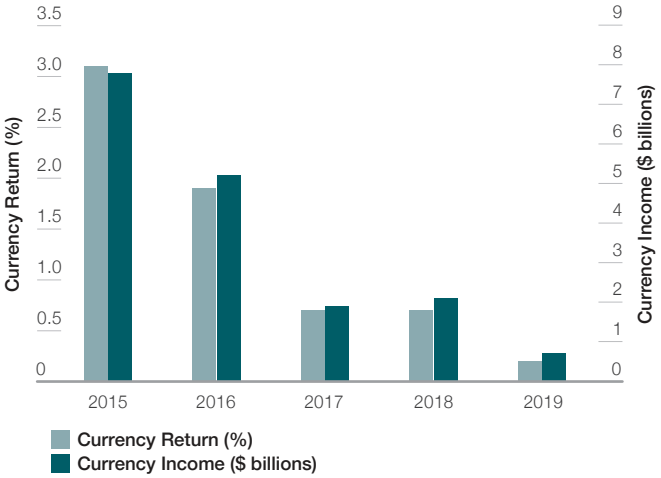
To gauge the impact of the overall risk targets, we compare realized returns under alternative Reference Portfolio specifications (see page 30). For fiscal years 2007 through 2015, CPPIB's Reference Portfolio was composed of 65% public equity and 35% sovereign debt. The simulated returns associated with this 65/35 equity/debt Reference Portfolio over the past five fiscal years are a proxy for performance had we not committed to progressively increasing the risk level of the Investment Portfolio over the fiscal years 2016 through 2018. This can be compared with the returns on the actual transition path of the Reference Portfolio from 65/35 at April 1, 2014 to 85/15 with effect from April 1, 2018.

Over the past five years, given the strong equity market returns observed over much of the period, the risk-increasing actual Reference Portfolio outperformed the former 65/35 Reference Portfolio by approximately 84 basis points (annualized) or an increase in CPP Fund value of $12,892 million cumulatively over the five years.

Foreign Currencies Exposure

As noted on page 27, CPPIB has generally elected not to hedge foreign currency exposures back to Canadian dollars. The table below shows the overall foreign currency gain or loss in each of the past five fiscal years, in billion dollar terms and as a percentage of the Investment Portfolio.

Currency Return



The additive impact of foreign currency gains and losses over the past five fiscal years has been a gain of $17.7 billion.

3 The Investment Portfolio analyzed is only that of the base CPP, as additional CPP cash flows were not received until January 2019.

Fiscal 2019 activities

At the end of fiscal 2019, TPM's team comprised 106 professionals. During the year, the team made major strides in furthering its mission to effect optimal management of the total portfolio of assets entrusted to CPPIB as an integrated, risk-appropriate and return-maximizing whole rather than simply as an aggregate of individual investments. Key aspects of TPM's activities are described below.

Launching additional CPP Portfolio Management:
TPM provided key inputs in the design and implementation of the investment management required for the assets now being received for the additional CPP account. The new pooled investment structure (see page 20) enables CPPIB to most effectively manage both the base and additional accounts with minimal organizational changes, while fulfilling the expanded mandate. The implementation leverages CPPIB's structural and developed advantages by allowing both accounts to fully participate in all our active and private programs, while efficiently and appropriately allocating risk given the different funding profiles of the two accounts.

Enhancing the TPM Investment Process:
To better execute its role, TPM re-stated its management standards and formalized its Investment Committee in Q1 fiscal 2019. The Committee now provides the forum in TPM with clear responsibility for TPM investment decisions and recommendations (including all those going to the Investment Planning Committee or the Board, as explained on page 35). The standards require rigorous rationale and documentation, and the process provides increased transparency across CPPIB.

Evolving the Balancing Process:
Since the adoption of the Total Portfolio Investment Framework (see page 29), TPM has been working to design and implement a more precise Balancing Process for managing factors and other exposures of the Core Pool through the Balancing Portfolio, which currently represents approximately 44% of the pool's assets. Following extensive testing, TPM has achieved a well-defined and fully functional Balancing Process for implementation at the start of fiscal 2020, which will result in:

- A more efficient portfolio based on optimal overall diversification of the underlying drivers of risk and return, while limiting transaction costs;
- A fully systematic methodology allowing for clearer attribution and transparency; and
- Improved checks and balances in the process to limit operational risk.

Developing Investment Strategy for Climate Change Risk:
In fiscal 2019, TPM continued the build-out of the Emerging Factors team responsible for assessing the impacts of climate change on economic activity and on risks for the total portfolio. The team designed a Climate Change Risk Index a high-level assessment of country-specific climate change risks based on perceived physical and transition impacts. In addition, the team created climate change warming impact scenarios for CPPIB's focus geographies. Further work this year will be conducted to develop a framework for assessing the potential impact of climate change on financial markets and investment exposures.

Advancement of Knowledge Sharing & Collaboration:
Knowledge Sharing & Collaboration (KSC) is a key piece of the Knowledge Advantage initiative (see page 45) designed to help us harness the collective wisdom across CPPIB. Led by TPM, KSC addresses the organization's belief that there are major benefits to systematizing and sharing organized knowledge across departments, groups and teams. In fiscal 2019, in addition to bringing in an experienced leader, the KSC team has launched the "Collaboration Portal" to connect employees based on investment experience and expertise, established a monthly call for global Principles and Portfolio Managers, which provides a cross-department forum to discuss current and potential investment themes, and launched the Top Holdings & Expertise Directory.

LOOKING AHEAD

The primary objectives for TPM in fiscal 2020 include:

> Continue to build and enhance frameworks that guide active programs on how to align their investment activities with the Investment Department guidance that define their intended contribution to the total portfolio;

> Implement the new Balancing Portfolio Management Process and continue to enhance the ongoing management of the Balancing Portfolio for optimal efficiency;

> Continuous improvement of portfolio design methods and techniques including: developing world-class portfolio design methodologies; enhancing factor research, including the evaluation of using macroeconomic factors to underpin the construction of the long-term factor exposures; and

> Advance attribution capabilities by evolving the performance measurement framework and methodologies by which CPPIB's investment performance is evaluated through key performance indicators, and by developing programs' portfolio analytics to better inform and enhance future investment management decisions.

CAPITAL MARKETS AND FACTOR INVESTING

AT A GLANCE

Fiscal 2019 Net Return ($ billion/%)

Absolute Return Strategies[1]
-$0.8 billion / n/a

Net Investments

-$31 million in Net Investments
$66.5 billion in Assets Under Management

Key Focus this Year

- Launching the Capital Markets and Factor Investing (CMF) Department and establishing new investment programs
- Facilitating a greater focus on total return and delivering increased emerging markets exposure
- Assisting in the launch of the Supplementary Pool investment process and investing additional CPP funds according to the additional CPP risk target (see page 21 for more details)
- Launching knowledge-sharing and cross-collaboration initiatives

SUMMARY

At the end of fiscal 2019, Capital Markets and Factor Investing (CMF) managed total net investments of -$31 million for CMF's Absolute Return Strategies. Total assets under management under Absolute Return Strategies were $66.5 billion, generally computed as the sum of the values of the long investments in these strategies. The distribution and development of CMF's assets under management for Absolute Return Strategies is shown below at the current and prior year ends. It reflects an increase of $12.5 billion in the current year. The growth of the portfolio was driven mainly by new investment activity.

The following chart shows the contribution to dollar value-added by CMF's Absolute Return Strategies in fiscal 2019. The returns are reported only in dollar amounts because activities are conducted on a market-neutral or long/short basis. In such cases, there is no generally accepted and appropriate underlying asset base for measuring returns in percentage terms.

Capital Markets and Factor Investing

($ billions)	March 31, 2019	March 31, 2018
Absolute Return Strategies (ARS) – Assets		
External Portfolio Management	39.5	37.0
Quantitative Strategies and Risk Premia	16.2	14.1
Macro Strategies	8.1	0.3
Others	2.7	2.6
ARS Assets Under Management (AUM)[1]	66.5	54.0
ARS Liabilities[2]	(66.5)	(53.6)
Net Investments	–	0.4

($ billions)	Fiscal 2019	Fiscal 2018
Contribution to Dollar Value-Added		
1-year	(0.8)	0.9
5-year	3.2	5.0

1 Absolute Return Strategies (ARS) hold offsetting systematic exposures through long and short investments. (See page 26 for more on long and short investing.) As a result, their net asset values greatly understate their size and impact on the portfolio. To calculate the size of Absolute Return Strategies on a comparable basis with long-only programs, we calculate Assets Under Management as the sum of the long investments in each of the programs. Returns for these strategies are reported in dollar values only, since percentage returns on their net asset values do not represent their investment performance.

2 Includes short positions and hedges of systematic risks arising in Absolute Return Strategies.

CMF manages its investments based on a five-year investment horizon, and these results continue to deliver positive net income. Consistent with other public market investors, the CMF portfolio experienced negative performance in fiscal 2019 as investments underperformed the public market equity rally. At the same time, value-oriented factors contributed to losses for quantitative strategies.

During fiscal 2019, CMF's Absolute Return Strategies delivered net income of -$0.8 billion for the Fund and incurred costs of $980 million to support its investing strategies and activities. CMF incurred investment management fees of $730 million representing $327 million paid to external fund managers for performance fees and $403 million for management fees. Performance fees decreased from last year, reflecting lower returns from hedge funds while management fees increased as a result of a higher level of externally managed assets. Transaction costs of $68 million represent primarily public market commissions, trade settlement costs and prime brokerage costs. Transaction costs increased, largely due to growth in the investment programs pursued by the Quantitative Strategies and Risk Premia group during fiscal 2019. Operating expenses of $182 million have increased year-over-year primarily related to higher allocated core services costs required to support the department.

Net Income for Capital Markets and Factor Investing

($ millions)	Fiscal 2019	Fiscal 2018	5-Year
Investment Income	**143**	2,112	11,056
Investment Management Fees	**730**	1,070	4,100
Transaction Costs	**68**	45	249
Net Investment Income	**(655)**	997	6,707
Operating Expenses	**182**	125	846
Net Income	**(837)**	872	5,861

Fiscal 2019 activities

In fiscal 2019, CMF continued to facilitate a greater focus on total return across the base and additional Investment Portfolios and on delivering increased emerging markets exposure. CMF advanced top-down strategic tilting efforts (see page 27), launched new programs within its Macro Strategies (MS) group and expanded its emerging markets capabilities. CMF's team of 161 professionals is located across four global offices.

Quantitative Strategies and Risk Premia

The quantitative equity portfolio underperformed this year due to mixed performance across three factor categories (value, sentiment and quality), with value driving the bulk of underperformance. Quality-based factors performed well this year but it did not deliver sufficient performance to offset losses elsewhere.

The risk premia portfolio contributed to CMF's value-added returns despite heightened volatility stemming from global growth concerns, U.S.-China trade negotiations, Brexit uncertainty, and political instability. Volatility strategies were profitable in equities, interest rates, and currencies, while the commodities volatility strategy experienced losses in the natural gas market in particular. The carry strategies were responsible for gains across government bonds, currencies and commodities, with contributions from value factors more than offsetting losses in trend and carry factors, illustrating the importance of diversifying factor exposures in the portfolio. In fiscal 2019, the Quantitative Strategies and Risk Premia (QSRP) team continued to refine and expand its existing strategies, with a focus on innovation in the areas of portfolio construction, forecasting and risk modelling.

Highlights included:

- Establishing the QSRP team, bringing together investment teams focused on systematic investment strategies across CPPIB to build a portfolio with an attractive risk-return profile;
- Significantly expanding the Risk Premia programs to their full size; and
- Implementing the credit asset class within the Volatility Risk Premium program.

Financing, Collateral and Trading

Financing, Collateral and Trading (FCT) integrated financing, collateral optimization, and execution functions within a centralized model. In line with CPPIB's long-term view, FCT continues to broaden its expertise in emerging markets. FCT implemented platform capabilities to gain exposure into these markets.

FCT continued expanding the term debt program. As a part of that effort, FCT worked in collaboration with multiple departments across the organization to issue CPPIB's inaugural Green Bond, raising $1.5 billion with a term of 10 years. This further diversified CPPIB's investor base. In January 2019, CPPIB issued a second 10-year Green Bond in Europe, raising €1.0 billion.

FCT invested the first series of cash flows received from the Supplementary Pool. It also developed a process to manage residual additional CPP funds in short-term money market instruments and continued to manage cash flows to the CPP.

Macro Strategies

In fiscal 2019, the Macro Strategies (MS) group defined the infrastructure, processes and team that resulted in the launch of its discretionary investment programs in January. Consistent with CPPIB's 2025 vision, the group is building its focus on emerging markets and now has the ability to trade fixed income, equity and currency products across 23 countries. In the short period since approval and launch, MS has generated positive returns.

External Portfolio Management

External Portfolio Management's (EPM) assets under management grew to $39.5 billion from $37.0 billion last year. EPM experienced negative performance in fiscal 2019 due to mixed results across its strategies. Fundamental equity and credit underperformed buoyant markets, although this was partially offset by positive contributions in fixed income and multi-strategy.

EPM continued to scale its portfolio by making further investments in high-conviction managers, and improved portfolio transparency and alignment with our partners. The group added five new mandates and nine co-investments, increased funding to 10 existing mandates and redeemed four mandates. Allocations were made primarily multi strategy, as well as fundamental and quant equity strategies. The portfolio now includes 58 managers, up from 56 at the end of fiscal 2018. Overall, they direct 64 mandates.

Key activities included:

- Completing EPM's first investment in a manager based in India, in addition to another emerging market-focused manager;
- Continuing to scale our co-investment program both in fundamental equity and global macro strategies; and
- Expanding our portfolio of emerging managers, which help reduce the overall fee burden through attractive terms and revenue share agreements.

LOOKING AHEAD

Building on the progress made in fiscal 2019, CMF will focus its efforts on:

- Continuing to facilitate a greater focus on total return through the Strategic Tilting program as well as the Risk Premia programs;
- Further developing programs that support the delivery of desired levels of emerging markets exposure; and
- Enhancing CMF's infrastructure to help scale its investment programs, improve investment agility, and support CPPIB's long-term growth. This growth strategy is set out in the CPPIB 2025 strategy, described on page 29.

ACTIVE EQUITIES

AT A GLANCE

Fiscal 2019 Net Return ($ billion/%)

Absolute Return Strategies[1]
$1.0 billion / n/a

Net Investments

$1.0 billion in Net Investments
$63.2 billion in Assets Under Management

Key Focus this Year

- Increasing the Fund's emerging markets exposure by adding new investments, primarily in Asia and Latin America
- Collaborating with Real Assets to implement the Climate Change Security Selection Framework. This allows investment teams and approval committees to efficiently and effectively identify, assess and price key climate change risks and opportunities
- Launching knowledge-sharing and cross-collaboration initiatives

SUMMARY

At the end of fiscal 2019, Active Equities (AE) managed total net investments of $1.0 billion. Total assets under management, computed as the sum of the values of the long investments in the AE portfolio, were $63.2 billion. That is a $19.2 billion increase compared to fiscal 2018.

The distribution and development of AE's assets under management are shown below at the current and prior year ends.

The following chart also shows AE's contribution to dollar value-added in fiscal 2019. The returns are reported only in dollar amounts, because activities are conducted on a market-neutral or long/short basis. In such cases, there is no generally accepted and appropriate underlying asset base for measuring returns in percentage terms.

Active Equities

($ billions)	March 31, 2019	March 31, 2018
Absolute Return Strategies (ARS) – Assets		
Active Fundamental Equities	27.5	20.8
Fundamental Equities Asia	17.9	10.4
Relationship Investments	12.0	8.0
Thematic Investing	5.8	4.8
ARS Assets Under Management (AUM)[1]	63.2	44.0
ARS Liabilities[2]	(62.2)	(42.9)
Net Investments	1.0	1.1

($ billions)	Fiscal 2019	Fiscal 2018
Contribution to Dollar Value-Added		
1-year	1.1	1.6
5-year	2.7	1.5

1 Absolute Return Strategies (ARS) hold offsetting systematic exposures through long and short investments. As a result, their net asset values greatly understate their size and impact on the portfolio. To calculate the size of Absolute Return Strategies on a comparable basis with long-only programs, we calculate Assets Under Management as the sum of the long investments in each of the programs. Returns for these strategies are reported in dollar values only, since percentage returns on their net asset values do not represent their investment performance.

2 Includes short positions and hedges of systematic risks arising in Absolute Return Strategies.

During fiscal 2019, AE's portfolio delivered net income of $1,062 million for the Fund, and incurred costs of $261 million to support its investing strategies and activities. Transaction costs include public market commissions, trade settlement costs and prime brokerage costs. AE's investment expenses were driven by growth of the portfolio in fiscal 2019. Operating expenses of $173 million increased year-over-year primarily related to higher allocated core services costs required to support the department.

Net Income for Active Equities

($ millions)	Fiscal 2019	Fiscal 2018	5-Year
Investment Income	**1,323**	1,855	3,597
Investment Management Fees	**12**	5	22
Transaction Costs	**76**	54	265
Net Investment Income	**1,235**	1,796	3,310
Operating Expenses	**173**	151	617
Net Income	**1,062**	1,645	2,693

Fiscal 2019 activities

Since its creation in fiscal 2019, AE has continued to increase the size of its portfolio and increased its emerging markets exposure. AE's team grew by 5%, accounting for 131 professionals located across five global offices.

Active Fundamental Equities

The assets under management for the Active Fundamental Equities (AFE) portfolio grew from $20.8 billion to $27.5 billion at the end of the fiscal year. The team manages a concentrated portfolio, comprising 84 active positions, including 19 new securities. AFE performed well in fiscal 2019, primarily in the information technology and communication services sectors. AFE's investment in Mastercard Inc. was the group's largest position and also the top contributor to its performance.

Key investment highlights included investing:

- A further €490 million in E.ON SE, a German utility company that owns and operates electricity and gas grids, as well as energy supply businesses;
- €321 million in ASML Holdings, the world's largest supplier of photolithography systems for the semiconductor industry, based in the Netherlands; and
- US$347 million in Akamai Technology, an American content-delivery network and cloud service.

Fundamental Equities Asia

Despite the volatile market conditions in the region, particularly in China and India, Fundamental Equities Asia (FEA) was a large contributor to AE's positive net income in fiscal 2019. This return was generated by security selection that outperformed, as well as effective risk and hedging management.

The current U.S.-China trade tension has caused a slight slowdown in the Chinese economy and weighed heavily on the regional market sentiment. Chinese equity markets have reflected these challenges, with lowered expectations and valuations. FEA has taken advantage of the market weakness and increased its assets under management by $7.5 billion, reaching $17.9 billion at the end of fiscal 2019. FEA achieved this by increasing its investments at a lowered valuation and researching and incubating new investments in the portfolio.

Key investment highlights included:

- Deploying an additional $1.9 billion in three of the group's largest positions in Chinese firms: Alibaba Group, Tencent Holdings and AIA Group;
- Collaborating with Thematic Investing to invest a total of US$600 million in Ant Financial, China's leading financial services technology platform; and
- Increasing its holdings in China A shares by $1.2 billion through investments in Midea group, CITS and CATL.

Relationship Investments

In fiscal 2019, Relationship Investments (RI) delivered strong performance, mostly from investments in the industrials and communication services sectors. RI deployed approximately $1.7 billion through six new investments and an additional $0.8 billion through follow-on investments in four existing portfolio companies for a total of $2.5 billion capital deployed over the fiscal year. The portfolio's assets under management total $12.0 billion at March 31, 2019 compared to $8.0 billion at the end of last fiscal year. New capital deployment and positive performance of the portfolio also contributed to the changes.

During the year, strong global demand for high-quality professional services and data providers positively contributed to the outperformance of RI's investments in the business services sector. Additionally, RI's investments in the communication services sector including the telecommunications and media & entertainment subsectors have produced high relative returns.

Key investment highlights included:

- An additional US$324 million in IHS Markit, a global data and information services provider, bringing total ownership to 5.5%;
- €318 million in Cellnex Telecom, an independent operator of wireless telecommunications and broadcast infrastructure in Europe, for 4.95% ownership in the company; and
- An additional €120 million in Elis, the European leader in commercial linen and workwear rental and laundry services, bringing the group's total ownership to 12.4%.

Thematic Investing

In fiscal 2019, Thematic Investing (TI) increased its assets under management from approximately $4.8 billion to $5.8 billion, driven by scaling existing themes and adding a new theme called "Retail 4.0" during the year. Capital was deployed across public and private asset classes, as well as developed and emerging markets.

TI experienced negative performance during the year as mixed results across the individual thematic portfolios was insufficient to offset the losses from the hedge portfolio.

TI continued scaling its exposure and remains concentrated in both consumer discretionary and communication services sectors.

Key activities included:

- Pursuing direct private equity opportunities in a number of early stage companies including Lulu's Fashion Lounge, ChargePoint Inc., Zoox Inc., Urban Compass Inc and Aurora Innovation Inc.
- As mentioned previously, invested in Ant Financial (in collaboration with our FEA Team), which contributed to TI's growing exposure in the Asia region.

Sustainable Investing

During fiscal 2019, Sustainable Investing (SI) spearheaded CPPIB's Climate Change Program, directing the Program Management Office and chairing the Climate Change Management Committee. Working directly with each of the Program's work streams, SI played an important coordinating role across a complex, cross-departmental Program. This ensured CPPIB took full advantage of its internal capabilities, resources and knowledge to the benefit of the Fund.

SI played a leading role in climate change engagement and proxy voting described on page 28. In fiscal 2019, SI supported more than 30 shareholder proposals related to climate change. SI continued to lead and participate in engagements alongside other Canadian and global investors to press large greenhouse gas emitters in oil and gas, utilities and other sectors to improve disclosure related to greenhouse gas emissions, strategies and performance. CPPIB is also on an Advisory Committee of the United Nations-supported Principles for Responsible Investments (PRI). It engages collaboratively with the oil and gas and utilities sectors to encourage companies to reduce methane emissions, improve management of methane emissions and enhance disclosure.

LOOKING AHEAD

Building on the progress made in fiscal 2019, AE will focus its efforts on:

- Increasing its exposure in emerging markets through new investments and in-depth research;
- Advancing knowledge-sharing initiatives and cross-collaboration across the organization, including data and analytics; and
- Further supporting the development of the Climate Change Program across CPPIB.

CREDIT INVESTMENTS

AT A GLANCE

Fiscal 2019 Net Return ($ billion/%)

$3.0 billion / 10.8%

Net Investments

$36.6 billion

Key Focus this Year

- Establishing the new Credit Investments (CI) department to deliver the desired credit exposure for the Fund
- Formalizing a long-term, go-to-market strategy for Mainland China and India
- Continuing to scale our investment activities along the entire credit spectrum

SUMMARY

Credit Investments (CI) assets grew to $36.6 billion at the end of fiscal 2019. This growth was primarily driven by new investment activities of $14.4 billion and valuation gains of $1.2 billion, partially offset by $8.4 billion of dispositions within CI's private holdings. CI's assets represent approximately 9.3% of the CPP Fund, managed by 94 professionals located across four offices globally. As shown on page 75, CI's investments are diversified by industry and geography. The figures exclude Balancing Credit managed by Public Credit which are reported under the Balancing Portfolio.

The first table below summarizes aggregated returns in absolute terms with rates of return calculated on an unhedged time-weighted basis.

The second table shows dollars of dollar value-added.

Credit Investments

(%)	Fiscal 2019	Fiscal 2018
Returns		
1-year excluding foreign currency impact	**9.8**	11.2
1-year	**11.2**	9.2
1-year net	**10.8**	8.7
1-year return comparator[1]	**5.4**	6.4

($ billions)	Fiscal 2019	Fiscal 2018
Contribution to Dollar Value-Added[1, 2]		
1-year	**1.3**	0.8
5-year	**3.4**	2.3

1 Return comparator is the weighted return of return-risk factors representative of the department's investment programs. Dollar value-added is relative to the return comparator.

2 Foreign currency fluctuations have no impact on departmental value-added. See page 27 for more details.

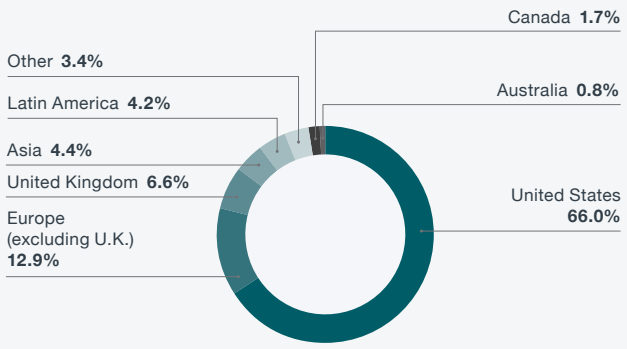
In fiscal 2019, the Credit Investments department delivered strong returns both in absolute and relative terms across all its programs, due to a combination of income flows, realizations, valuation gains and currency gains. The Credit Investments portfolio also continues to outpace the returns of relevant public market indexes over the long term. Over the past five years, the CI portfolio has generated a net return of 11.8% and net income of $10.7 billion.

During fiscal 2019, CI delivered $3.0 billion in net income for the Fund and incurred costs of $185 million to support investment activities. Investment management fees of $24 million mainly represent fees for structured credit and deployment vehicles. Transaction costs of $48 million primarily reflect the professional and advisory services related to acquisitions and dispositions. Transaction costs compared to last year were higher due to increased investment activities. Operating expenses of $113 million for Credit Investments have increased compared to last year due to higher allocated core services as well as personnel costs to support the portfolio's expanded mandate.

The charts below provide a summary of CI's holdings by geography and sector.

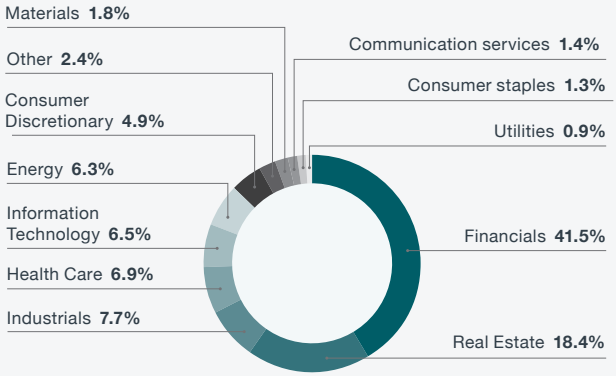
Credit Investments – Geographic Diversification

As at March 31, 2019



Credit Investments – Sector Diversification

As at March 31, 2019



Net Income for Credit Investments

($ millions)	Fiscal 2019	Fiscal 2018	5-Year
Investment Income	**3,161**	2,157	11,397
Investment Management Fees	**24**	13	68
Transaction Costs	**48**	31	233
Net Investment Income	**3,089**	2,113	11,096
Operating Expenses	**113**	94	425
Net Income	**2,976**	2,019	10,671

Fiscal 2019 activities

The CI department was formed in fiscal 2019, bringing together all public and private credit strategies across the Fund. Since the formation of the department, CI has established the organizational structure and investment processes needed to deliver the desired credit exposure for the Fund.

Credit markets experienced significant volatility in fiscal 2019. Credit spreads widened across geographies towards the end of calendar 2018. After outperforming most other asset classes throughout the calendar year, the credit market was ultimately not immune to the broader market sell-off. However, markets have rebounded substantially since the start of calendar 2019, ending the fiscal year with positive total returns.

Despite volatile market conditions, the breadth and flexibility of CI's mandate has enabled the team to deploy significant capital in investments with attractive risk-adjusted returns. In fiscal 2019, CI deployed $14.4 billion in capital across the credit spectrum and geographies.

Americas Leveraged Finance

At year end, Americas Leveraged Finance (ALF) assets totalled $13.3 billion, compared to $10.4 billion at the end of fiscal 2018. The growth in the portfolio was driven primarily by $4.9 billion in new investment activity and $0.8 billion in valuation gains. This was partially offset by dispositions totalling $3.1 billion. A team dedicated to credit investing in Latin America was formally established, and the Latin America portfolio grew to $1.2 billion by the end of the fiscal year.

Notable ALF transactions this fiscal year included:

- Closed a $508 million first-lien secured unitranche financing commitment for a Canadian-based industrials business. ALF and Antares, CI's platform investment, were sole lenders to the facility; and
- Closed a US$85 million term loan investment to Mutant, a provider of customer experience management solutions in Brazil.

Americas Structured Credit and Financials

At year end, Americas Structured Credit and Financials (ASCF) assets totalled $4.7 billion, compared to $4.6 billion at the end of fiscal 2018. The growth in the portfolio was driven primarily by $3.0 billion in new investment activity and $0.2 billion in valuation gains. This was partially offset by portfolio and portfolio distributions, refinancings and dispositions totalling $3.1 billion. ASCF continues to partner with high-quality originators and servicers across asset classes. The group is embracing new data and technology tools to assist with diligence, asset management and identification of new investment opportunities.

Notable ASCF transactions this fiscal year included:

- Committed US$285 million to a newly established vehicle used to purchase equity in collateralized loan obligations managed by Sound Point Capital Management, LP; and
- Acquired a portion of Theravance Biopharma's non-recourse notes, backed by a portion of future royalties related to net sales of Trelegy® Ellipta®, a drug marketed by GlaxoSmithKline for the treatment of respiratory disorders.

APAC Credit

At year end, APAC Credit (APAC) assets totalled $1.2 billion, compared to $1.1 billion at the end of fiscal 2018. The growth in the portfolio was driven primarily by $0.4 billion in new investment activity and $45 million in valuation gains. This was partially offset by dispositions totalling $0.3 billion. During the year, APAC worked with local advisors to formulate a long-term credit investment strategy for two strategic markets: Mainland China and India. It also continued to build out its investment team based in Hong Kong. The group made its first investment in India and executed several transactions in the offshore China credit market.

A notable APAC transaction this fiscal year included:

- Invested CNY704 million in loan financing to support an international sponsor's purchase of a non-performing loan (NPL) portfolio in Mainland China. This portfolio is primarily backed by commercial real estate properties in Guangzhou, one of the four Tier One cities in Mainland China.

European Credit

At year end, European Credit (EC) assets totalled $4.6 billion, compared to $3.0 billion at the end of fiscal 2018. The net growth in the portfolio was driven primarily by $2.1 billion in new investment activity, and $0.1 billion in valuation gains. This was partially offset by dispositions totalling $0.5 billion. The group continued to expand investments into senior secured loans and established a permanent structuring strategy for European non-performing loans.

A notable EC transaction this fiscal year included:

- Invested £75 million in the first-lien secured term loan of ZPG, a digital business offering online property portal and home-services price comparison to consumers primarily in the U.K. Silver Lake Partners took ZPG private in July 2018 alongside GIC and PSP.

Public Credit

Public Credit (PC) manages the Balancing Credit portfolio as part of the Balancing Portfolio for the Fund as well as an active portfolio under CI. The Public Credit portfolio, consisting of liquid investment grade credit products, grew from $3.4 billion to $9.2 billion in fiscal 2019, consisting of $5.4 billion in Balancing Credit and $3.8 billion in Active Public Credit. During fiscal 2019, PC established the Emerging Markets Hard Currency Public Credit program which provides an alternative access point for the diversification benefits of CPPIB's emerging markets exposure. The group also started research into an Emerging Markets Local Currency Public Corporate Credit program.

Real Assets Credit

At year end, Real Assets Credit (RAC) assets totalled $8.9 billion, compared to $6.1 billion at the end of fiscal 2018. The growth in the portfolio was driven primarily by $4.0 billion in new investment activity and $62 million in valuation gains. This was partially offset by dispositions totalling $1.5 billion. The group closed its first investments in Brazil and Poland in fiscal 2019, and started the work to develop an Infrastructure and Power & Renewables go-to-market strategy.

Notable RAC transactions this fiscal year included:

- Participated in A$500 million of seed lending to a newly established fund with Challenger Investment Partners. The fund invests in middle-market real estate loans in Australia and New Zealand;
- Originated a €250 million mezzanine loan investment in Echo Polska Properties N.V., owner of the largest retail property portfolio in Poland; and
- Committed US$375 million to LongPoint Minerals II LLC, the second company launched by the Denver-based group that focuses on the acquisition of oil and natural gas mineral interests in the U.S.

LOOKING AHEAD

With the ability to provide a complete solution across the credit market, CI is focused on scaling the portfolio globally and adding incremental returns in the most efficient manner. Specifically, CI will:

- Further scale its developed markets strategies and fill in the gaps in the credit spectrum;
- Develop a Public Credit active program and grow its emerging markets exposure;
- Develop a framework to price and allocate capital based on best relative value among strategies globally; and
- Use technology and data to enable better investment decision-making and portfolio management.

PRIVATE EQUITY

AT A GLANCE

Fiscal 2019 Net Return ($ billion/%)

$12.0 billion / 16.5%

Net Investments

$87.7 billion

Key Focus this Year

- Realigning the PE department to deliver a global diversified private equity portfolio across a breadth of investment types
- Expanding its opportunity set by partnering with other like-minded long-term investors
- Continuing to actively manage relationships with fund managers to generate deals while enhancing proactive sourcing efforts

SUMMARY

Private Equity's (PE) assets increased from $69.3 billion at the end of fiscal 2018 to $87.7 billion at the end of fiscal 2019. This growth was primarily driven by new investment activities totalling $20.1 billion, valuation gains of $10.6 billion, and foreign exchange gains of $1.6 billion. This was partially offset by distributions of $14.3 billion. PE's total exposure including unfunded commitments was $120.2 billion – an increase of $23.0 billion over the fiscal year. PE has 116 direct investments and maintains 142 manager relationships. The department's portfolio represents approximately 22.4% of the CPP Fund, managed by 153 professionals located across four offices globally. As shown on page 78, PE's investments are diversified by industry and geography.

The table below summarizes aggregated returns in absolute terms with rates of return calculated on an unhedged time-weighted basis, as well as dollars of dollar value-added.

Private Equity

(%)	Fiscal 2019	Fiscal 2018
Returns		
1-year excluding foreign currency impact	**14.4**	17.2
1-year	**16.8**	16.1
1-year net	**16.5**	15.8
1-year return comparator[1]	**8.6**	15.5

($ billions)	Fiscal 2019	Fiscal 2018
Contribution to Portfolio Dollar Value-Added[1, 2]		
1-year	**3.4**	0.8
5-year	**5.4**	0.8

1 Return comparator is the weighted return of return-risk factors representative of the department's investment programs. Dollar value-added is relative to the return comparator.

2 Foreign currency fluctuations have no impact on departmental value-added. See page 27 for more details.

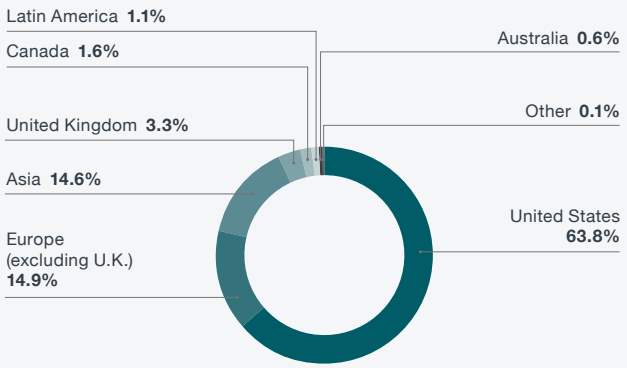
In fiscal 2019, the PE department delivered solid returns both in absolute and relative terms. This was due to a combination of strong income flows and valuation gains. The gains were recorded across programs and a majority of sectors, but primarily resulted from strong operational performance in several portfolio companies within Direct Private Equity. The PE portfolio also continued to outperform the returns of the relevant public equity benchmarks over the long term. Over the past five years, the Private Equity department has generated a net return of 17.1% and net income of $44.3 billion.

During fiscal 2019, PE delivered $12.0 billion in net income for the Fund and incurred costs of $849 million to support investment activities. Investment management fees of $562 million have increased over last year due to increased level of assets managed externally. Transaction costs of $82 million which primarily reflect professional and advisory services related to private market acquisitions and dispositions, were lower than last year. The higher transaction costs last year were attributed to sizeable underwriting costs related to an existing private investment that went public. Operating expenses of $205 million were higher than last year, driven by higher allocated core services and personnel costs to support deal activities.

The charts below provide a summary of PE's holdings by geography and sector.

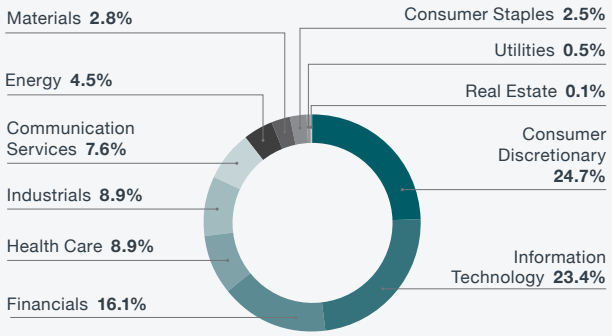
Private Equity – Geographic Diversification

As at March 31, 2019



Private Equity – Sector Diversification

As at March 31, 2019



Net Income for Private Equity

($ millions)	Fiscal 2019	Fiscal 2018	5-Year
Investment Income	**12,853**	10,136	47,858
Investment Management Fees	**562**	523	2,418
Transaction Costs	**82**	120	386
Net Investment Income	**12,209**	9,493	45,054
Operating Expenses	**205**	168	770
Net Income	**12,004**	9,325	44,284

Fiscal 2019 activities

In fiscal 2019, PE deployed $20.1 billion in capital, continuing on its projected growth trajectory despite very competitive market conditions. By taking advantage of CPPIB's scale, the long-term nature of its capital base, internal expertise and partner relationships, PE has been able to expand its business beyond traditional private equity products and continues to source and execute innovative transactions across the groups. Examples include opportunities under the Private Equity Solutions and Structured Secondaries strategies.

The integration of the passive co-investments strategy with Direct Private Equity (DPE) and Private Equity Funds has increased the number of opportunities for passive direct investments. In fiscal 2019, DPE and Private Equity Funds closed 26 co-investments, representing $3.1 billion of invested capital, compared to 12 investments totalling $1.4 billion in fiscal 2018. Consolidating and streamlining the origination and underwriting process to improve execution efficiency made this possible.

The funds programs continued to focus on actively managing their relationships with General Partners (GPs) to generate deals across CPPIB. Meanwhile, the secondary and direct investment programs took a more proactive and systematic approach in deal sourcing and origination to scale our business.

High asset valuations persisted into fiscal 2019 and motivated sponsors to consider cashing in their holdings and finding other ways to generate cash. During the year, PE's distributions totalled $14.3 billion, with $6.9 billion representing original invested capital, $6.8 billion in realized gains and $0.5 billion in dividends and interest income.

Private Equity Funds

During the year, the Private Equity Funds (Funds) portfolio grew from $27.9 billion to $32.7 billion. The growth in the portfolio was primarily driven by $7.0 billion in new invested capital, $3.2 billion in valuation gains and $0.5 billion in foreign exchange gains. This was partially offset by distributions totalling $6.3 billion. The portfolio generated investment gains in all key markets, with North American investments outperforming European investments. Investments in the information technology sector continued to be the top performer as they generated 53% of Funds' investment gains. Although investments in consumer staples underperformed this year, no sectors materially detracted from the net return of the group's portfolio. The Funds group currently has relationships with 77 fund managers across 208 funds, with $55.0 billion of total exposure (up 12% from fiscal 2018).

Fundraising activity by private equity firms remained buoyant in fiscal 2019, as investors continue to allocate significantly to the asset class in pursuit of returns. The Funds group reviewed 60 relevant, on-strategy opportunities and after prudent judgment, made commitments to 16 funds for a total of $7.1 billion. Of these, 13 represented existing relationships, including three that backed adjacent strategies to a GP's core platform. Three relationships were completely new to the program.

The Funds group continued to focus on actively managing its relationships with GPs to generate deals for other investment programs within CPPIB and contribute to the growth of the Fund. Over the year, the group's GPs offered CPPIB 216 opportunities, of which 29 had closed as of March 31, 2019. The total dollar amount of closed opportunities represented $5.8 billion of CPPIB's invested capital, which was invested on a no-fee, no-carry basis.

Direct Private Equity

At year end, the Direct Private Equity (DPE) portfolio consisted of 80 direct investments valued at $32.8 billion compared with 64 valued at $23.2 billion one year earlier. The growth in the portfolio was primarily driven by $6.6 billion in new investment activity, $5.9 billion in valuation gains and $0.6 billion in foreign exchange gains. This was partially offset by dispositions totalling $3.5 billion. The group generated positive net returns of $6.5 billion with contributions from all core strategies.

In fiscal 2019, leveraged buyout valuations remained at cyclical highs, driven by borrower-friendly terms and availability of credit, as well as historically high public equity market valuations. This environment has resulted in downward pressure on prospective returns. Many assets traded at prices that did not meet our expected risk-adjusted returns. The DPE group remains disciplined in underwriting as it executes its investment program and focuses on strategic opportunities to invest alongside strong partners beyond traditional private equity funds. Partners include family offices, like-minded long-term investors, corporations, and entrepreneurs. We differentiate ourselves as a partner of choice due to the stability, scale and long duration of our capital. This year, DPE added two new investments alongside partners who were not managers in the Private Equity Funds portfolio for total invested capital of $2 billion.

DPE scaled up by integrating the former passive co-investments business into the group. It also harmonized processes on origination, underwriting and asset management for smaller, passive investments. In fiscal 2019, DPE originated and closed 17 passive investments representing $2.5 billion of invested capital.

Significant transactions executed by DPE this year included:

- Acquiring a stake in Sportradar, the global leader in sports data analysis, alongside growth equity fund Technology Crossover Ventures, at an enterprise value of €2.1 billion;
- Investing in Berlin Packaging, an American hybrid packaging distributor, as part of a recapitalization deal with Oak Hill Capital Partners; and
- Signing a definitive agreement to invest US$1 billion for a 12% stake in The Ultimate Software Group, Inc. alongside Hellman & Friedman and Blackstone, in a transaction valued at approximately US$11 billion.

Private Equity Asia

During the year, the Private Equity Asia (PE Asia) portfolio grew from $12.4 billion to $13.6 billion in carrying value. The portfolio consists of $8.2 billion (60.4%) in funds, $5.0 billion (36.4%) in direct investments, and $0.4 billion (3.2%) in secondary investments. The majority of PE Asia's investments were based in emerging markets, with 52.0% in Greater China (up from 47.6% in fiscal 2018) and 13.5% in India. The growth in the portfolio was primarily driven by $2.2 billion in new invested capital, $0.3 billion in foreign exchange gains and $0.6 billion in valuation gains. This was partially offset by distributions totalling $1.9 billion. PE Asia generated investment gains in both the funds and direct investments portfolios. Chinese investments were responsible for the majority of PE Asia's gains, which were partially offset by a notable write-down of a direct investment in South Korea.

Private equity investment activity across Asia remained strong in fiscal 2019, with an increase in large deals and transactions with ownership control. China and India continued to lead the region in terms of contribution to market growth. On the funds side, the fundraising market was robust, with over 250 funds raised in Asia

during calendar year 2018. PE Asia remained selective against this backdrop and committed to nine managers out of 66 opportunities reviewed. While continuing to support strong existing managers, the PE Asia group also expanded relationships with a healthy mix of emerging and experienced managers across the region. On the direct investment side, PE Asia continued growing its co-investment business and its roster of investment partners. During the year, PE Asia committed $3.0 billion to funds in Asia and closed nine direct investments for $0.8 billion. The group continued to strengthen its partner network, enhance deal origination efforts, and expand its capabilities to pursue scalable, complex transactions. This will contribute to the desired emerging market exposure for CPPIB.

Notable PE Asia transactions this fiscal year included:

- Originating and closing an investment in Think & Learn Pvt. Ltd. (also known as Byju's), the leading educational technology company in India;
- Committing to three growth funds within Sequoia Capital's family of funds, including Sequoia Global Growth Fund III, to gain access to the emerging market and technology sector; and
- Committing to Baring Asia Private Equity VII, the group's third commitment to Baring Asia's private equity fund since commencing the partnership in 2010.

Secondaries

At year end, the Secondaries group assets totalled $8.6 billion, compared to $5.8 billion at the end of fiscal 2018. The growth in the portfolio was primarily driven by $4.3 billion in new invested capital, $0.9 billion in valuation gains and $0.1 billion in foreign exchange gains. This was partially offset by distributions totalling $2.6 billion. Unfunded commitments increased by $1.1 billion to $2.9 billion, for a total exposure of $11.6 billion. As at March 31, 2019, 69.5% of the total exposure was in North America, 20.6% in Europe, 5.5% in Latin America and 4.4% in Asia.

Secondaries delivered strong net returns in all three of its core investment strategies, including recent expansions into Structured Secondaries, Latin America, growth equity and venture capital. Broadening the focus of the group will support continued growth and diversification of the portfolio while allowing for the careful selection of attractive investment opportunities.

Transaction volumes in the private equity secondary market continued to grow due to a variety of cyclical factors and long-term trends, particularly the increased prevalence of GP-led transactions being executed by large, high-quality GPs.

During the year, the group invested $5.5 billion across 13 transactions, including:

- Four LP secondary transactions including an LP portfolio in excess of US$1.5 billion and three large and highly concentrated single manager/LP interest portfolios;
- US$290 million GP commitment financing; and
- US$100 million GP-led fund recapitalization in the venture capital sector.

LOOKING AHEAD

The Private Equity department will continue to support CPPIB's goal of increasing private equity exposure, particularly in emerging markets. It will focus on using technology, data and analytics in its investment decision-making. PE will maintain a large funds program and will further optimize how the department uses General Partner (GP) relationships to generate deals by focusing on relationship returns and portfolio construction. This will ensure efficient capital deployment across all programs with a wide selection of private instruments that can be tailored to specific investment opportunities. Specifically:

- The Private Equity Funds group will focus on building a new Venture Capital program aligned with other CPPIB technology-related initiatives to support the Fund's growth. The group will continue to proactively develop GP relationships to gain better insight into upcoming fundraising activities.
- The Direct Private Equity group will continue to optimize the deal execution process, particularly for smaller, passive investments, to ensure the portfolio can be further scaled in a resource-efficient manner. DPE will also prioritize information technology initiatives that will allow for more systematic performance monitoring, identification of strategic opportunities or threats, and enhanced value creation within our portfolio companies.
- The Private Equity Asia group will continue to deepen its local market expertise and network in the region, with a focus in Greater China and India. The group will build new GP and strategic relationships to support our direct investment capabilities.
- The Secondaries group will continue to execute on its mandate to grow and diversify its portfolio and to support increased active management of the department's mature private equity funds portfolio.

REAL ASSETS

AT A GLANCE

Fiscal 2019 Net Return ($ billion/%)

$6.7 billion / 7.7%

Net Investments

$94.1 billion

Key Focus this Year

- Pursuing growth in emerging markets via existing and select new local partnerships
- Launching a focused effort on the Energy Innovation, Technology and Services sector
- Establishing capabilities to invest in public real estate opportunities through the creation of a Listed Real Estate program
- Streamlining the investment reporting process to improve collaborative sharing of information across the organization

SUMMARY

The Real Assets (RA) portfolio increased from $83.8 billion at the end of fiscal 2018 to $94.1 billion, representing a net increase of $10.3 billion. The change in portfolio value was primarily the net result of several factors: new investment activity totalling $10.5 billion and changes in valuation of $6.5 billion, which was offset by asset dispositions and return of capital of $5.1 billion, distribution income of $1.0 billion and foreign exchange movement during the year of $1.1 billion.

The RA portfolio represents 24.0% of the Fund, managed by 198 professionals located across seven offices globally. The department's geographic footprint spans five continents and consists of 174 investments.

In fiscal 2019, RA further consolidated to include the Energy & Resources (E&R) group. The investment groups within RA, including E&R, share similarities with respect to risk profile and the capital-intensive and long-dated nature of its investment activities. Consolidation of these groups within one department enables the sharing of best practices and better allocation of capital to generate higher risk-adjusted returns. The groups are also among our most globally diverse businesses within the Fund.

Real Assets

(%)	Fiscal 2019	Fiscal 2018
Returns		
1-year excluding foreign currency impact	**9.5**	8.0
1-year	**8.0**	9.0
1-year net	**7.7**	8.7
1-year return comparator[1]	**5.3**	5.6

($ billions)	Fiscal 2019	Fiscal 2018
Contribution to Dollar Value-Added[1, 2]		
1-year	**2.1**	2.1
5-year	**8.6**	6.7

1 Return comparator is the weighted return of return-risk factors representative of the department's investment programs. Dollar value-added is relative to the return comparator.

2 Foreign currency fluctuations have no impact on departmental value-added. See page 27 for more details.

The department's four investment programs performed well on an adjusted basis against their respective performance objectives this year. In particular, the Infrastructure program showed strong performance due to valuation increases.

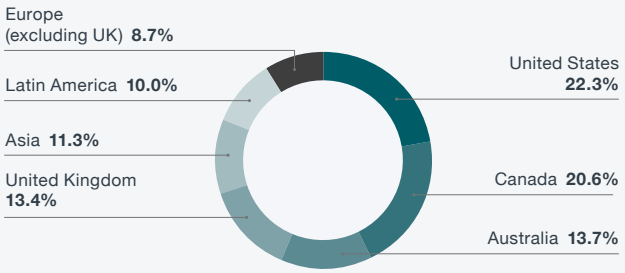
During fiscal 2019, RA delivered net income of $6.7 billion and incurred costs of $694 million to support their investing activities. Investment management fees of $258 million have increased over last year as a result of higher performance fees for real estate investments from increased valuations and realized dispositions.

Transaction costs of $159 million primarily represent professional and advisory services incurred during due diligence related to investment acquisitions and dispositions. Specifically, the increase in transaction costs this year is a result of higher transaction volumes within the Energy & Resources, Power & Renewables and Infrastructure portfolios. Operating expenses of $277 million are higher than last year driven by higher allocated core services costs and personnel costs to support the growing global reach of the portfolio and its investing activities.

The charts below provide a summary of RA's holdings by geography and sector.

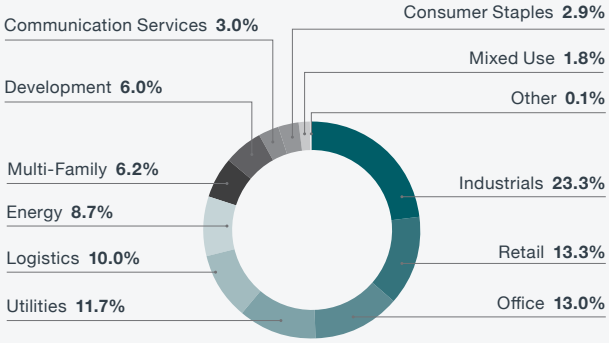
Real Assets – Geographic Diversification

As at March 31, 2019



Real Assets – Sector Diversification

As at March 31, 2019



Net Income for Real Assets

($ millions)	Fiscal 2019	Fiscal 2018	5-Year
Investment Income	**7,417**	6,941	32,091
Investment Management Fees	**258**	127	764
Transaction Costs	**159**	111	699
Net Investment Income	**7,000**	6,703	30,628
Operating Expenses	**277**	245	1,098
Net Income	**6,723**	6,458	29,530

Fiscal 2019 activities

Transaction volumes for global real assets continued to show growth in fiscal 2019, with a slight slowdown towards the latter half of the year. Global interest rates rose modestly, but still remain low historically, and income-seeking investors continued to allocate additional capital into real assets. This competitive landscape has pushed asset prices upward, dampening forward return expectations, especially for core deals.

RA's approach to acquisitions remains disciplined, yet agile. The department continues to favour situations where its strong partnerships and ability to offer scale, speed and certainty of execution allows access to complex, non-traditional deals that offer attractive return profiles.

Geographically, RA is focused on increasing its exposure to emerging markets such as India, Greater China and Brazil. The department has also been ready to divest certain assets where its original investment expectations played out, or where the market's view on future returns was lower than its own. While down from the pace of divestments RA achieved in fiscal 2018, the RA programs still repatriated $5.1 billion of capital to the CPP Fund in fiscal 2019, primarily from the Real Estate portfolio.

Real Estate

At year end, the Real Estate (RE) portfolio totalled $47.5 billion, an increase of 3.1% from fiscal 2018. The change in portfolio value was primarily the net result of several factors: new investment activity totalling $3.4 billion and $1.9 billion in valuation increases. This was offset by $3.7 billion in return of capital from asset sales and $0.6 billion in foreign exchange losses.

At year end, the RE portfolio consisted of 139 investments with 65 operating partners, managed by a team of 72 professionals across seven offices globally. This portfolio remains well diversified across major markets globally, with 82.5% in developed markets such as U.S., U.K., Canada and Australia, and 17.5% in the emerging markets, including Greater China, India and Brazil. The group's success in these markets can be attributed to its local presence, with almost 90% of its real estate investment professionals located in CPPIB's international offices.

Real estate investments continue to look relatively attractive in an environment where global investors are contending with rising interest rates, elevated trade tensions, political uncertainty and volatility in energy markets. Intense competition continues for core real estate assets in gateway markets calling for continued discipline, yet flexibility in our investment approach. As a result, Real Estate continued to broaden its opportunities this year and increased its investments in emerging markets in order to invest in areas that offer attractive returns on a risk-adjusted basis. The group also established the Listed Real Estate (LRE) program. This allowed it to further enhance the risk-return characteristics of the real estate portfolio by investing in public real estate in efforts to gain exposure to markets and sectors that are absent or under-represented in our current portfolio.

RE also continues to benefit from long-standing relationships with many best-in-class operating partners who are a valuable source of deals. More than 70% of the investment activity this year was made with existing partners such as Goodman Group, Longfor Properties, Global Logistic Properties and Oxford Properties.

Major transactions undertaken by the RE group in fiscal 2019 include:

- Expanding the relationship with Goodman Group and making an initial allocation of up to R$500 million for a 20% interest in the Goodman Brazil Logistics Partnership. This partnership invests in prime logistics and industrial assets in São Paulo and Rio de Janeiro.
- Forming a new investment cooperation alongside Longfor Group Holdings Limited to focus on rental housing programs in Greater China across Tier I and core Tier II cities. The initial targeted investment was approximately US$817 million.
- Forming a new investment vehicle with ESR and Kendall Square Asset Management to invest up to US$500 million in a newly established investment vehicle targeting modern logistics facilities in Korea.

Infrastructure

At year end, the Infrastructure portfolio consisted of 19 direct investments valued at $33.3 billion, compared with $28.6 billion a year earlier. The change in value was primarily the result of $1.9 billion in new investment activity, and $4.9 billion in valuation increases driven by strong portfolio performance and market pricing, This was offset by a $0.5 billion return of capital and dispositions, distribution income of $1.0 billion and $0.6 billion in foreign exchange losses.

The Infrastructure portfolio remains well-diversified globally, with 79.3% in developed markets such as North America, Western Europe and Australia and 20.7% in select emerging markets, primarily in Latin America and India. Infrastructure investments represent 35.4% of the RA portfolio. A team of 48 professionals located across five offices globally manages the Infrastructure portfolio.

Investors continued to dedicate significant amounts of capital into private infrastructure funds, with total global fundraising continuously increasing over prior years. Investors are attracted to the sector as a means of achieving returns that generally do not correlate to public markets, providing the opportunity for higher returns than fixed income alternatives and a hedge against rises in inflation.

The corresponding downward pressure on returns has resulted in many private investors seeking "core-plus" or higher-risk infrastructure investments to earn additional returns. However, CPPIB has remained focused on selecting quality, large-scale core opportunities with dependable partners.

During the year the Infrastructure group was active across its core geographies and markets. It acquired:

- As part of a consortium, a 51% ownership stake in WestConnex, the largest road infrastructure project in Australia. CPPIB holds a 20.5% interest in the consortium's A$9.26 billion ownership stake. CPPIB's investment was approximately A$1.8 billion.
- 30% of the units of IndInfravit Trust, the first private infrastructure investment in India, for approximately C$200 million. The trust focuses on the ownership and development of toll roads and road infrastructure in India.
- 29% of the Pacifico Sur toll road, which provides access between Guadalajara and Tepic in Mexico, for approximately 2.7 billion pesos (C$185 million), investing alongside our partners in another Mexican toll road, Ontario Teachers' Pension Plan and Impulsora del Desarrollo y el Empleo en América Latina, S.A.B. de C.V.

Energy & Resources

At year end, the Energy & Resources (E&R) portfolio consisted of 11 investments valued at $8.2 billion compared with $6.1 billion a year earlier. The growth in the portfolio was driven primarily by $2.8 billion in new investment activity.

The macro environment during fiscal 2019 contributed to another active year for E&R. Volatile commodities and capital markets reacted to the increasing availability of renewable energy, faster adoption rates of electric vehicles and near-term supply shocks. Policy-makers, industry and investors are increasingly re-orienting themselves to a new world order focused on returns over growth and optimization over speed.

This dynamic created an attractive opportunity for patient and flexible capital that believes in the following key energy transition themes:

- Energy demand will grow globally;
- The world will decarbonize;
- Energy infrastructure will recalibrate globally; and
- Traditional energy sources will continue to be important.

Notable E&R transactions this fiscal year included:

- Acquiring all of Chesapeake Energy's Utica Shale oil and gas assets in Ohio via Encino Acquisition Partners (EAP), for US$2.0 billion. EAP was formed in 2017 between CPPIB and Encino Energy to acquire large, high-margin oil and gas production and development assets in the U.S. CPPIB invested approximately US$1.0 billion in EAP and owns 98% of the partnership.
- Entering into a long-term service agreement for the construction and operation of the Alberta Carbon Trunk Line via Wolf Midstream, which is 99% owned by CPPIB. CPPIB invested approximately C$300 million in the project.
- Acquiring 100% of Shell E&P Ireland Limited for €830 million, which holds Shell's 45% interest in the Corrib Offshore Natural Gas Field. This marked E&R's first investment in Europe.

Power & Renewables

At year end, the Power & Renewables (P&R) portfolio consisted of five direct investments valued at $5.1 billion compared with $2.9 billion a year earlier. The growth in the portfolio was driven primarily by $2.4 billion in new investment activity.

Fiscal 2019 saw an acceleration of long-term changes in the power market. Several factors drove the changes, including:

- The increasing cost-competitiveness of renewable generation relative to new and existing conventional generation (such as from coal and natural gas);
- Continued policy support for a transition to a clean electricity system;
- A rise in the direct purchase of renewable power by corporations and communities; and
- The rapid adoption of new power technologies, such as battery storage, to facilitate integration of renewables into the electricity system.

The combined confluence of these trends has created a meaningful investment opportunity for CPPIB's flexible capital. With activity in equity capital markets remaining limited, private capital is now playing a leading role in funding the transition towards renewable generation, allowing for investment opportunities for the P&R portfolio.

Notable P&R transactions this fiscal year included:

- Acquiring all of NextEra Energy Partners' Ontario renewable assets for approximately C$740.4 million. Concurrently, P&R formed a new company, Cordelio Power, to manage these assets.
- Entering into a global joint venture with Enbridge by acquiring a 49% stake in certain U.S. and Canadian operating assets, as well as two in-construction offshore wind projects in Germany, for a total capital commitment of C$2.25 billion. In addition, Enbridge and CPPIB will collectively pursue future offshore wind opportunities in Europe.
- Acquiring the State of São Paulo's stake in Companhia Energética de São Paulo for R$1.9 billion through the group's Brazilian joint venture with Votorantim Energia.

Portfolio Value Creation

In fiscal 2019, Portfolio Value Creation (PVC) expanded its asset management activities to cover all direct investments in which CPPIB has material influence, across all Investment Departments. This comprises all platform investments and direct investments where CPPIB has one or more board seats. In addition to Direct Private Equity, Infrastructure, and Energy and Resources, PVC's expanded mandate now covers Relationship Investments, Thematic Investing, Private Equity Asia, Power and Renewables, and Real Estate.

The PVC group provided transition support from the beginning of CPPIB's ownership in portfolio companies. It also gave 100-day planning for newly acquired companies to establish robust, long-term processes and controls. The group continued to execute a thorough monitoring process across major CPPIB portfolio companies and provided due diligence support.

LOOKING AHEAD

The Real Assets department is very conscious of the ongoing conflict between increased capital being allocated to real assets globally and the risks posed by a decelerating global economy. However, the department believes that real asset investments will continue to generate growing income streams and, therefore, expect total returns that are very attractive on a risk-adjusted basis. Looking ahead to fiscal 2020, RA will focus on:

- Growing its investments with current long-standing relationships and establishing new and scalable relationships;
- Remaining committed to expanding its emerging-markets portfolio, specifically in Greater China, India and Latin America;
- Divesting assets where its business plans have been completed, and where it can capitalize on attractive asset pricing; and
- Continuing to find ways to broaden its horizon and focus on investments that further enhance the risk-return characteristics of the portfolio.

FISCAL 2020 OBJECTIVES

CPPIB's corporate objectives for fiscal 2020 are:

1. Scaling our investment programs and emerging market capabilities, and increasing our global presence.
2. Evolving our enterprise-wide business architecture to guide how we will operate in the future.
3. Operationalizing our new risk framework.
4. Building talent and reinforcing culture on the foundation of our Guiding Principles.
5. Continuing to integrate technology, data and our knowledge collaboration initiative to enhance investment decisions.

ORGANIZATIONAL ACCOUNTABILITY

CEO/CFRO CERTIFICATION

During the year, we completed an evaluation of internal control over financial reporting and disclosure controls and procedures, using the framework and criteria set out in the Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). CPPIB is not required by law or regulation to perform this annual evaluation. We do so voluntarily as part of our commitment to strong corporate governance and accountability.

The CEO and CFRO are responsible for establishing and maintaining internal control over financial reporting to provide reasonable assurance that it is reliable and conforms with International Financial Reporting Standards (IFRS). They are also responsible for the design of disclosure controls and procedures that provide reasonable assurance that all material information is gathered and reported to Management on a timely basis.

No changes were made in our internal control over financial reporting or disclosure controls and procedures that have affected, or are reasonably likely to materially affect, our reporting.

Based on the results of Management's evaluation, the CEO and CFRO have concluded that internal control over financial reporting and the disclosure controls and procedures are properly designed and operated effectively throughout the year.

ACCOUNTING POLICIES AND CRITICAL ESTIMATES

Our significant accounting policies are summarized in note 1 and the respective relevant notes to the annual Consolidated Financial Statements and are important in understanding and interpreting our reported financial results and financial condition.

Certain of these accounting policies require Management to make assumptions and estimates that affect the reported amounts of assets, liabilities, income and expenses. We have established procedures to ensure accounting policies are applied consistently and processes for changing methodologies are well-controlled. Management's most critical accounting estimates are with regard to the determination of fair value for investments and investment liabilities. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement and therefore incorporates those factors that market participants would consider when pricing an investment or investment liability. Quoted market prices are used to measure the fair value for investments traded in an active market, such as public equities and marketable bonds. Where the market for an investment is not active, such as for private equity, private debt, real assets, and over-the-counter derivatives, fair value is determined by valuation techniques that make maximum use of inputs observed from markets, such as a multiple of earnings derived from a set of publicly traded comparable companies. Additional techniques include the use of recent arm's-length transactions, the current fair value of another investment that is substantially the same, discounted cash-flow analysis, pricing models and other accepted industry valuation methods.

The Valuation Committee is responsible for the oversight of valuation governance, processes and results. Committee members include the Chief Financial and Risk Officer (as Chair) along with select senior representatives from CPPIB's Finance team. We have developed robust quarterly valuation processes to ensure the fair value of our investments are reasonably presented in our financial statements. These processes include independent procedures and the targeted use of external appraisers and valuators.

CPPIB's Finance team includes accredited professionals who prepare or approve fair values independently from the investment team. This ensures a valuation that is free of potential bias. In addition, for a majority of the direct investments, we leverage independent third-party appraisals and external valuation experts at least once per year to support the valuation process. Assets are selected for third-party appraisals through a risk-based approach that is based on both the materiality and complexity of the investments.

For CPPIB's fund investments in private equity and real assets, net asset values (NAVs) are obtained directly from the Investment Manager and represent fair value. CPPIB performs certain procedures to validate our reliance on the NAVs provided by the Investment Manager. These procedures may include: an operational risk review, updating all publicly listed securities to the current reporting date, a cross fund holdings analysis, and ensuring that funds are subject to an independent audit.

Regardless of the techniques used, judgment is required to estimate fair value for investments which are not traded on an active market. Our valuation methodologies for investments and investment liabilities are summarized in note 3 to the annual Consolidated Financial Statements.

REPORT OF THE HUMAN RESOURCES AND COMPENSATION COMMITTEE

As the Chair of the Human Resources and Compensation Committee (HRCC), I am pleased to share with you our approach to assessing performance and determining CPPIB employee compensation.

The underlying principles of CPPIB's compensation framework are to deliver the long-term business strategy by focusing on:

- Attracting, motivating and retaining top investment and management expertise;
- Paying for performance; and
- Aligning the interests of employees with those of CPP contributors and beneficiaries over the very long term.

Fiscal 2019 Performance Highlights

A key underpinning of our compensation programs is the performance of the total Fund[1] and each of our departments. Over the past year, the Fund generated a strong return. The one-year total Fund net return was 8.95%, while the five-year annualized net return was 10.7%. For fiscal 2019, we outperformed the Reference Portfolio benchmark, reflecting the strong performance of global public equity markets and performance of our active investments programs in the fiscal year. We delivered positive dollar value-added (DVA) above the Reference Portfolio's return, with total Fund net DVA in fiscal 2019 of $6.4 billion, and the cumulative five-year net DVA of $18.0 billion.

Compensation Program

We believe that a focus on total Fund performance in our compensation program is crucial. It supports a strong alignment between CPPIB employees and the interests of 20 million CPP contributors and beneficiaries.

We implemented the current compensation program in fiscal 2016. It has an enhanced focus on total Fund performance, balanced with a continued concentration on dollar value-added, over a longer performance horizon – a five-year rolling period, to better align with our long-term investment mandate. Importantly, our compensation program continues to measure both the quantity and quality of outcomes, including how Senior Management and employees deliver on long-term strategic business objectives.

Fiscal 2019 was the fourth full year under this compensation program. We are confident that it continues to support our business strategy, to enforce the principle of pay for performance and to align employees with the long-term interests of beneficiaries. This year we outperformed the Reference Portfolio benchmark as well as the absolute return target, and as a result saw an increase in the five-year multiplier used to drive incentive compensation. Our Named Executive Officers' (NEO) compensation remained relatively consistent. This year, it is moderately higher for Mr. Machin and Mr. Cass, SMD & Global Head of Real Assets. Mr. Cass' performance multiplier drove the higher compensation. Mr. Carrier, SMD & Head of International, also received relatively consistent compensation. The other two NEOs are new members of the Senior Management Team – Ms. Suyi Kim and Ms. Deborah Orida. Both have higher compensation due to time in a regional office with higher market pay levels, as well as for Ms. Orida, a transitional adjustment to reflect both her promotion to SMD, as well as her transfer from Hong Kong to Canada.

Our compensation program provides competitive pay levels relative to our defined talent market in all regions where we operate. It provides a clear, transparent framework to CPPIB employees and to our stakeholders.

The Board approves all compensation benchmarks and multiplier rates. The Human Resources and Compensation Committee retains full discretion to reward performance for the Senior Management Team within a range of zero to two times target incentive levels, as well as any salary adjustments or other compensation arrangements. This allows the Committee to assess and reward not only results, but also the manner in which they were achieved.

Fiscal 2019 CEO Pay Decisions

Over the past five years, CPPIB's total Fund[1] return of 10.7% and dollar value-added of $18.0 billion has been strong and has resulted in a total Fund multiplier of 1.74. The Board assessed Mr. Machin against his corporate goals and deemed that all of these were substantially achieved, resulting in a multiplier of 1.59. Against his individual objectives, the Board determined a multiplier of 1.70 for fiscal 2019. The weighted average of these three factors resulted in an overall incentive multiplier for Mr. Machin of 1.68.

Ultimately, the Board awarded Mr. Machin a total direct compensation of $5,265,125 for fiscal 2019, consisting of salary, an in-year award, and deferred awards. Mr. Machin also received a pension and benefits. Further details on CEO compensation are included in the Compensation Discussion and Analysis that follows.

Other Activities of the HRCC

The HRCC adopted specific objectives to focus on strategic priorities in fiscal 2019. This included reviewing the Incentive Compensation Plan to ensure it adequately incorporates additional CPP. The HRCC concluded that the existing compensation design will drive appropriate focus for the enhanced CPP over the next several years. Please refer to page 88 for specific HRCC activities undertaken in fiscal 2019.

In conclusion, the HRCC is satisfied that the compensation paid for fiscal 2019 is appropriate. We are confident that our decisions regarding department/group and individual performance compensation factors reflect our assessment of the Senior Management Team's performance, relative to the pre-established objectives for fiscal 2019. They are also appropriately aligned with the interests of contributors and beneficiaries.

Karen Sheriff
Chair, Human Resources and Compensation Committee

1 For the purpose of the incentive compensation plan, total Fund reflects the combined long-term investment portfolios of the base Canada Pension Plan and additional Canada Pension Plan. This excludes CPP for benefits, which is consistent with prior years.

The role and structure of the Committee

The Human Resources and Compensation Committee (HRCC) helps the Board of Directors with human resources matters, including talent management and compensation.

The HRCC is composed entirely of Directors who are knowledgeable about human resources and executive compensation issues. All HRCC members also serve on the Investment Committee. They have a strong appreciation of the link between compensation and risk management.

The committee members for fiscal year 2019 were:

Ian Bourne – ceased to be a member July 1, 2018
Sylvia Chrominska – appointed September 12, 2018
Tahira Hassan
Douglas W. Mahaffy – ceased to be a member October 26, 2018
Mary Phibbs – ceased to be a member January 1, 2019
Karen Sheriff, Chair
Kathleen Taylor
Jo Mark Zurel – ceased to be a member January 1, 2019

The HRCC held eight (8) meetings during fiscal 2019. The Chairperson of the Board of Directors, although not an HRCC member, attended all meetings. The CEO, the Senior Managing Director & Chief Talent Officer, the Senior Managing Director & General Counsel, and the Corporate Secretary also attended portions of the meetings at the HRCC's request. Annual activities for the HRCC (including those performed in fiscal 2019) are:

Evaluation of the CEO:

- Reviewed and recommended for Board approval the CEO's performance objectives and performance evaluation process.
- Reviewed significant outside commitments of the CEO.

Compensation of Officer and non-Officer employees:

- Reviewed, approved and recommended for Board approval, salary increases and incentive compensation payouts for officers and employees.
- Reviewed executive compensation trends as provided by the HRCC's external compensation advisor.
- Reviewed Officers' compensation. This included requesting and reviewing a report from an external compensation advisor on the compensation of officers relative to other large Canadian pension funds and investment management companies.
- Oversaw the disclosure of Directors' and Officers' compensation and the compensation framework in the annual report.
- Reviewed and recommended for Board approval the benchmark and incentive compensation curve for the CPP Fund.

Talent Management and Development:

- Reviewed succession planning for Officers and talent management programs.
- Reviewed employee pension and benefits plans.
- Received the annual report of the Pension Committee and reviewed and approved pension plan documents.
- Reviewed material changes to employee benefit plans and Human Resources policies.

Committee Terms of Reference review:

- Reviewed and recommended for Board approval the HRCC Terms of Reference and reviewed performance against Terms of Reference.

The HRCC uses the services of Hugessen Consulting Inc. to provide independent advice, information and guidance on human resources and executive compensation issues. Hugessen cannot provide any services to Management without the committee's prior approval. Hugessen received $197,740 for its services to the HRCC in fiscal 2019 and $162,000 in fiscal 2018.

You can find out more about the HRCC's mandate in the Terms of Reference section posted on the CPPIB website.

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis summarizes the foundational principles of our compensation framework and reviews the elements of our compensation program. It also provides details on the performance results and remuneration paid to our Named Executive Officers (NEOs) for the fiscal year ended March 31, 2019 including:

> President & Chief Executive Officer (CEO) – Mark Machin
> SMD & Chief Financial and Risk Officer (CFRO) – Neil Beaumont
> SMD & Head of International, Head of Europe – Alain Carrier
> SMD & Head of Asia Pacific – Suyi Kim
> SMD & Global Head of Real Assets – Ed Cass
> SMD & Global Head of Active Equities – Deborah Orida

Principles of our compensation program

Our compensation program continues to rest on three key principles:

> Attracting, motivating and retaining top investment and management expertise;
> Paying for performance; and
> Aligning the interests of employees with those of CPP contributors and beneficiaries over the very long term.

Our compensation program is a key factor in attracting the talent and investment experience we need to manage a global active portfolio of our size. In our search for the best employees, we compete with the largest investment managers and financial institutions in Canada and around the world. As the Fund is one of the largest of its type globally, we require people with significant experience in investment management, investment operations and many other support and governance functions. A competitive compensation package is essential to attract, motivate and retain this talent and effectively execute CPPIB's mandate to maximize the rate of return without undue risk of loss.

Risk management

Our compensation program reflects our public mandate and our responsibility to CPP's contributors and beneficiaries. We have aligned incentives with our long-term investment strategy and mandate, while considering our target return and risk appetite.

Our compensation program includes a number of key risk mitigating features:

- Significant Pay at Risk – a significant portion of compensation for Senior Management and senior employees is variable and deferred. The deferred portion fluctuates with the Fund's performance over time;
- Long-term Horizon Measurement – CPPIB tracks performance over multiple years. This aligns with the long-term nature of our investment mandate;
- Maximum Payouts – there is a cap on the incentive multipliers;
- Robust Benchmark Investment Return Targets – benchmarks used to calculate dollar value-added and returns reflect an appropriate balance of risk and return aligned with the Board-approved investment strategy;
- Board-Approved Risk Limits – the target rates of return consider the Board-approved overall and specific risk limits; and
- Clawbacks – the Board can claw back or adjust all forms of incentive compensation.

Our compensation framework continues to meet or exceed the Principles for Sound Compensation Practices established by the Financial Stability Board and endorsed by the G20 nations.

Financial Stability Board Principles	CPPIB Compensation Framework
Based on long-term performance	Based on investment performance over up to five-year periods
Discourage short-term risk-taking	Five-year results discourage short-term decisions Total amount of risk is governed by the Board of Directors Where appropriate, benchmarks adjust for the degree of risk taken
Increased oversight powers of compensation committees	The HRCC and the Board of Directors make all decisions about the compensation framework

Our compensation framework

The design of our incentive program takes into account the environment in which we operate, our mission and the strategy we have chosen to execute. We are a growing organization, and one that is meant to endure for a very long time. As a result, a large element of Management's current focus is on:

> Attracting talent;
> Growing the organization globally;
> Establishing investment programs and processes that can be scaled up;
> Delivering strong performance;
> Improving the efficiency of technology, operations and risk management; and
> Establishing a strong culture with uncompromising standards of integrity and a commitment to inclusion and diversity.

The program considers these important priorities and reflects them in the performance measures used to determine incentive payouts. It also considers the public responsibility involved in managing the Fund for the benefit of 20 million contributors and beneficiaries by ensuring risk is considered appropriately. Further, we believe that what gets accomplished is important, but how activities are accomplished is equally important. Our compensation program is grounded in our Guiding Principles and we adhere to the following best practices in designing our compensation structure:

- Focus on Total Fund[1] Performance – each employee has 30% of their total incentive weighted on total Fund performance. The measurement of total Fund performance includes absolute total Fund return as well as dollar value-added. This emphasis on the total Fund allows for a closer tie between compensation and the interests of our beneficiaries and contributors.
- Align Performance Horizon with the Long-Term Nature of our Investment Mandate – the five-year rolling time period over which we measure total Fund performance reflects our long-term perspective. Department performance is also measured over a multi-year time frame. This long-term performance horizon improves measurement accuracy and reduces volatility.
- Measure Both Quantitative and Qualitative Outcomes – as our investment strategy and execution evolve, we consider both quantity and quality when measuring investment performance and other objectives.
- Align Pay Mix to Market Practice – the pay mix of fixed and variable compensation, as well as short-term and long-term compensation reflects market trends.
- Create a Consistent Framework for all Employees – all employees have the same weight on total Fund performance, department and group performance, and individual performance. This creates a consistent platform for rewarding all employees.
- In addition to researching best practices in incentive design, CPPIB conducts a competitive benchmarking of jobs across the organization annually. This ensures compensation levels are competitive and aligned with the organization's market for talent. We operate within the global investment management industry, and compete globally to attract, motivate and retain employees in Toronto and our offices in Hong Kong, London, Luxembourg, Mumbai, New York, São Paulo and Sydney. Accordingly, we review competitive pay information for Canadian pension funds and broader investment management organizations, as well as compensation in the other major markets in which we operate (e.g., United States, United Kingdom and Hong Kong).
- The HRCC also reviews competitive pay levels for each position on the Senior Management Team, including the Named Executive Officers (NEOs), relative to a significant market sample and data from proprietary consultant surveys. Specifically for the Senior Management Team and NEOs, we benchmark compensation against the following organizations:
- Canadian Pension Funds: Caisse de dépôt et placement du Québec (CDPQ), Ontario Teachers' Pension Plan (OTPP), bcIMC, AIMCo, OMERS, PSPIB, HOOPP and OPTrust.
- Canadian Publicly Traded Investment Asset Managers: CI Investments, AGF Management, Fiera Capital, Mackenzie Investments, RBC Global Asset Management, etc.
- Broader Labour Market: The top Canadian Pension Funds and/or the broad financial services market. This includes investment firms, insurance companies, and banks in Canada, the U.S., and other relevant international markets.

Aligned with Our Investment Objectives	> Maximize return to the total Fund within agreed risk parameters > Supports CPPIB's Guiding Principles
Market Competitive	> Enables CPPIB to attract and retain the right people
Right Time Horizon	> Strong alignment to our long-term investment horizon for performance measurement and for payouts
Simple	> Ability to distinctly differentiate based on individual performance
Enables Application of Informed Judgment	> Clear and simple framework transparent to key stakeholders and prospective employees > Yields increased stability and consistency of performance measurements
Differentiation Based on Individual Performance	> Ability to recognize the distinction of each asset class, strategic and operational objectives, and market conditions

1 For the purpose of the incentive compensation plan, total Fund reflects the combined long-term investment portfolios of the base Canada Pension Plan and additional Canada Pension Plan. This excludes cash for benefits, which is consistent with prior years.

Compensation elements

Base salary

Employees receive a base salary for fulfilling their core job responsibilities. Salaries reflect skill level, ability and sustained performance. We use annual compensation surveys from reputable compensation consulting firms to ensure that we remain competitive within our talent market.

We review salaries annually at the end of each fiscal year. Any changes to Senior Management Team compensation, including the Named Executive Officers' (NEOs') salaries, require Board approval.

Incentive compensation plan

At the end of each fiscal year, employees are eligible to receive an annual award according to the following formula:

Base salary x Incentive target x Performance multiplier = Annual award

We set incentive targets by the job level to align with market practices. A portion of the Annual Award is paid out in cash following the end of the fiscal year (In-Year Award). For senior employees, a portion is deferred over three years (Deferred Award) to align with the long-term focus of the CPP Fund. The Deferred Award vests and pays out over three years following the fiscal year for which it is awarded.

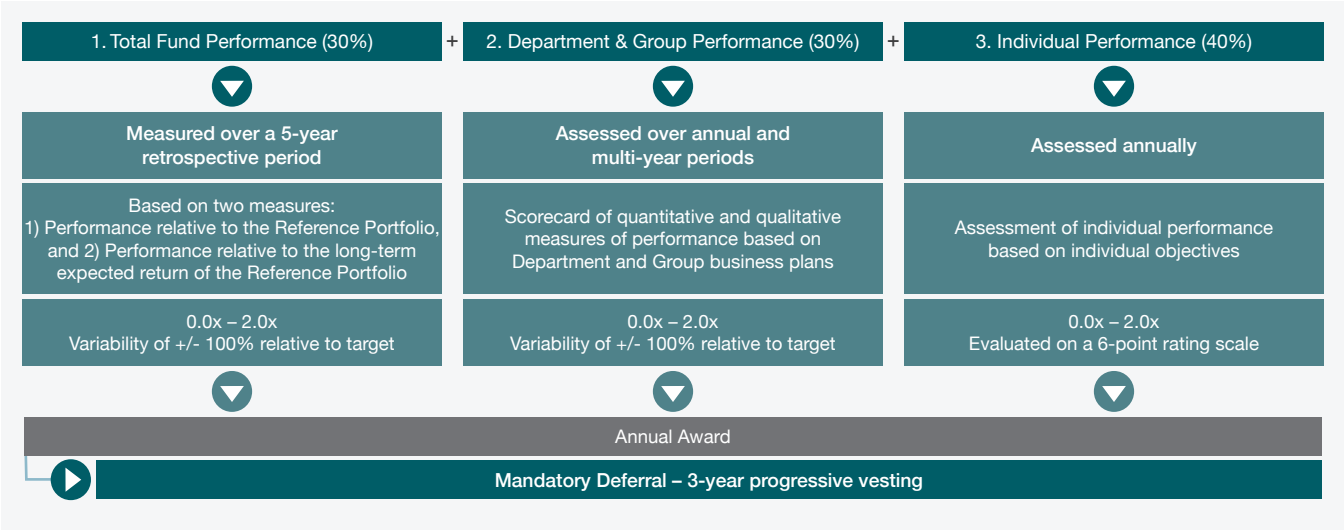
At the end of the fiscal year, the Annual Award is adjusted by a Performance Multiplier. The Performance Multiplier is based on a performance assessment of three factors:

1. Total Fund performance;
2. Department and Group performance; and
3. Individual performance.

Each performance factor contributes a fixed percentage or weight to the total incentive pay. These weightings are consistent across the organization. The Total Incentive may vary from zero to a maximum of two times the target amount for each performance factor. The award depends on performance relative to pre-determined objectives.

This structure applies to all employees across the organization regardless of department, group, seniority or geographic location.

The following chart illustrates the current incentive plan:



Below is more information on our three performance factors:

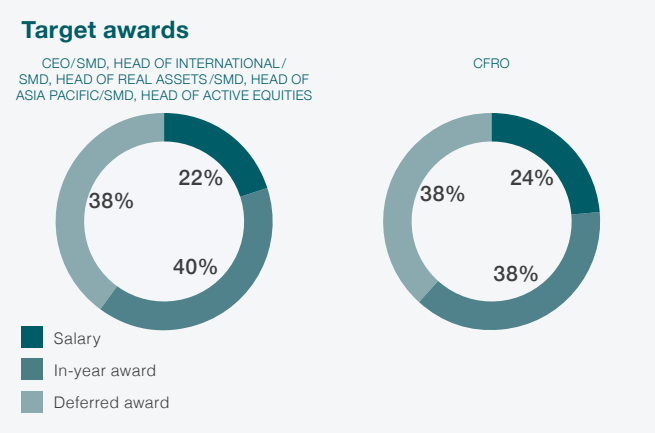
1. Total Fund performance – This performance factor includes equally weighted measures of both dollar value-added and total Fund return, each measured over a five-year trailing period. For the purpose of the incentive compensation plan, total Fund reflects the combined long-term investment portfolios of the base Canada Pension Plan and additional Canada Pension Plan, excluding Cash for Benefits.
2. Department and Group performance – Departments and Groups play an important role in contributing to and maximizing the performance of the total Fund. We determine performance objectives at the start of each year. We take both quality and quantity into account and align them with the strategic objectives of the organization. At year end, we measure performance against the objectives defined for each Department and Group, including value-added. We may measure performance over the year or over several years, depending on the objective and performance measurement approach.

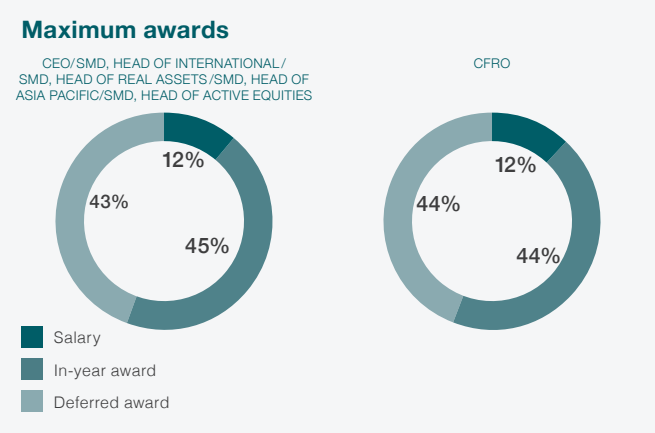
3. Individual performance – We assess this performance factor annually for each employee, based on specific objectives identified at the beginning of the year. Assessment of the individual is also based on their performance relative to the expectations of the job and their demonstration of our Guiding Principles of Integrity, Partnership and High Performance.

Employees receive their in-year cash payout following an assessment of their performance and approval by the HRCC and Board. All deferred awards are treated as if they were invested in the Fund and fluctuate with the total Fund return over time. Employees forfeit the incentive award and any unvested deferred awards if they resign during the fiscal year.

Pay mix

The mix of in-year cash and deferred compensation varies by role and level, with higher deferral targets for more senior professionals. The charts below illustrate the mix of salary, in-year cash, and deferred incentive for fiscal 2019 for the Named Executive Officers (NEOs):





Voluntary Deferral Incentive Plan (VDIP)

Where allowed under local tax law, employees may defer some or all of their in-year award in a given year. The deferred portion is treated as if it were invested. The employee can choose to make this nominal investment either entirely in the CPP Fund, or in both the CPP Fund and up to a maximum of 50% in the CPP Fund's portfolio of private investments. The deferred amounts fluctuate in value over the three-year deferral period with the returns of the Fund and, if elected, the portfolio of private investments. The VDIP provides another way to align employee interests with Fund performance.

Supplemental Restricted Fund Units (SRFU)

SRFUs are notional investments that fluctuate in value with CPP total Fund performance. SRFUs with multi-year vesting schedules can assist in attracting new employees. That is because they help ease in the compensation of new hires during their transition to CPPIB. For example, SRFUs can replace forfeited compensation from a previous employer. SRFUs can also be used as part of a transition arrangement to a new role or geography for current employees.

Fund Return Units (FRU)

FRUs are a type of long-term incentive compensation that align payouts to the long-term absolute performance of the Fund. The FRU grant pays out an amount equal to the total Fund return on a notional investment in the Fund, governed by specific Plan terms and contingent on positive cumulative return. The grant value is derived using a Black-Scholes model which takes into consideration volatility and risk-free rate of return. The grant issued to the CEO in fiscal 2017 has a fixed settlement date at the end of seven years and the grant issued to the CEO in fiscal 2019 has a fixed settlement date at the end of five years.

Clawback and Forfeiture Provision

The Board of Directors has the authority to interpret, change and discontinue the compensation plans at its discretion. In addition, the Board may reduce incentive awards or require employees to forfeit them if:

- Financial results are restated and the Board considers the award is therefore excessive. The Board can also require employees to forfeit unvested incentive compensation awards. This provision applies to those at the Managing Director level and above.
- The incentive award was granted in error.
- An employee is guilty of misconduct.

Pension

CPPIB provides its Officers and employees with the opportunity to participate in defined contribution retirement plans. These have relatively lower and more predictable costs than the more generous defined benefit plans offered by other organizations in the large pension fund and broader financial services industry.

Canada

All Canada-based employees are eligible to participate in our registered and supplementary defined contribution pension plans. Eligible earnings for both pension plans consist of:

- Base salary, plus
- The portion of the incentive paid in a given year (to a maximum of 50% of base salary).

Employees contribute 4.5% of annual eligible earnings and CPPIB contributes 4.5% to the maximum allowed under the *Income Tax Act* (Canada). For the supplementary pension plan, employees earn contribution credits equal to 9% of eligible earnings over the maximum for the registered pension plan. The supplementary plan is an unfunded plan. It grows at the same rate as the investment choices available under the registered plan.

Hong Kong

All Hong Kong-based employees are eligible to participate in the Mandatory Provident Fund (MPF) which consists of a mandatory program and a voluntary program which only CPPIB contributes to. Both programs operate as defined contribution pension plans.

Employees contribute 5% of annual eligible earnings and CPPIB contributes 5% to the monthly maximum allowed under the Mandatory Provident Fund Schemes Ordinance. For the voluntary MPF, CPPIB contributes 10% of eligible earnings less the employer mandatory MPF contributions. The voluntary MPF program has a vesting schedule where contributions fully vest once an employee reaches 10 years of continuous service.

Eligible earnings for the purposes of the mandatory MPF are all remuneration received by employees. The eligible earnings for the purposes of the voluntary MPF are (a) base salary, (b) housing allowance and (c) lifestyle spending account.

Employees based in other global CPPIB locations are eligible to participate in local pension plans that vary based on local regulations and market practices, where offered.

Benefits and other compensation

Our benefits programs are comparable to those provided by similar organizations in our industry. They include life insurance, disability benefits, health and dental benefits, time-off policies, a fitness reimbursement and an Employee-Family Assistance Program. Perquisites are limited to paid parking for the Senior Management Team members based in Toronto.

FISCAL 2019 RESULTS: ANNUAL OBJECTIVES, PERFORMANCE OUTCOMES AND COMPENSATION DECISIONS

This section describes the annual financial and non-financial performance measures and results we used to make compensation decisions for the Named Executive Officers (NEOs) for fiscal 2019.

Annual non-financial objectives

Management establishes the non-financial organizational objectives in the CPPIB business plan each fiscal year. The Board of Directors approves these goals. You will find the non-financial organizational objectives of fiscal 2019 in Table 1.

Management then aligns annual individual objectives for Officers and employees to these organizational objectives. The Board reviews progress against organizational objectives quarterly and at year end. This ensures a pay-for-performance approach to evaluation. Based on the Board's assessment, Management achieved the organizational objectives for fiscal 2019.

Table 1: Fiscal 2019 Non-Financial Objectives

1. Completing preparations to accept, invest and report on the additional Canada Pension Plan contributions that start in January 2019.
2. Scaling our investment programs and growing the Fund's exposure to emerging markets.
3. Improving our understanding of the opportunities and risks posed by climate change as part of a cross-departmental, multi-year initiative, and to adopt best-in-class climate-related financial disclosures.
4. Leveraging the power of our collective knowledge through our multi-year integrated technology, data and knowledge advantage initiative. This helps to drive better investment decisions and add value to the Fund.

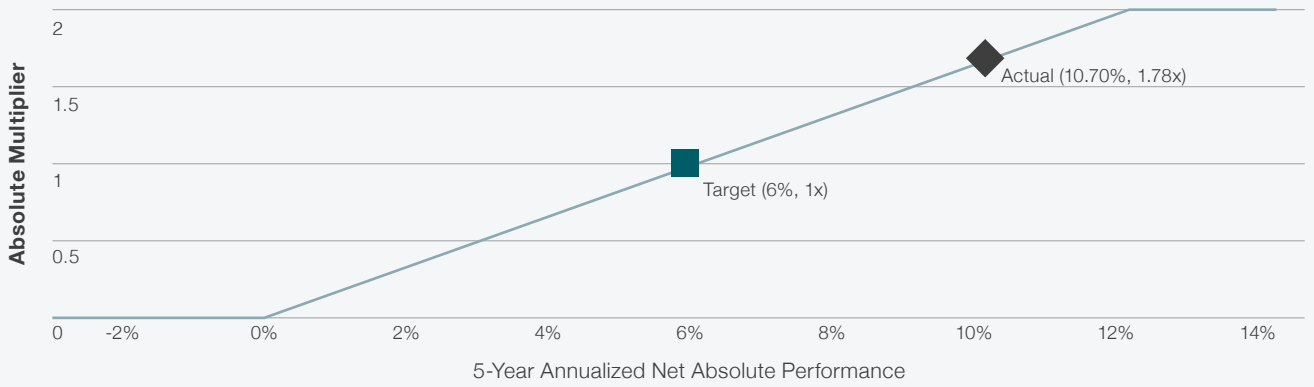
Total Fund[1] performance

We measure total Fund performance over a five-year period using two equally weighted criteria:

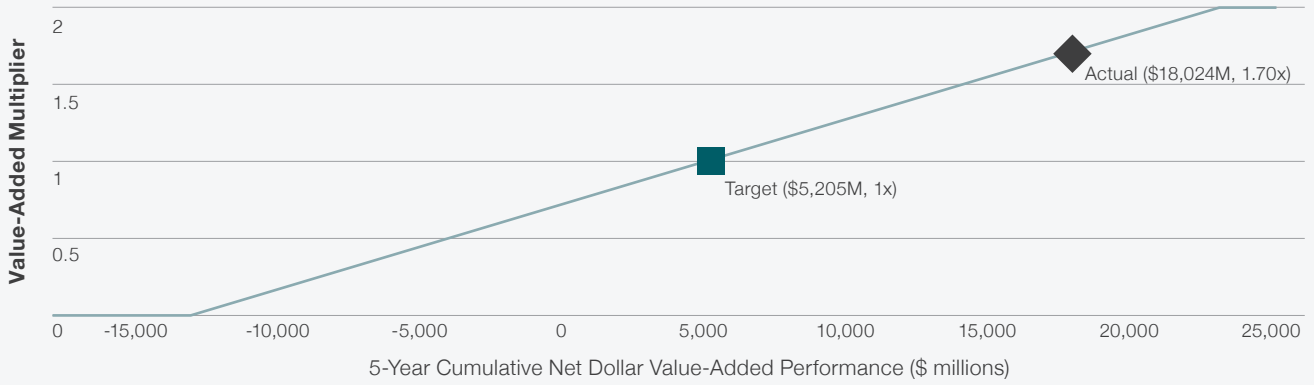
1. Absolute performance – Absolute total return of the Fund; and
2. Relative performance – Value-added relative return of the Fund compared to the Reference Portfolio.

For compensation payout purposes, we measure total Fund performance over a rolling five-year period relative to each of these two criteria and map it to a multiplier. For the absolute performance component, a target return of 6% will result in a target multiplier of 1x. For the relative performance component, a five-year cumulative target dollar value-added (DVA) of $5.21 billion must be reached to achieve a relative performance multiplier of 1x. The Board reviews DVA targets annually. The graphs below map the fiscal 2019 target and actual Fund performance.

Absolute Performance Component of the Total Fund Performance Multiplier



Value-Added Performance Component of the Total Fund Performance Multiplier



1 For the purpose of the incentive compensation plan, total Fund reflects the combined long-term investment portfolios of the base Canada Pension Plan and additional Canada Pension Plan. This excludes cash for benefits, which is consistent with prior years.

In Table 2 below, total Fund performance is measured over the five fiscal years beginning April 1, 2014 and ending March 31, 2019. The absolute and relative performance of the Fund in fiscal 2019 resulted in an equally weighted total Fund multiplier of 1.74.

Table 2: CPP Fund Performance, Fiscal 2015 to 2019 and Cumulative Results

	Absolute Performance				Relative Performance				
Fiscal year	CPP Fund Gross Return ($ billion)	CPP Fund Net Return ($ billion)	CPP Fund Net Return %	Total Fund Absolute Multiplier	Reference Portfolio Return ($ billion)	CPP Gross value-added ($ billion)	CPP Net value-added ($ billion)	Total Fund value-added Multiplier	Total Fund Multiplier
2015	41.4	40.6	18.31%		37.8	3.6	2.8		
2016	10.0	9.1	3.37%		(2.1)	12.1	11.2		
2017	34.4	33.4	11.84%		41.6	(7.2)	(8.2)		
2018	37.8	36.7	11.56%		31.0	6.8	5.7		
2019	**33.2**	**32.0**	**8.95%**		**25.6**	**7.6**	**6.4**		
Cumulative $ / Annualized % – 5 year	**156.8**	**151.9**	**10.70%**	**1.78**	**133.9**	**22.9**	**18.0**	**1.70**	**1.74**
Cumulative $ / Annualized % – 10 year	**245.9**	**238.9**	**11.18%**		**222.7**	**23.1**	**16.2**		

Department Performance

Each investment department has both financial and non-financial objectives. The CEO evaluates performance against these objectives for approval by the Board. We have summarized performance for fiscal 2019 for each investment department below.

Fiscal 2019 Investment Department Performance

	Fiscal 2019 performance
Total Portfolio Management	Exceeded target
Capital Markets and Factor Investing	Exceeded target
Active Equities	Exceeded target
Credit Investments	Exceeded target
Private Equity	Exceeded target
Real Assets	Exceeded target

A more detailed description of the total Fund and investment department performance is found on page 52 in the Management's Discussion & Analysis section.

COMPENSATION DISCLOSURE

We align with the best practices for compensation disclosure for a public pension fund. We disclose compensation information for key management personnel as a group. We also disclose individual compensation figures for the CEO, the CFO, and the next four highest-paid Senior Management Team members.

Compensation of Key Management Personnel

We define key management personnel as the Senior Management Team and the Board of Directors. For more information on Director compensation, please refer to the Governance Practices section of the Annual Report. The total compensation expense for key management personnel for fiscal 2019 is $52 million. Excluding one-time payments, the expense is $46 million, up 13% from $41 million for fiscal 2018. This increase was principally a result of headcount growth, especially in regional offices.

See note 12.1 of the Financial Statements for more information.

Compensation of the CEO

The CEO participates in the same incentive compensation plan as all employees at CPPIB. At the start of each fiscal year, the Board and the CEO agree on organizational and individual objectives for the CEO. At year end, the HRCC evaluates the CEO's performance against those objectives and presents its evaluation to the Board for review and approval. As well, each Director completes an annual evaluation of the CEO's performance with respect to his key areas of responsibility. These evaluations are summarized and presented to the Board of Directors. The Board uses this information to determine the organizational performance multiplier and individual performance multiplier of the CEO's incentive award for the fiscal year. These evaluations are also used to set the CEO's base salary for the upcoming fiscal year.

Mr. Machin's personal accomplishments for fiscal 2019 included achievement against the following goals:

1. Achieve strong returns, while managing to net of expenses.
2. Execute Vision 2020 and ensure alignment to 2025 strategy, and execute thereafter.
   - As part of Vision 2020, achieved additional CPP milestones on time. Key design considerations completed with zero risk exposure.
3. Grow, attract and retain top talent at all levels of the organization to create a wide and deep pool of diverse, global leaders.
   - Successfully onboarded new leadership team, including hiring a new Chief Technology & Data Officer.
   - Filled 31% of 45 vacancies at senior level positions with internal candidates, indicative of our excellent bench strength. Undertook detailed succession planning.
   - Took deliberate measures to ensure our talent pipeline embodies our commitment to a diverse and inclusive culture, with a particular focus on furthering gender parity across all levels of the organization. This improved female representation across the organization to 45% and across Investment Departments, from 32% in fiscal 2018 to 35% in fiscal 2019.
4. Achieve peer recognized practice leadership in Core functions.
   - Continued to ensure independence from the Investment teams and made significant improvements to management reporting to get greater insights.
   - Consolidated risk management and compliance oversight with improvements to evaluation, mitigation and reporting of risks.
5. Continue to develop CPPIB's global culture of high performance, partnership and integrity.
   - Participated in several domestic and global initiatives to highlight how CPPIB's evolving investment strategy continues to generate strong long-term results, ensuring the Fund remains well-positioned for future growth.
   - Drove the themes of Ambition, Agility, Innovation and Inclusion.

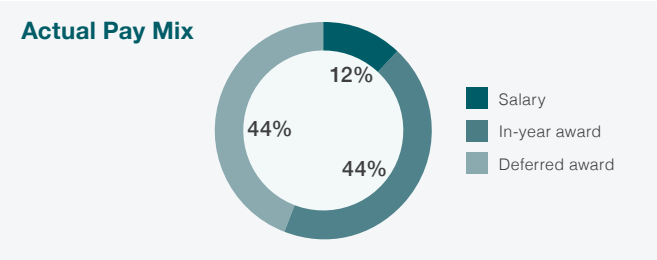
The Board of Directors awarded Mr. Machin a total incentive award of $4,200,125 for fiscal 2019. The compensation awarded to Mr. Machin is consistent with the principle of pay for performance and appropriately recognizes his many accomplishments as CEO. His leadership of the organization, its critical priorities and Fund management strongly position CPPIB to continue working in the best interests of CPP's contributors and beneficiaries.

The table below shows a summary of the CEO Total Direct Compensation for fiscal 2019.

Table 3: Fiscal 2019 CEO Total Direct Compensation

	Fiscal 2019 Total	
	Target Annual	Actual Annual
Base salary (A)[1]	**625,000**	**625,000**
Total Fund	750,000	1,307,625
Department/Group	750,000	1,192,500
Individual	1,000,000	1,700,000
Total Incentive Award (B)	**2,500,000**	**4,200,125**
In-year Award	1,250,000	2,100,063
Deferred Award	1,250,000	2,100,063
Other Deferred Award (C)[2]	**440,000**	**440,000**
Total Direct Compensation (A) + (B) + (C)	**3,565,000**	**5,265,125**
Fiscal 2019 Total Direct Compensation	**3,565,000**	**5,265,125**

1 The CEO's base salary was reviewed by the Board. The CEO's base salary will remain unchanged for fiscal 2020.
2 Mr. Machin received a fiscal 2019 FRU award of C$440,000. Based on a Black-Scholes valuation, the underlying notional investment of this award is C$2.93 million.



Please refer to Table 5: Summary Total Compensation.

Compensation for the Named Executive Officers

Table 4 below shows the total direct compensation in fiscal 2019 for each Named Executive Officer (NEO).

Table 4: Summary Fiscal 2019 Total Direct Compensation

	Currency	Base Salary (A)	Total Fund	Department/ Group/ Individual	Total Incentive Award (B)	In-year Award	Deferred Award	Total Direct Compen-sation (A) + (B)
Neil Beaumont SMD & CFRO	CAD	**435,000**	739,462	1,498,576	**2,238,038**	1,119,019	1,119,019	**2,673,038**
Alain Carrier SMD & Head of International, Head of Europe	GBP	**436,000**	912,199	1,822,480	**2,734,679**	1,367,340	1,367,340	**3,170,679**
Suyi Kim[1] SMD & Head of Asia Pacific *From June 1, 2018*	HKD	**4,151,380**	7,353,932	14,692,399	**22,046,331**	11,346,386	10,699,945	**26,197,711**
Ed Cass SMD & Global Head of Real Assets	CAD	**465,000**	972,874	2,029,260	**3,002,134**	1,501,067	1,501,067	**3,467,134**
Deborah Orida[1] SMD & Global Head of Active Equities *From June 1, 2018*	CAD	**503,536**	920,811	1,850,247	**2,771,058**	1,484,487	1,286,571	**3,274,594**

1 All amounts are prorated for time spent in both MD and SMD roles.

The total compensation awarded to the Named Executive Officers is $24.7 million, relatively flat to $25 million in fiscal 2018.

Table 5 below shows total compensation over the past three fiscal years for the Named Executive Officers.

Table 5: Summary Total Compensation

Name and Position	Year	Currency	Salary ($) A	In-year Award ($) B	Deferred Awards[2] ($) C	Other Deferred Awards[3] D	Pension Value ($) E	All Other Compensation[4] ($) F	Total Compensation (with Deferred Award) ($) A+B+C+D+E+F
Mark Machin[1,6,7,8,11,12,14]	**2019**	CAD	**625,000**	**2,100,063**	**2,100,063**	**440,000**	**436,380**	**54,900**	**5,756,406**
President & CEO	2018		625,000	1,971,825	1,971,825		450,921	211,593	5,231,164
	2017		651,608	1,927,890	1,927,890	1,125,000	420,804	108,581	6,161,773
Neil Beaumont[5,15]	**2019**	CAD	**435,000**	**1,119,019**	**1,119,019**		**45,233**	**83,471**	**2,801,742**
SMD & CFRO	2018		285,384	728,761	728,761	1,400,000	12,929	112,196	3,268,031
Alain Carrier[5,9,10,11]	**2019**	GBP	**436,000**	**1,367,340**	**1,367,340**		**57,469**	**13,549**	**3,241,698**
SMD & Head of International,	2018		436,000	1,348,513	1,348,513		56,429	15,628	3,205,082
Head of Europe	2017		452,009	1,248,560	1,106,740	1,000,000	62,701	19,381	3,889,391
Suyi Kim[11,12,16]	**2019**	HKD	**4,151,380**	**11,346,386**	**10,699,945**		**461,481**	**1,478,837**	**28,138,030**
SMD & Head of Asia Pacific	2018		4,284,900	10,202,804	6,801,869		385,816	221,453	21,896,842
From June 1, 2018	2017		4,150,000	9,310,724	6,207,149		359,040	224,635	20,251,549
Ed Cass[4,5,11,12]	**2019**	CAD	**465,000**	**1,501,067**	**1,501,067**		**49,525**	**291,462**	**3,808,121**
SMD & Global Head of	2018		435,000	1,338,350	1,338,350		46,306	6,893	3,164,899
Real Assets	2017		430,000	1,319,100	1,319,100		47,456	6,819	3,122,475
Deborah Orida[13,14]	**2019**	CAD	**503,536**	**1,484,487**	**1,286,571**	**1,911,000**	**45,406**	**216,514**	**5,447,514**
SMD & Global Head of	2018		624,543	1,540,501	1,027,001		14,964	37,165	3,244,174
Active Equities	2017		636,528	1,528,441	1,018,961		32,462	36,911	3,253,303
From June 1, 2018									

1 Mr. Machin's compensation for 2017 (prorated for the period April 1 – June 12, 2017) is converted using the exchange in rate in effect on March 31, 2018 (CAD:HKD 1:6.08).

2 The Deferred Award represents the award value at the time of the award. The award fluctuates with the performance of the total Fund over the vesting period.

3 Other Deferred Awards refers to one-time, long-term awards. For Mr. Machin this includes Fund Return Units.

4 All other compensation includes life insurance, disability benefits, health and dental benefits, discretionary employment arrangements, fitness reimbursement as well as comprehensive health assessment conducted at a private medical clinic. Perquisites are limited to paid parking for officers based in Canada. For the time spent in Hong Kong, Mr. Machin, Ms. Orida and Ms. Kim receive(d) a housing allowance. Mr. Cass received a temporary allowance for the duration of his international assignment. These figures include all relocation and assignment costs as applicable.

5 NEO elected to defer all or part of the fiscal 2019 In-year award into the Voluntary Deferred Incentive Plan (VDIP).

6 Mr. Machin received a fiscal 2017 SRFU award of C$625,000 upon his appointment as President & CEO. This award vests progressively as 33%, 33% and 34% from fiscal 2017 to fiscal 2019.

7 Upon his appointment as President & CEO, Mr. Machin received a FRU award of C$500,000. Based on a Black-Scholes valuation, the underlying notional investment of this award is C$2.7 million and it is annualized over 5 years. In fiscal 2019 he received another FRU award of C$440,000 with an underlying notional investment value of C$2.93 million. It is also annualized over 5 years.

8 Upon his appointment as President & CEO, Mr. Machin received partial vesting on his unvested LTIP/ELTIP awards at the end of Q2 fiscal 2017. This payment was made in October 2016.

9 Upon promotion to SMD, Head of International on June 21, 2016, Mr. Carrier received an SRFU award of GBP 1 million. This award vests 50% in fiscal 2017, and 40% in fiscal 2018 and the final 10% in fiscal 2019.

10 As part of his original employment agreement, Mr. Carrier received an additional cash payment on his salary and in-year bonus payment. This arrangement was discontinued upon his promotion.

11 Final payout of outstanding fiscal 2015 LTIP grant was in fiscal 2018.

12 Final payout of outstanding fiscal 2015 ELTIP grant was in fiscal 2018.

13 Upon promotion to SMD, Head of Active Equities on June 1, 2018, Ms. Orida received an SRFU award of C$1.9 million. This award vests 8.5% in fiscal 2019, 8.5% in fiscal 2020, and 83% in fiscal 2021.

14 Mr. Machin and Ms. Orida's compensation and pension values during their time in Hong Kong are converted using an exchange rate in effect on March 31, 2019 (CAD:HKD 1:5.88), on March 31, 2018 (CAD:HKD 1:6.08) and on March 31, 2017 (CAD:HKD 1:5.83), as applicable.

15 Mr. Beaumont's fiscal 2018 compensation was prorated based on start date of July 24, 2017.

16 Ms. Kim's other compensation is converted using the exchange rate in effect on March 31, 2019 (USD:HKD 1:7.85), on March 31, 2018 (USD:HKD 1:7.85), and on March 31, 2017 (USD:HKD 1:7.77), as applicable.

Compensation and Estimated Future Payouts

NEOs must defer a portion of the annual incentive award. The deferred portion vests and pays out in equal installments over a three-year period following the fiscal year for which the award is given. All deferred awards fluctuate in value with the net total Fund rate of return during the vesting period. Table 6 below shows the outstanding deferred awards and the future payouts for each Named Executive Officer.

Table 6: Deferred Awards

Name	Currency	Type of Award	Year of Award	Award Value	Payments in current year 2019	Value of Unvested Awards[1]
Mark Machin[2]	CAD	Deferred Award	**2019**	**2,100,063**		**2,100,063**
President and CEO		Deferred Award	2018	1,971,825	716,101	1,432,202
		Deferred Award	2017	1,923,679	779,376	779,376
		Deferred Award	2016	2,505,952	1,135,493	
		SRFU Award[3]	2017	625,000	288,863	
		FRU Grant[4]	**2019**	**440,000**		**234,400**
		FRU Grant[5]	2017	500,000		938,255
Neil Beaumont	CAD	Deferred Award	**2019**	**1,119,019**		**1,119,019**
SMD & CFRO		Deferred Award	2018	728,762	264,662	529,324
		SRFU Award[6]	2017	1,400,000	340,325	340,325
Alain Carrier	GBP	Deferred Award	**2019**	**1,367,340**		**1,367,340**
SMD & Head of International, Head of Europe		Deferred Award	2018	1,348,513	489,735	979,470
		Deferred Award	2017	1,106,744	448,396	448,396
		Deferred Award	2016	704,500	319,222	
		SRFU Award[7]	2017	1,000,000	135,936	
Suyi Kim	HKD	Deferred Award	**2019**	**10,699,945**		**10,699,945**
SMD & Head of Asia Pacific		Deferred Award	2018	6,801,869	2,470,212	4,940,424
From June 1, 2018		Deferred Award	2017	6,207,149	2,514,819	2,514,819
		Deferred Award	2016	6,527,900	2,957,911	
Ed Cass	CAD	Deferred Award	**2019**	**1,501,067**		**1,501,067**
SMD & Global Head of Real Assets		Deferred Award	2018	1,441,025	523,332	1,046,664
		Deferred Award	2017	1,338,347	542,230	542,230
		Deferred Award	2016	1,319,100	597,708	
Deborah Orida	CAD	Deferred Award	**2019**	**2,771,058**		**1,286,571**
SMD & Global Head of Active Equities		Deferred Award	2018			
From June 1, 2018		Deferred Award	2017			
		SRFU Award[8]	**2019**	**1,911,000**	176,973	**1,905,062**

1 Value of unvested awards is estimated as at March 31, 2019. For Deferred Awards and SRFUs, it equals the award value at grant date times the cumulative net Total Fund rate of return. For FRUs, the value represents only the cumulative net Total Fund rate of return of the underlying notional investment since grant.

2 Mr. Machin's unvested grants have been converted to CAD using the exchange rate in effect on March 31, 2019 (CAD:HKD 1:5.88).

3 Mr. Machin received a fiscal 2017 SRFU award of C$625,000 upon his appointment to President & CEO. This award vests progressively as 33%, 33%, and 34% from fiscal 2017 to fiscal 2019.

4 Mr. Machin received a fiscal 2019 FRU award of C$440,000. Based on a Black-Scholes valuation, the underlying notional investment of this award is C$2.93 million.

5 Upon his appointment to President & CEO, Mr. Machin received an FRU award of C$500,000. Based on a Black-Scholes valuation, the underlying notional investment of this award is C$2.7 milion.

6 Per his employment agreement, Mr. Beaumont received a fiscal 2018 SRFU grant of C$1.4 million, which vests 60% in fiscal 2018, 20% in fiscal 2019 and 20% in fiscal 2020.

7 Upon appointment as SMD, Mr. Carrier received a fiscal 2017 SRFU award of £1 million, which vested 50% in fiscal 2017, 40% in fiscal 2018 and the final 10% in fiscal 2019.

8 Upon appointment as SMD and relocation to Canada, Ms. Orida forfeited past awards and received a fiscal 2019 SRFU award of C$1,911,000 which vests 8.5% in fiscal 2019, 8.5% in fiscal 2020 and 83% in fiscal 2021.

Pension Plans

As described earlier, all Canada-based employees participate in the regular and supplementary defined contribution pension plans. Employees based outside of Canada are eligible to participate in local pension plans that vary based on local regulations and market practices.

Retirement Compensation Arrangement (RCA)

The President & CEO participates in a Retirement Compensation Arrangement (RCA), a non-registered pension fund to which CPPIB contributes annually and Mr. Machin can choose from a range of options on how the available funds are invested. This is similar to the registered pension plan and supported by the same provider. As part of his compensation package as CEO, Mr. Machin took a greater proportion of his overall total compensation in the form of pension.

Table 7 below shows the contributions and investment earnings for the Named Executive Officers under both plans. The total unfunded liability for the Canada-based Named Executive Officers, as at March 31, 2019, is $581,381 (2018 – $854,718).

Table 7: Pension Plan Contributions

				Compensatory ($)			
Name	Plan Type	Currency	Accumulated Value at Start of Year ($)	Employer Contributions ($)	Investments Earnings ($)	Non-compensatory ($)[1]	at End of Year ($)
Mark Machin[2,3]	Registered	CAD	68,450	13,250		19,786	101,485
President & CEO	Supplementary		58,118	57,875	12,292		128,285
	RCA		362,263	365,000		(150,384)	576,879
	Mandatory[3]	HKD	164,806	1,500		8,553	174,859
	Voluntary[3]	HKD	1,738,826	0		57,046	1,795,873
Neil Beaumont	Registered	CAD	26,104	13,492	0	15,655	55,251
SMD & CFRO	Supplementary		0	31,740	2,689	0	34,430
Alain Carrier	GSIPP	GBP	756,771	0	0	50,691	807,462
SMD & Head of International, Head of Europe	Cash-In-Lieu[7]		0	57,469	See note 7		57,469
Suyi Kim	Mandatory	HKD	424,778	18,000		(13,799)	428,979
SMD & Head of Asia Pacific	Voluntary[4,5]		3,346,641	443,481		(279,610)	3,510,512
Appointed June 1, 2018							
Ed Cass	Registered	CAD	385,251	13,250		26,567	425,068
SMD & Global Head of Real Assets	Supplementary		350,161	36,275	(26,782)		359,654
Deborah Orida[7]	Registered	CAD	264,796	12,726		39,781	317,302
SMD & Global Head	Supplementary		58,122	0	890		59,012
of Active Equities	Mandatory[6]	HKD	110,810	6,000		4,924	121,734
Appointed June 1, 2018	Voluntary[6]	HKD	935,454	186,030		(19,306)	1,102,178

1 Represents employee contributions and investment earnings in the registered pension plans.

2 Mr. Machin's Retirement Compensation Arrangment represents investment earnings and government tax deductions in the plan.

3 Mr. Machin became an active and non-participating member of the Mandatory Provident Fund (MPF) for Hong Kong when he was appointed President & CEO, which has an employee and employer contribution of 5% towards relevant income capped at HKD 30,000 of monthly earnings.

4 Effective December 1, 2018, CPPIB provides an employer pension contribution of 10% towards eligible earnings above the HKD 30,000 monthly earnings ceiling, increasing from the previous 5% contribution.

5 Effective December 1, 2018, the definition of eligible earnings was updated to include base salary, housing allowance and health spending allowance only.

6 Ms. Orida, upon permanently transferring to Canada effective August 1, 2018 terminated her membership in the MPF and withdrew her funds.

7 Receives employer pension contributions as cash-in-lieu above annual U.K. pension limit less statutory deductions and the employer portion of National Insurance contributions.

Termination and Retirement Arrangements for the President & CEO

In the event of termination without cause, severance pay for the President & CEO is set at:

- 12 months of base salary and a prorated payment for the value of the Incentive Award at target (both In-year and Deferred), plus
- An additional month of salary and one-twelfth of the prorated Incentive Award value for each year of service.

Severance pay is capped at 21 months for the President & CEO. The President & CEO forfeits any deferred portion of the incentive awards, with the exception of voluntary deferrals. Insured benefits, such as health, dental and life coverage, continue during the severance period.

In the case of termination with cause, the President & CEO forfeits all incentives and benefits. There are no change-of-control provisions in the employment arrangements.

In the event of resignation, all incentives and benefits are forfeited.

The President & CEO is eligible to retire from the organization and receive certain benefits, provided he has served in the role of President for at least five years and has provided formal notice at least six months in advance of his departure. Any Annual Incentive Award during the year of retirement is paid out on a prorated basis. Any unvested deferred awards continue to vest as per the established vesting schedule. All benefits stop on the date of retirement.

Termination and Retirement Arrangements for the NEOs

In the event of termination without cause, severance pay for the Named Executive Officers (NEOs) is set at:

- 12 months of base salary and a prorated payment for the value of the In-Year Award at target of the respective fiscal year
- An additional month of salary and one-twelfth of the target In-Year Award for each year of service, up to a maximum of eighteen months of base salary and In-Year Award
- Deferred Awards that would otherwise have vested in that period to a maximum of 18 months.

In the case of termination with cause or resignation, the employee forfeits all incentives, unvested awards and benefits. There are no change-of-control provisions in the employment arrangements.

For E. Cass specifically, in the event of resignation and in consideration of adherence to post employment obligations, Mr. Cass will receive a prorated payment of the Deferred Award that would have vested at the end of the fiscal year of resignation. It is payable one year after resignation. All other incentives and benefits are forfeited.

As with other employees, NEOs are entitled to retire from the organization provided they have reached the combined threshold of age 55 and 10 years of service at CPPIB.

Upon retirement, employees continue to receive the ongoing deferral payments owed to them under the Incentive Plan, unless they have opted out and provided they continue to satisfy the retirement criteria under the Plan. The normal payment cycle applies and payments are subject to the same conditions. All benefits stop on the date an employee retires.

Table 8 below shows the payments that would be made, as of March 31, 2019, to the Named Executive Officers if they retire or are terminated without cause.

Table 8: Potential Termination and Retirement Payments[1]

Name	Currency	Completed years of service	Severance[2]	Retirement treatment of unvested awards[3,4]
Mark Machin President & CEO	CAD	7	4,947,917	4,311,700
Neil Beaumont SMD & CFRO	CAD	1	1,237,031	1,648,300
Alain Carrier SMD & Head of International, Head of Europe	GBP	11	1,962,000	2,795,200
Suyi Kim SMD & Head of Asia Pacific *From June 1, 2018*	HKD	11	18,992,564	18,155,100
Ed Cass SMD & Global Head of Real Assets	CAD	11	2,092,500	3,090,000
Deborah Orida SMD & Global Head of Active Equities *From June 1, 2018*	CAD	9	2,265,911	1,286,600

1 Excludes incentive compensation payouts for the current fiscal year, which are included in Table 5: Summary Total Compensation. Termination and retirement payments are estimated as of March 31, 2019. Actual payments are prorated based on time worked in the performance period.
2 Excludes the value of insured benefits, such as health, dental and life insurance, continued during the severance period.
3 Upon retirement, payout of the unvested awards will be subject to the following conditions:
– Performance is measured at the end of the vesting period;
– Payout is prorated based on length of service within the vesting period; and
– Payment is made at the end of the vesting period.
4 The unvested awards assume a net return of 0% on the CPP Fund for future years.

LETTER FROM THE CHAIR OF THE GOVERNANCE COMMITTEE

We believe sound governance practices are integral to CPPIB's successful long-term performance. They also help to ensure compliance with the law and with the ethical standards that we expect of everyone at CPPIB. We are committed to rigorous standards of corporate governance and strive to be a leader in setting global governance best practices for our industry. We also promote strong governance practices at the companies in which we invest.

Good governance starts with our Board of Directors. The Governance Committee of the Board regularly assesses our corporate governance. It takes into account evolving global best practices, regulatory changes and stakeholder expectations. The Committee reviews criteria and qualifications for Board Directors and takes the lead in assessing and planning for Board composition and succession. The Committee oversees processes related to the annual Board evaluations as described under *A Commitment to Accountability* on page 106. We also oversee the Director compensation review process every two years. In addition, we oversee Director orientation and ongoing development programs, monitor the application of the Code of Conduct across CPPIB, and recommend Proxy Voting Principles and Guidelines for Board approval.

My colleagues on the Committee for fiscal 2019 were: Ian Bourne (Governance Committee Chair until July 2018), Robert Brooks (until September 2018), Sylvia Chrominska (from October 2018 until December 2018), Tahira Hassan, John Montalbano (until December 2018), Heather Munroe-Blum (in an *ex officio* capacity), Karen Sheriff (from January 2019) and Jackson Tai.

Fiscal 2019 report on activities

The Governance Committee continued its work this year to prudently manage Board renewal. The last several fiscal years have been a period of significant change within the membership of the Board of Directors. Eight Directors retired during fiscal 2017–2019, four of those in fiscal 2019. Chuck Magro was appointed in July 2018, replacing Ian Bourne. Sylvia Chrominska was appointed in September 2018, replacing Robert Brooks. Upon completion of an in-depth director search, we recommended this year the appointment of Mark Evans to replace Douglas Mahaffy, whose term was completed in October 2018. This appointment was announced following fiscal year end. Our colleague Jackson Tai retired from the Board at fiscal year end, given other commitments.

All appointment and reappointment recommendations, including those made by us in fiscal 2019, are based upon the Board composition matrix set out on page 105 and our stringent Board and peer evaluation process. The Director Appointment and Reappointment Process is described on page 104.

The Governance Committee focused this year on overseeing the extensive orientation and ongoing education programs for Directors. These sessions support new Directors in becoming knowledgeable to perform their duties and ensure a consistent level of information among all Board members.

A key initiative of the Governance Committee in fiscal 2019 involved the review of CPPIB's conduct and culture with the goal of independently assessing our organizational culture against our Guiding Principles of Integrity, Partnership and High Performance. An ad hoc committee was struck for this purpose. I chaired this ad hoc committee, which focused on conduct and culture throughout our global operations. Its work led to the Governance Committee reviewing and recommending to the Board an updated Code of Conduct and related internal policies and the Board concluding that CPPIB's culture and values are strong overall.

In fiscal 2019, the Board endorsed the creation of a standing Risk Committee of the Board, as described on page 104. The Governance Committee oversaw the development of the mandate document for the newly formed Risk Committee, as well as the corresponding amendments to the mandates for each of the other standing committees to ensure specific elements of risk remain considered by other committees as appropriate. The Committee carefully considered committee chair appointments, transition issues and orientation needs resulting from the creation of the new Risk Committee.

The Governance Committee's activities this year also included committee chair succession planning and recommending revised membership for all Board committees.

In the upcoming year, we will undertake the biennial review of Director compensation and complete the director search now in progress to replace Jackson Tai. We also intend to focus on the effective integration of the new Risk Committee into the Board's overall operation and activities.

N. Ashleigh Everett
Chair, Governance Committee

GOVERNANCE PRACTICES OF THE BOARD OF DIRECTORS

This section sets out certain key governance practices of the Board of Directors. More extensive governance information is posted on our website.

Mandate, duties and objectives of the Board of Directors

The Board of Directors is responsible for the stewardship of CPPIB.

Among other duties, the Directors:

- Appoint the President & CEO and annually review his or her performance;
- Oversee succession planning for Senior Management;
- Set compensation policies and approve Senior Management compensation;
- Determine the organization's strategic direction in collaboration with Management;
- Review and approve investment policies, standards and procedures;
- Approve the Integrated Risk Framework;
- Approve investment risk targets and limits;
- Approve the guidelines for investment transaction approvals and for retaining external investment managers;
- Review the Investment Portfolio and the results of investment decisions;
- Review and approve the annual business plan and budget;
- Appoint CPPIB's external auditor;
- Establish procedures to identify and resolve conflicts of interest;
- Establish and monitor compliance with a Code of Conduct for Directors and employees;
- Assess the performance of the Board itself, including an annual Chairperson and Director peer review;
- Establish other policies relating to such matters as authorities, procurement, anti-bribery and corruption, privacy, and travel and expenses; and
- Review and approve material disclosures such as quarterly and annual financial statements and the annual report.

Directors must act honestly and in good faith with a view to the best interests of CPPIB. They must exercise the care, diligence and skill that a reasonably prudent person would apply in comparable circumstances. They must employ any expertise or skill they possess in carrying out their duties.

One of the Board's most important responsibilities is to preserve a governance model in which CPPIB operates at arm's length from governments, with an investment-only mandate.

One important way the governance structure balances independence with accountability is to make investment professionals accountable to an independent Board of Directors, which operates at arm's length from governments. The Board ensures that CPPIB's investment-only mandate is undertaken without regard to political, regional, social or economic development considerations or any other non-investment objectives.

CPPIB's Code of Conduct states that Board members shall not participate in any political activity that could:

- Be incompatible with their duties;
- Affect their ability to carry out their duties in a politically impartial fashion;
- Cast doubt on the integrity, objectivity or impartiality of the organization.

There is an expectation that Directors, like Officers and employees, will promptly report any attempted political interference with respect to investments, procurement, hiring or any other decisions. No such reports have been made. The Code of Conduct and related policies also establish a process for identifying, minimizing and resolving financial conflicts of interest. This enables Directors, Officers and employees to discharge their responsibilities effectively while maintaining their integrity. These policies also help Directors recognize when they may have a specific or systemic conflict of interest.

Mandates, activities and composition of Board committees

The Board has four standing committees that met during fiscal 2019: Investment, Audit, Human Resources and Compensation, and Governance. In addition, this fiscal year the Board approved the formation of a fifth standing committee – the Risk Committee – that will meet commencing in fiscal 2020. Membership is shown in the Board Attendance chart on page 109.

The Investment Committee oversees CPPIB's core business, which is making investment decisions within the context of a Board-approved framework. This Committee reviews and recommends investment policies to the Board. It also reviews, approves and monitors the long-term investment strategy. In addition, the Committee approves certain investment transactions and approves the engagement of external investment managers in accordance with the *CPPIB Act*.

The Audit Committee oversees management controls and financial reporting. This includes recommending for Board approval the Financial Statements and Management's Discussion and Analysis. It also includes overseeing the external and internal audit functions. Oversight also involves the appointment of the internal auditor and recommending the external auditor for appointment by the full Board. The Audit Committee reviews information systems and internal control policies and practices. It oversees the Assurance & Advisory function and financial aspects of the employee pension plans.

The Audit Committee advises the Board in connection with the statutorily mandated Special Examination, which reviews CPPIB's records, systems and practices. CPPIB's external auditors, as recommended by the Audit Committee, typically conduct this review every six years, with the final report provided to CPPIB's stewards. In fiscal 2016, Deloitte completed a Special Examination that resulted in a clean opinion. In its report, Deloitte concluded that there were no significant deficiencies in the systems and practices examined during the period covered by the review. A copy of the Special Examination report and the Special Examiner's report are available on CPPIB's website. The next Special Examination will be held in 2022. The Audit Committee regularly meets separately with each of the external and internal auditors, without Management present. It also meets with the CEO and CFRO.

The mandate of the Risk Committee is to provide a focus on risk governance and overseeing risk management. It reviews and recommends the Integrated Risk Framework and Risk Appetite Statements and monitors CPPIB's risk profile against its risk appetite. It also reviews key existing and emerging risks to which CPPIB is exposed. In addition, the Committee reviews and recommends material risk management policies and exceptions to those policies. For more details about CPPIB's risk governance practices, see page 47.

The Human Resources and Compensation Committee (HRCC) administers the performance evaluation process for the CEO and senior leadership. It reviews and recommends the compensation framework, reviews organizational structure and oversees Management succession planning. It also oversees employee benefits, human resources policies and the employee pension plans. The role of the HRCC is further outlined in the Compensation Discussion and Analysis, beginning on page 87.

The Governance Committee ensures that CPPIB follows appropriate governance best practices. The Governance Committee considers conduct and culture, including monitoring the application of the Code of Conduct and related policies and recommending any required amendments. It establishes and recommends performance evaluation processes for the Board, Board committees, individual Directors, and the Chairperson. It also oversees Board succession planning. This includes reviewing criteria and qualifications for Director appointments or reappointments and recommending candidates for appointment or reappointment. It also recommends Director compensation and oversees the design of orientation and ongoing education programs for Directors.

At every regularly scheduled meeting, the Board of Directors and all committees have in-camera sessions without members of Management present. As noted previously, the Audit Committee also meets privately with each of the internal and external auditors, and the CFRO. In addition, the Board meets alone with the CEO and CFRO at every regularly scheduled Board meeting.

Decisions requiring prior Board approval

Management's discretion in making operational and investment decisions is described in the policies approved by the Board or Board committees. This includes a detailed policy dealing exclusively with authorities. In particular, Board approval is required for matters affecting the strategic direction of the organization and for the annual business plan and budget. Annual and incentive-based compensation for Officers, as well as their appointments, also require Board approval.

Ensuring Board effectiveness

Managing prudent Board renewal

The *CPPIB Act* provides that each Director be appointed for a term of up to three years. Each Director may be reappointed for one or more additional terms. In order to ensure good governance practices, the Board aims to prudently manage continuity and renewal. It seeks to ensure that multiple tenured directors remain on the Board as other Directors complete their terms and new Directors join.

In fiscal 2019, the Board worked to ensure a smooth transition as several Directors completed their terms and new Directors joined the Board.

This fiscal year, three long-tenured Board members retired after their terms expired: Ian Bourne, Robert Brooks and Douglas Mahaffy. Mr. Bourne and Mr. Brooks were replaced by Chuck Magro and Sylvia Chrominska respectively, each of whom brings a distinct yet complementary perspective to the Board. Mark Evans' appointment as Mr. Mahaffy's replacement was announced following the end of fiscal 2019. The Board is also actively seeking a replacement for Jackson Tai, who retired from the Board effective March 31, 2019. The Board continues to work closely with CPPIB's stewards to ensure there is a prudent rhythm of Director turnover. Renewal contributes to the Board's effectiveness as it carries out its duties, yet it must be managed carefully.

Board appointment and reappointment process

The federal Governor in Council appoints Directors on the recommendation of the federal Minister of Finance, following the Minister's consultation with the finance ministers of the participating provinces. An external nominating committee, constituted by the federal Minister of Finance, assists in the process.

The Director appointment and reappointment process is designed to ensure that the Board has Directors who provide effective oversight and have proven financial ability or relevant work experience that will help CPPIB to achieve its objectives. CPPIB seeks to uphold its governance practices as a leading model in the oversight of public pension management. To that end, the Director appointment and

reappointment process is based on the principles of merit, openness, transparency and diversity. The process aligns with our governance model to ensure an independent, qualified Board of Directors.

The Governance Committee regularly reviews and updates both desirable and actual competencies and attributes of the Board. This helps to ensure appointments and reappointments will create a Board that is fully capable of providing the oversight necessary for CPPIB to achieve its statutory objectives. The Committee establishes the essential attributes or "table stakes" required of individuals, along with other competencies required of the Board as a whole and in individual Board members to varying degrees. It then compares these requirements to CPPIB's existing Board composition to determine which competencies and attributes are required or are likely to be required in the foreseeable future.

As part of the Director appointment process, CPPIB retains and manages executive search firms to source qualified candidates for consideration. To meet the principles of openness, transparency and independence, a Notice of Appointment opportunity is posted on CPPIB's website. This enables members of the general public to view the eligibility factors and the critical competencies required of Directors. Interested individuals can then submit their names for consideration. These applicants augment the candidates identified by the Board and external executive search firms to ensure that the widest possible network of candidates is considered for appointment. The analysis of competencies described below is used to establish the selection criteria. The Governance Committee (or an ad hoc search committee) then uses these criteria to assess candidates.

In assessing potential Director reappointments, the Governance Committee considers table stakes, Board competencies, and applications in response to the Notice of Appointment opportunity. It also considers the results of the annual evaluations of the relevant Director and his or her performance on the Board.

Once finalized, the names of qualified candidates for appointments and reappointments are forwarded to the Nominating Committee for Appointments to CPPIB's Board of Directors. After considering them, the Nominating Committee submits names of recommended candidates to the federal Finance Minister.

Skills matrix

	Experience and Expertise	Sylvia Chrominska	Ashleigh Everett	Tahira Hassan	Chuck Magro	John Montalbano	Heather Munroe-Blum	Karen Sheriff	Kathleen Taylor	Mary Phibbs	Jackson Tai[1]	Jo Mark Zurel
	Governance	X	X	X	X	X	X	X	X	X	X	X
	C-Suite Executive Leadership	X	X	X	X	X	X	X	X	X	X	X
Investment Management	Asset Management			X		X					X	
	Financial Services	X	X			X	X		X	X	X	
	Capital Markets	X				X				X	X	X
	Capital Project Management			X	X			X	X	X	X	X
	Risk Management	X	X	X	X	X	X	X	X	X	X	X
	Accounting/Finance	X		X		X		X	X	X	X	X
	Business Building and Transformation		X	X	X	X	X	X	X		X	X
	Government/Regulatory/Public Policy	X					X					
	Global Business	X	X	X	X	X	X		X	X	X	X
	Talent Management/Compensation	X	X	X	X	X	X	X	X	X		X
	Information Technology/Security			X			X	X			X	X
Diversity	Age[2]	67	62	65	49	54	68	61	61	61	68	55
	Years on Board[2]	0	2	4	0	2	8	6	5	1	2	6
	Gender	X	X	X			X	X	X	X		
	Non-Gender[3]			X							X	

1 Resigned effective March 31, 2019.
2 As of March 31, 2019.
3 Directors who self-identify in categories such as LGBTQ, Indigenous, a visible minority, disabled, or of an ethnic or cultural group, are noted in this category.

Board diversity

CPPIB believes that diversity, including gender diversity, is crucial in ensuring an effective Board of Directors with various perspectives and qualifications. The Board has adopted a written Board of Directors Diversity Policy. It reflects our long-standing belief that CPPIB is best served by a Board with a wide array of skills, backgrounds, perspectives and ideas. The Board Diversity Policy includes the objective of gender parity among Directors so that at least 40% are women and at least 40% are men. Overall, Board diversity is one factor considered in evaluating Director appointments and possible reappointments.

Board composition

The Board has determined that the governance, functional and industry experience of the Board, as well as its diversity, currently provide for the effective oversight of CPPIB's activities. Details of the competencies analysis and diversity of the Board, as at March 31, 2019, are set out in the table on page 105. Seven of the usual complement of 12 CPPIB Directors are currently women, including Heather Munroe-Blum who is the Chairperson.

Biographies of the CPPIB Board of Directors are on pages 112 to 115. They provide details of each Director's background and professional experience.

Board member orientation and development

The Board has an established orientation process for new Directors. This includes several comprehensive, full-day sessions with discussion of the background, history and mandate of CPPIB as well as its strategy, business planning process and current corporate and departmental business plans. Each new Director receives background material in advance and intensive interaction with Management during the orientation process. Directors are invited to attend supplemental orientation sessions to deepen their knowledge of the organization.

Professional development for all Directors is a key focus for the Board because of the evolving nature of a Director's responsibilities and the unique nature of CPPIB. Management provides ongoing presentations focused on our business, emerging global issues and corporate governance practices. Special development seminars outside of regular meetings feature both external and internal experts.

A key education component for Board members is to develop an in-depth understanding of the geographic regions in which CPPIB invests and operates. Over the past several years, Directors have held Board meetings in select international offices and gained valuable insights related to the political and economic climate in those regions. Meetings held in international locations have enhanced the Board's knowledge of the various challenges and implications of deploying capital on a global basis. In June 2018, the Board convened in South America, which provided Directors with an opportunity to engage with CPPIB employees in São Paulo and with select local partners in both São Paulo and Santiago. It also helped Board members to better understand CPPIB's Latin America strategy and activities.

Directors are also encouraged to participate in relevant external programs. Given CPPIB's scale and breadth of activities, the Board will continue to engage in both internal and external education programs as a central part of the Board's governance responsibility.

A commitment to accountability

Procedures for the assessment of Board performance

The Board has an established annual process for evaluating its own performance and that of its committees, the Chairperson and each Director. All assessments are currently conducted through confidential questionnaires. The full Board then reviews summaries of the evaluations. These summaries provide a basis for improvement plans.

The Chairperson leads the confidential annual peer review. This is designed to assist each Director to identify self-development initiatives and continuous improvement. It is also used to explore new Board and committee roles for individual directors. After receiving relevant questionnaire feedback, the Chairperson meets formally with each Director. The Chairperson also checks in with each Director at least one more time formally during the year regarding feedback. The Board looks for improvements to this process annually.

The Chair of the Governance Committee leads the confidential annual Chairperson review and, subject to the direction of the Board, provides feedback to the Chairperson.

A summary of the feedback obtained through the evaluations process is conveyed to the external nominating committee. It uses this information when considering the reappointment of CPPIB Directors and the reappointment of the Chairperson when his or her term expires.

To ensure independence among Directors, the Board of Directors monitors interlocking relationships, in line with leading governance practices. This includes Board and committee interlocks. CPPIB currently has one Board interlock: both Heather Munroe-Blum and Kathleen Taylor serve on the Board of Royal Bank of Canada. The CPPIB Board has considered this interlock and has determined that this relationship does not impair the independent judgment of these Directors.

Directors are also expected to notify the Chairperson in advance if they plan to accept an appointment to another board or to an executive position with any enterprise that might benefit from, or be in conflict with, the activities of the CPPIB Board.

Board expectations of Management

The Board expects Management to comply with the *CPPIB Act* and regulations and with all policies approved by the Board, and to act in accordance with applicable law. With involvement from the Board, Management develops the strategic direction of the organization in response to its growing asset-management responsibilities and the outlook for capital markets. The strategy incorporates risk-management policies and controls, as well as monitoring and reporting mechanisms. Management is also expected to sustain and promote a culture of high integrity, to manage any conflicts of interest appropriately and to adhere to a stringent Code of Conduct.

Management is charged with developing benchmarks that objectively measure the performance of the markets, asset classes and programs in which CPPIB invests. The Board approves benchmarks at the total Fund level. These benchmarks assist the Board in evaluating Management's investment performance and structuring performance-based compensation incentives.

Management is expected to disclose all material activities to the Board and the public on a full and timely basis. This includes new investments, the engagement of operational and investment partners, quarterly and annual financial results, and developments that may materially affect CPPIB's reputation.

Directors' compensation

The Governance Committee of the Board is responsible for making recommendations with respect to Directors' compensation. This compensation consists of an annual retainer, meeting fees, and travel time allowances. Directors' compensation is reviewed at least every two years. Changes, if any, are recommended to the Board for approval.

As described in CPPIB's fiscal 2018 Annual Report, the Board reviewed Director compensation in fiscal 2018 and approved for fiscal 2019 modest increases in annual retainers for Directors as well as the Chairperson. The Committee approved more material increases in retainers for Committee Chairs in order to align with the responsibilities of those roles. It also approved an annual allowance for Directors residing outside Canada to reflect the additional overall complexities and travel time associated with not residing in Canada while serving as a CPPIB Director. The aim of these changes was to ensure that Directors are competitively compensated, while still taking into account CPPIB's public mandate. This is consistent with CPPIB's Directors' Compensation Philosophy as outlined on page 108.

The following table reflects approved Directors' Compensation for fiscal 2019, and fiscal 2020.

	Fiscal 2019 and 2020
Annual Retainers	
Chairperson[1]	$ 245,000
Director	$ 70,000
Standing Committee chair, additional retainer	$ 25,000
Meeting Fees	
In-person meeting fee	$ 2,000
Telephone meeting fee	$ 1,000
Travel and Other Allowances	
One way travel time per meeting is 1–3.5 hours	$ 500
One-way travel time per meeting is greater than 3.5 up to 6.5 hours	$ 1,500
One-way travel time per meeting is greater than 6.5 hours	$ 2,500
Annual allowance for Directors residing outside Canada	$ 20,000

1 In the case of the Board Chairperson, compensation will continue to be a flat annual fee, for chairing the Board and Investment Committee, recognizing the difference in the role of the Board Chairperson versus individual directors. The Board Chairperson will, however, be eligible for travel time reimbursement for regularly scheduled meetings and meeting fees in the event the Chairperson serves on an ad hoc committee.

CPPIB Directors' compensation philosophy

Safeguarding the interests of CPP contributors and beneficiaries requires professional directors with the capabilities to ensure the effective stewardship and oversight of CPPIB. The Board maintains a compensation approach that takes into account:

- Leading governance performance;
- The recruitment and retention of directors with extensive international experience and expertise in business, finance or investments; and
- The considerable time demands of the position.

An equitable balance between CPPIB's commercial activities and public purpose promotes the selection of individuals who will reinforce the organization's unique culture.

CPPIB Directors' compensation principles

I. Pay Neutrality

Compensation alone should not attract or detract desirable candidates.

In reviewing the compensation of CPPIB Directors, the Board's objective must be to set a reasonable "threshold" level of compensation, which neutralizes compensation so that it is not a significant favourable or unfavourable influence on the decision of a candidate in joining the CPPIB Board.

II. Public Purpose

Canadian governments established CPPIB with a purpose to serve millions of contributors to the compulsory CPP program. Directors' compensation should reflect a purpose distinct from other commercial organizations oriented to profits and stock price.

While Directors' compensation should reflect the reality that both the workload and time commitment of a CPPIB Directorship, and the expertise and experience required are comparable to private sector directorships, the total pay opportunity for CPPIB Directors should reflect our public purpose.

III. Time Commitment

The compensation structure should recognize the differential in time commitment among Directors.

The Board must contemplate and design a compensation structure that takes into account the fact that the CPPIB Board is a true 'working board' with significant time and travel requirements. Directors are expected to be continuously engaged on organizational matters well beyond preparing for, and participating in, frequent Board and Committee meetings. The structure should recognize the incremental time, travel and meeting commitments expected of each Director Committee Chairs and the unique role of the Board Chairperson.

IV. Relative Benchmark

CPPIB is a complex global investment management organization and is correctly considered a peer relative to other major financial institutions and large companies globally.

There is a highly competitive global market for top director talent and the Board must consider how candidates perceive the value proposition of being a CPPIB Director to recruit and retain top governance talent. For compensation-benchmarking purposes, the Board should consider alternative directorship opportunities available to these candidates in three target talent markets: (1) pension funds and smaller Canadian asset managers; (2) TSX 100 Boards and larger Canadian asset managers; and (3) TSX 20 & U.S./U.K. asset managers and multinationals.

V. Appropriate Discount to Benchmark

A full market-based level of compensation is not appropriate given CPPIB's public purpose as described in Principle II.

Upon review of the relative target talent markets for benchmarking purposes, an approximate 20% discount was applied during the last review of compensation in 2017.

Board attendance

There were six regularly scheduled Board meetings in fiscal 2019. In addition, there were five regularly scheduled Audit Committee meetings, six regularly scheduled Human Resources and Compensation Committee meetings, six regularly scheduled Governance Committee meetings, and six regularly scheduled Investment Committee meetings. In addition, there were a number of special Board or Committee meetings held to address specific issues or approvals, some of which were scheduled at times where all Directors were not able to attend given pre-existing commitments. The Risk Committee, formed in fiscal 2019, will meet for the first time in fiscal 2020. The table below shows the number of meetings that each Director attended in fiscal 2019 relative to the number of meetings he or she could have attended.

Director	Board Meeting[1]	Investment Committee[2]	Audit Committee[3]	Governance Committee[4]	Human Resources and Compensation Committee (HRCC)[5]
Heather Munroe-Blum, Chairperson of Board and Chair of Investment Committee	10/10	13/13	–	–	–
Ian Bourne, Chair of Governance Committee[6]	3/3	4/4	–	3/3	3/3
Robert Brooks[7]	4/4	6/6	2/2	4/4	–
Sylvia Chrominska[8, 9]	6/6	7/7	1/1	5/5	4/4
Ashleigh Everett, Chair of Governance Committee[10]	10/10	12/13	–	9/9	–
Tahira Hassan	10/10	12/13	–	9/9	8/8
Chuck Magro[11, 12]	6/7	9/9	4/4	6/6	–
Douglas Mahaffy[13]	7/7	7/8	–	–	6/6
John Montalbano[14]	10/10	13/13	5/5	8/8	–
Mary Phibbs, Chair of Audit Committee[15, 16]	10/10	13/13	5/5	–	7/7
Karen Sheriff, Chair of HRCC[17]	10/10	11/13	–	1/1	8/8
Jackson Tai[18]	7/10	9/13	4/5	7/9	–
Kathleen Taylor	10/10	12/13	5/5	–	8/8
Jo Mark Zurel, Chair of Audit Committee[19]	10/10	12/13	5/5	–	7/7

1 Eight in-person and two teleconference meetings.
2 Six in-person and seven teleconference meetings.
3 Five in-person meetings.
4 Eight in-person meetings and one teleconference meeting.
5 Six in-person and two teleconference meetings.
6 Ceased to be a Director effective July 1, 2018.
7 Ceased to be a Director effective September 4, 2018.
8 Became a Director effective September 4, 2018.
9 Attended Audit Committee meeting by invitation. Appointed to Governance Committee effective September 19, 2018 (attended September 18, 2018 meeting as an observer) until January 1, 2019, and attended February 12, 2019 meeting by invitation. Appointed to HRCC effective September 12, 2018 and to the Risk Committee effective February 13, 2019.
10 Appointed Chair of the Governance Committee effective July 1, 2018.
11 Became a Director effective July 1, 2018.
12 Appointed to the Audit Committee and Governance Committee effective July 4, 2018.
13 Ceased to be a Director effective October 26, 2018.
14 Ceased to be a member of the Governance Committee effective January 1, 2019. Appointed to the Risk Committee effective February 13, 2019.
15 Appointed Chair of the Audit Committee effective January 1, 2019. Appointed non-voting member of the Risk Committee effective February 13, 2019.
16 Ceased to be a member of the HRCC January 1, 2019.
17 Appointed to the Governance Committee effective January 1, 2019.
18 Ceased to be a Director effective March 31, 2019.
19 Ceased to be Chair of the Audit Committee effective January 1, 2019, (now non-voting member). Appointed Chair of the Risk Committee effective February 13, 2019.

During fiscal 2019, the following ad hoc committees of the Board were formed or continued:

- The ad hoc Director candidate search committee, formed in fiscal 2018, met several times during fiscal 2019. The purpose of the committee was to consider potential candidates and recommend candidates to the Governance Committee and the Board (to be ultimately recommended to the external nominating committee). Membership consisted of Ms. Everett (Chair), Mr. Montalbano, Dr. Munroe-Blum and Mr. Zurel;
- A separate ad hoc Director candidate search committee was formed in fiscal 2019 to consider potential candidates for a fiscal 2020 Board vacancy. Membership of the committee consisted of Ms. Everett (Chair), Mr. Montalbano, Dr. Munroe-Blum, Ms. Phibbs and Ms. Sheriff;
- The ad hoc committee to oversee Management's preparations to receive additional CPP contributions, formed in fiscal 2018, met throughout fiscal 2019. Membership consisted of Dr. Munroe-Blum, Mr. Bourne (until his retirement from the Board), Mr. Brooks (until his retirement from the Board), Mr. Montalbano, Ms. Sheriff and Mr. Zurel. Mr. Montalbano assumed the role of Chair of this committee partway through the fiscal year;

- The ad hoc risk committee, formed in fiscal 2018 to review matters relating to evolving CPPIB's risk governance practices, met during fiscal 2019 until the formation of the standing Risk Committee of the Board. Membership of the committee consisted of Mr. Tai (Chair), Mr. Montalbano, Dr. Munroe-Blum, Ms. Phibbs and Mr. Zurel; and
- The ad hoc conduct and culture committee, formed in fiscal 2018 to oversee the review and optimization of CPPIB's organizational culture, met several times during fiscal 2019. Membership of the committee consisted of Ms. Everett (Chair), Mr. Bourne (until his retirement from the Board), Dr. Munroe-Blum, Ms. Sheriff and Mr. Zurel.

Director compensation for fiscal 2019

Based on the attendance and fee schedules, individual compensation for each of the Directors for fiscal 2019 was as follows:

Director	Annual Retainer ($)	Board and Committee Meeting Fees ($)	Public Meeting Fees ($)	Travel Fees ($)	Total Remuneration ($)
Ian Bourne[1]	23,750.00	24,000.00	–	5,500.00	53,250.00
Robert Brooks[2]	31,888.89	31,000.00	–	2,500.00	65,388.89
Ashleigh Everett[3]	88,750.00	75,000.00	–	6,000.00	169,750.00
Tahira Hassan	70,000.00	67,000.00	–	2,500.00	139,500.00
Douglas Mahaffy[4]	39,892.47	30,000.00	–	–	69,892.47
John Montalbano[5]	70,000.00	86,000.00	–	13,000.00	169,000.00
Heather Munroe-Blum*	245,000.00	41,000.00	2,000	7,000.00	295,000.00
Mary Phibbs[6]	96,250.00	76,000.00	–	17,500.00	189,750.00
Karen Sheriff[7]	95,000.00	70,000.00	–	2,500.00	167,500.00
Jackson Tai	90,000.00	52,000.00	–	5,000.00	147,000.00
Kathleen Taylor	70,000.00	61,000.00	–	2,500.00	133,500.00
Chuck Magro[8]	52,500.00	46,000.00	–	7,500.00	106,000.00
Jo Mark Zurel[9]	88,750.00	86,000.00	1,000	6,000.00	181,750.00
Sylvia Chrominska[10]	40,250.00	41,000.00	–	–	81,250.00
Total	1,102,031.36	786,000.00[11]	3,000	77,500.00	1,968,531.36

* Chair of the Board.

1 Ian Bourne ceased to be a Board Member July 1, 2018.

2 Robert Brooks ceased to be a Board Member September 4, 2018.

3 Ashleigh Everett appointed Chair of Governance Committee effective July 1, 2018.

4 Douglas Mahaffy ceased to be a Board Member October 26, 2018.

5 John Montalbano ceased to be a member Governance Committee January 1, 2019.

6 Mary Phibbs appointed Chair of Audit Committee effective January 1, 2019. Ceased to be Human Resources Compensation Committee member January 1, 2019.

7 Karen Sheriff appointed as member of Governance Committee effective January 1, 2019.

8 Chuck Magro appointed as Board member effective July 1, 2018. Appointed as Investment Committee, Governance Committee, Audit Committee member effective July 4, 2018.

9 Jo Mark Zurel ceased to be Chair of Audit Committee, Human Resources and Compensation Committee member January 1, 2019. Appointed Chair of Risk Committee effective February 13, 2019.

10 Sylvia Chrominska appointed as Board member effective September 4, 2018. Appointed as an Investment Committee and Human Resources and Compensation Committee member effective September 12, 2018. Appointed as a Governance Committee member on September 18, 2018. Ceased to be a member of Governance Committee January 1, 2019.

11 These meeting fees include attendance at ad hoc committee and formal orientation meetings.

Conduct and culture

A culture of integrity and ethical conduct

The Board places utmost importance on fostering an inclusive culture of ethics and integrity throughout CPPIB. It requires and expects Management to support the Board in setting the tone for a strong governance culture.

In fiscal 2019, an ad hoc committee of the Board was formed to oversee the review and optimization of CPPIB's organizational culture. The work of this committee led the Board to conclude that CPPIB's global culture and values are strong. As part of the review of corporate culture, the Governance Committee oversaw the refreshing of CPPIB's Code of Conduct and related internal policies, effective April 1, 2019.

Code of Conduct and related policies

The *Code of Conduct* can be found on our website. It is designed to help create a corporate culture of trust, honesty and integrity. It outlines what is expected of everyone at CPPIB and our accountability to each other.

The Code sets out strict criteria for the acceptance by Directors and employees of any entertainment, gifts or special treatment. Such benefits must not create or appear to create a favoured position for actual or potential contractors or suppliers.

It also deals with such matters as conflicts of interest, personal and professional conduct, confidentiality of proprietary information, and personal investments.

Related internal policies provide additional information on conflicts of interest and personal investments. These are intended to identify, manage and, where possible, eliminate conflicts of interest relating to Directors and employees. Conflicts of interest were anticipated in CPPIB's legislation as a result of the need to recruit Directors and employees with financial and investment experience. Our policies are designed to ensure that Directors and employees act in the best interests of the organization. They must disclose any personal or business interests that might lead to a real, potential or perceived conflict of interest. Any involvement in relevant decision-making is prohibited, should those circumstances arise. Further, Directors are expected to resign from the Board if they take on executive responsibilities with an organization whose objectives and mandates may be, or might reasonably be perceived to be, in conflict with CPPIB's objectives and mandate.

These policies also cover the personal trading of CPPIB employees and directors. They establish strict pre-clearance procedures and restrictions for personal trading in securities.

As part of the hiring process, new recruits must read and agree to comply with the Code of Conduct and related conduct policies. Together, these set a high standard for promoting ethical conduct and addressing conflicts of interest. Directors and employees must reconfirm their compliance semi-annually and employees must complete an online module semi-annually to confirm their understanding of the Code and their ability to apply it in day-to-day decisions and actions.

Guiding Principles

Our Guiding Principles of Integrity, Partnership and High Performance are embedded in the Code of Conduct. CPPIB holds annual sessions for all employees on the same day across all offices to renew their commitment to the Guiding Principles. We will continue to hold these sessions annually to maintain the focus on this cornerstone of our culture.

When the Board hires or conducts annual performance reviews of the CEO, it considers the individual's leadership in promoting ethical conduct and championing a culture of Integrity, Partnership and High Performance. These factors are also relevant in the hiring and review of all employees.

Conduct Review Advisor

To augment the Code of Conduct, the Board of Directors has appointed an external Conduct Review Advisor to discuss Code of Conduct issues with Directors, employees and relevant third parties on a confidential basis. The Conduct Review Advisor also assists the Governance Committee in monitoring how the Code is applied and in reviewing it for any appropriate changes. Ms. Sheila Block, a distinguished Canadian litigation lawyer, currently holds this position.

BOARD OF DIRECTORS[1]

COMMITTEE MEMBERSHIP:
Investment Committee (Chair), Audit Committee (non-voting member), Governance Committee (non-voting member), Human Resources and Compensation Committee (non-voting member), Risk Committee (non-voting member)

HEATHER MUNROE-BLUM, O.C., O.Q., PH.D., F.R.S.C., CHAIRPERSON

Corporate Director and Public Policy Scholar, Montreal, Quebec
Director since December 2010. Appointed Chairperson effective October 2014.

Served for over a decade as Principal and Vice Chancellor (President), McGill University; Former Vice-President (Research and International Relations), University of Toronto. Current Director of the Royal Bank of Canada and Chairperson of the Gairdner Foundation. Co-founder of the Canadian Children's Literacy Foundation. Member, Board of Stanford University's Center for Advanced Study in the Behavioral Sciences (CASBS), McGill's Tanenbaum Open Science Institute (TOSI), McGill's Bensadoun School of Retail Management, and the Trilateral Commission. Among others, served on the boards of Four Seasons Hotels, Alcan, Yellow Media Inc., Hydro One (Ontario), and CGI Group, and as a member of the President's Council of the New York Academy of Sciences, the Conference Board of Canada and the CD Howe Institute. Recipient of numerous domestic and international honorary degrees and awards of distinction. Officer of the Order of Canada, Officer of the Order of Quebec, Specially Elected Fellow of the Royal Society of Canada and Fellow of the Institute of Corporate Directors.

Building on a distinguished career of clinical, scientific and policy contributions, qualifications include more than 25 years of senior administrative leadership concentrated in higher education, public policy and research and development; has extensive board experience as a director on executive, human resources and compensation, governance, investment, finance and risk committees in the corporate and not-for-profit sectors.

COMMITTEE MEMBERSHIP:
Investment Committee, Governance Committee, Human Resources and Compensation Committee

IAN A. BOURNE

Corporate Director, Calgary, Alberta
Director since April 2007. Retired from the Board in July 2018, when his term completed.

Chair of Ballard Power Systems Inc., Director of Hydro One Limited, Wajax Corporation, and the Canadian Public Accountability Board. Former Chair of SNC-Lavalin Group Inc. and former Director of Canadian Oil Sands Limited. Retired Executive Vice President and Chief Financial Officer of TransAlta Corporation, a power generation company, and President of TransAlta Power L.P. Over 35 years of experience in senior finance roles at TransAlta, General Electric and Canada Post Corporation. Former Director of TransAlta Power L.P. Qualifications include expertise in finance in major corporations, corporate governance and international experience in Paris and London.

COMMITTEE MEMBERSHIP:
Investment Committee, Governance Committee, Audit Committee

ROBERT L. BROOKS

Corporate Director, Toronto, Ontario
Director since January 2009. Retired from the Board in September 2018, when his term completed.

Former Vice-Chair and Group Treasurer of the Bank of Nova Scotia, the culmination of a 40-year career with the bank serving in a succession of senior investment banking, finance and treasury roles. Director of Integrated Asset Management Corp. Director of Hamilton Capital Partners Inc. Former Director of numerous Scotiabank subsidiaries including Scotia Discount Brokerage, Inc., Scotia Life Insurance Company, ScotiaMcLeod, Inc. and Scotia Cassels Investment Counsel Ltd. Qualifications include more than 40 years of financial industry experience as a bank executive dealing with finance, risk management, pension fund asset mix, investment strategies, treasury functions and international operations.

COMMITTEE MEMBERSHIP:
Investment Committee, Human Resources and Compensation Committee, Risk Committee

SYLVIA CHROMINSKA

Corporate Director, Stratford, Ontario
Director since September 2018.

Currently serves on the Board and as Chair of the Human Resources and Compensation Committee of Wajax Inc., on the Board, and as Chair of the Management Resources and Compensation Committee of Emera Inc., on the Board and as Chair of the Stratford Festival and is also on the Board of the University of Western Ontario.

Previously served as Chair of the Boards of the Bank of Nova Scotia Jamaica and Scotiabank Trinidad & Tobago, as a Director and Chair of the Human Resources Committee of Dofasco Inc., as the Chair of the Board of Governors of the Canadian Bankers Association, and on the Dean's Advisory Committee of the University of Western Ontario's Richard Ivey Business School. Member and Honorary Fellow of the Advisory Council for Dalhousie University, Chair of the International Women's Forum; and Board Member and Vice President of the Canadian Club of Toronto.

Holds an Honours Degree in Business Administration and an Honorary Doctorate from the University of Western Ontario. Qualifications include over 30 years of banking experience, including executive positions in human resources and Corporate Credit Risk, as well as extensive board experience.

1 The biographies provided include all Directors who served on the Board in fiscal 2019. Ian Bourne, Robert Brooks, Douglas Mahaffy and Jackson Tai left the Board and Board committees during fiscal 2019. Committee membership is listed as of March 31, 2019, other than those directors who left the Board during the year.

COMMITTEE MEMBERSHIP:
Investment Committee, Governance Committee (appointed Chair effective July 1, 2018)

ASHLEIGH EVERETT

Corporate Executive, Corporate Director, Winnipeg, Manitoba
Director since February 2017.

President, Corporate Secretary and Director of Royal Canadian Securities Limited, the holding company of Royal Canadian Properties Limited, Domo Gasoline Corporation Ltd., and L'Eau-1 Inc. Director of The Wawanesa Mutual Insurance Company. Former Director of the Bank of Nova Scotia (Chair of the Corporate Governance and Pension Committees). Former Director of Manitoba Telecom Services (Chair of the Governance and Nominating Committees). Current member of the Premiers Enterprise Team for the Province of Manitoba. Qualifications include extensive board experience as a director on executive and risk, governance and pension, and human resources and compensation committees in the public telecom and finance sectors, with experience in international risk and governance issues. Over 25 years of senior management experience in private property development and retail business operations.

COMMITTEE MEMBERSHIP:
Investment Committee, Governance Committee, Human Resources and Compensation Committee

TAHIRA HASSAN

Corporate Director, Toronto, Ontario
Director since February 2015.

Non-executive Director of Brambles Limited. Vice Chair and Director of Ontario Shores Centre for Mental Health Sciences. Former Senior Vice-President at Nestlé SA with extensive international experience in transformative change including mergers & acquisitions. Held executive positions such as Global Business Head for Nescafé Ready-to-Drink, Head of Global Supply Chain and President of Ice Cream in Canada. Served on several international management and joint venture boards. Past member of the Dean's advisory council of the Laurier School of Business & Economics at Wilfrid Laurier University.

Certified Management Accountant of Canada. Fellow of the Chartered Institute of Management Accountants in the United Kingdom.

Qualifications include more than 39 years of business and board expertise, in countries such as the United Kingdom, Switzerland and Pakistan, in addition to Canada.

COMMITTEE MEMBERSHIP:
Investment Committee, Audit Committee, Governance Committee

CHUCK MAGRO

Corporate Executive, Heritage Point, Alberta
Director since July 2018.

Chuck Magro is President and Chief Executive Officer of Nutrien Ltd. He also plays an active role on the boards of the Business Council of Canada, the International Fertilizer Industry Association and the International Plant Nutrition Institute; and serves as chair of Canpotex Limited, and past chair of The Fertilizer Institute and the Nutrients for Life Foundation.

Qualifications include 25 years of international business experience primarily in North and South America, Australia, Europe, and Asia, as well as board experience.

COMMITTEE MEMBERSHIP:
Investment Committee, Human Resources and Compensation Committee

DOUGLAS W. MAHAFFY

Corporate Director, Toronto, Ontario
Director since October 2009. Retired from the Board in October 2018, when his term completed.

Retired Chairman and Chief Executive Officer of McLean Budden Ltd., an institutional money management firm. Former Managing Director and Head of Investment Banking (Ontario) of Merrill Lynch Canada Inc., and former Senior Vice-President, Finance and Chief Financial Officer of Hudson's Bay Company. Director at Methanex Corporation and former Director at Stelco Inc. and Woodward's Ltd. Chairman at Drumlane Capital, a personally owned investment firm. Former member of the Investment Committee at Sunnybrook Health Sciences Centre. Qualifications: more than 40 years of investment industry, general management, and mergers and acquisitions experience.

In Memoriam

Sadly, Douglas Mahaffy passed away on January 6, 2019. Appointed in October 2009, Douglas was a highly respected member of the CPPIB Board. His valued counsel and wisdom helped guide CPPIB's growth over the past decade. He will be sadly missed and fondly remembered.

COMMITTEE MEMBERSHIP:
Investment Committee,
Audit Committee,
Risk Committee

JOHN MONTALBANO

Corporate Director, Vancouver, British Columbia
Director since February 2017.

Served as Chief Executive Officer of RBC Global Asset Management from 2008 to 2015. Previously President of Phillips, Hager & North Investment Management and Vice Chairman of RBC Wealth Management. Serves as Director on a number of corporate boards, including Canalyst Financial Modeling Corporation, Accuro Technologies Inc. and Eupraxia Pharmaceuticals Inc.

Chartered Financial Analyst designation. Leslie Wong Fellow of the UBC Portfolio Management Foundation. Holds an Honorary Doctorate from Emily Carr University, serves on the Asia Pacific Foundation Board, is Vice Chair of The St. Paul's Hospital Foundation and Chairs The Vancouver Police Foundation.

Qualifications include nearly 30 years working in asset management and extensive senior management experience, including overseeing double-digit annual growth over seven years as CEO of the new RBC Global Asset Management, making it one of the 50 largest asset managers in the world.

COMMITTEE MEMBERSHIP:
Investment Committee,
Audit Committee (appointed Chair effective January 1, 2019),
Risk Committee (non-voting member)

MARY PHIBBS

Corporate Director, London, United Kingdom
Director since May 2017.

Held senior positions at Standard Chartered Bank plc, ANZ Banking Group, National Australia Bank, Commonwealth Bank of Australia, and Allied Irish Banks plc among others. Non-executive Director of Morgan Stanley International Limited, Morgan Stanley & Co International plc and Morgan Stanley Bank International Limited. Previously a Director of Novae Group plc, New Day Group Limited, Nottingham Building Society, Friends Life Group plc, Stewart Title Limited, The Charity Bank Limited and Northern Rock plc during its period of public ownership.

Holds a Bachelor of Science (Honours) from the University of Surrey, is a Fellow of the Institute of Chartered Accountants in England and Wales and a Fellow of Chartered Accountants Australia and New Zealand.

Qualifications include more than 40 years of international business, risk management and board experience in various countries in the Australian, Pacific, Southeast Asia, Middle East and European regions including the United Kingdom.

COMMITTEE MEMBERSHIP:
Investment Committee,
Governance Committee,
Human Resources and Compensation Committee (Chair)

KAREN SHERIFF

Corporate Executive, Halifax, Nova Scotia[2]
Director since October 2012.

President and Chief Executive Officer of Q9 Networks from January 2015 through October 2016. Previously President and CEO of Bell Aliant; Chief Operating Officer, Bell Aliant. Prior to Bell Aliant, President of Small and Medium Business, Bell Canada; Chief Marketing Officer, Bell Canada; Senior Vice President of Product Management and Development, Bell Canada, and a variety of assignments with Ameritech and United Airlines. Director of WestJet Airlines Ltd. and BCE Inc/Bell Canada. Past director of Bell Aliant Inc., Bell Aliant Regional Communications Inc., Bell Aliant Preferred Equity Inc., Aliant Inc. and Teknion Corporation. Chair of the Board of Trustees of the Gardiner Museum of Ceramic Arts from 2006 to 2016. Named one of Canada's top 25 Women of Influence for 2013 by Women of Influence Inc. In 2012, named Woman of the Year by Canadian Women in Communications (CWC). Named one of Atlantic Canada's Top 50 CEOs (*Atlantic Business Magazine*). Recognized as one of Canada's Top 100 Most Powerful Women three times and named to the Women's Executive Network Top 100 Women Hall of Fame.

Qualifications include extensive senior management experience and expertise in strategic priority setting of major corporations, including oversight of Bell Aliant's conversion back to a corporation from one of the largest income trusts in Canada, and leading Bell Aliant's corporate transformation and industry leading fibre-to-the-home (FTTH) network build, the first of its kind in Canada.

2 At time of appointment.

COMMITTEE MEMBERSHIP:
Investment Committee,
Audit Committee,
Governance Committee

JACKSON TAI

Corporate Director, Greenwich, Connecticut, USA
Director since June 2016. Retired from the Board in March 2019, given other commitments.

Former Chief Executive Officer and Vice-Chairman of DBS Bank Ltd, and previously, President and Chief Operating Officer, and Chief Financial Officer. Served 25 years in the Investment Banking Division of J.P. Morgan & Co. Incorporated and held executive positions such as Head of Japan Capital Markets; founder of the firm's global real estate investment banking; Senior Regional Officer for Asia Pacific; and Senior Regional Officer for the Western United States. Currently serves as a non-executive director for several boards, including HSBC Holdings PLC, Eli Lilly & Company, and Mastercard Incorporated. Currently serves as a trustee for Rensselaer Polytechnic Institute and as a Director of Metropolitan Opera.

Qualifications include significant on-the-ground operating and governance experience in Asia, including in China, Singapore and Japan; a distinguished career in banking and capital markets with experience in investment and risk assessment; as well as global governance experience among active boards providing insights into U.S., EU and China.

COMMITTEE MEMBERSHIP:
Investment Committee,
Audit Committee,
Human Resources and
Compensation Committee

KATHLEEN TAYLOR, C.M., BA (HONS), JD, MBA

Global Executive, Corporate Director, Toronto, Ontario
Director since October 2013.

Chair of the Board of the Royal Bank of Canada and Board member since 2001. Chair of the Board of the Hospital for Sick Children Foundation and a member of the Hospital's Board of Trustees. Director of Air Canada since May 2016. Vice Chair of The Adecco Group since April 2017 and director since April 2015. Chair of Altas Partners, a Toronto-based private equity firm, since April 2019. Former President and Chief Executive Officer of Four Seasons Hotels and Resorts.

Recipient of the Order of Canada with the grade of member (2016). Recipient of an Honorary Doctor of Humane Letters from Mount Saint Vincent University (2015) and Honorary Doctorates of Laws from Trent University (2016) and York University (2014). Named the first woman Corporate Hotelier of the World by *Hotels Magazine* (2011) and was inducted to the Canadian Marketing Hall of Legends (2010). Recipient of the Inaugural Medal for Career Achievement from Hennick Centre for Business and Law (2010), and the Schulich School of Business Award for Outstanding Executive Leadership (2001).

Executive qualifications include almost 25 years of international experience building a global culture, overseeing major strategic and operations initiatives, negotiating expertise and strong relationship management capabilities. Also a seasoned Director, with 20 years of governance experience on a number of corporate and not-for-profit boards.

COMMITTEE MEMBERSHIP:
Investment Committee,
Audit Committee (Chair until December 31, 2018, non-voting member effective January 1, 2019),
Risk Committee (appointed Chair effective February 13, 2019).

JO MARK ZUREL

Chartered Professional Accountant, Corporate Director, St. John's, Newfoundland and Labrador
Director since November 2012.

President/Owner of Stonebridge Capital Inc., a private investment company that invests in a variety of businesses, including Atlantic Canadian start-up and high-growth companies. From 1998 to 2006 served as Senior Vice-President and Chief Financial Officer of CHC Helicopter Corporation. Director of Highland Copper, Director of Major Drilling Group International Inc. and Director of Fortis Inc. Current and recent volunteer activities include Chair of the Atlantic Provinces Economic Council, Chair of the St. John's Board of Trade, Chair of Junior Achievement of Newfoundland and Labrador, and Chair of a Red Cross Capital Campaign. In 2015, Jo Mark and his wife were named the Outstanding Philanthropists for Newfoundland and Labrador. Honoured as one of Canada's Top 40 under 40 in 2000.

Qualifications include extensive investment industry and corporate director experience including as an active angel investor and as Director of the Institute of Corporate Directors (ICD) and member of the founding executive of the ICD's Newfoundland and Labrador Chapter.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The Consolidated Financial Statements of Canada Pension Plan Investment Board (CPP Investment Board) have been prepared by Management and approved by the Board of Directors. Management is responsible for the integrity and reliability of the Consolidated Financial Statements and the financial information contained within the Annual Report.

The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards. The Consolidated Financial Statements include certain amounts based on Management's judgments and best estimates where deemed appropriate. The significant accounting policies used are disclosed in note 1 to the Consolidated Financial Statements. The financial information presented throughout the Annual Report is consistent with the Consolidated Financial Statements.

CPP Investment Board develops and maintains systems of internal control and supporting procedures. The systems of internal control are designed to provide reasonable assurance that assets are safeguarded; that transactions are properly recorded, authorized and are in accordance with the *Canada Pension Plan Investment Board Act*, the accompanying regulations, the by-laws and investment policies of CPP Investment Board; and that there are no material misstatements in the Consolidated Financial Statements or the financial information contained within the Annual Report. The internal control over financial reporting and disclosure controls and procedures are tested for both design and operational effectiveness as part of our CEO/CFRO certification process as described on page 86 of Management's Discussion and Analysis in the 2019 Annual Report.

The internal control framework includes a strong corporate governance structure, an enterprise risk management framework that identifies, monitors and reports on key risks facing the organization, a code of conduct and conflict of interest procedures, and other policies, management authorities and procedures that guide decision-making. The controls also include the establishment of an organization structure that provides a well-defined division of responsibilities and accountability, the selection and training of qualified staff, and the communication of policies, management authorities and procedures throughout the organization. The systems of internal control are further supported by a compliance management system to monitor CPP Investment Board's compliance with legislation, policies, management authorities and procedures and by internal and external auditors who review and evaluate internal controls in accordance with their respective annual audit plans approved by the Audit Committee.

The Audit Committee assists the Board of Directors in discharging its responsibility to approve the Consolidated Financial Statements. The Audit Committee, consisting of independent directors, meets regularly with Management and the internal and external auditors to discuss the scope and findings of audits and other work they may be requested to perform from time to time, to review financial information and to discuss the adequacy of internal controls. The Audit Committee reviews the Consolidated Financial Statements and recommends them to the Board of Directors for approval.

CPP Investment Board's external auditor, Deloitte LLP, has conducted an independent audit of the Consolidated Financial Statements in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as it considers necessary to express an opinion in its Independent Auditor's Report. The external auditor has full and unrestricted access to management and the Audit Committee to discuss any findings related to the integrity and reliability of CPP Investment Board's financial reporting and the adequacy of internal control systems.

Mark G. Machin
President and Chief Executive Officer

Neil Beaumont
Senior Managing Director & Chief Financial and Risk Officer

Toronto, Ontario
May 8, 2019

INVESTMENT CERTIFICATE

The *Canada Pension Plan Investment Board Act* (CPPIB Act) requires that a certificate be signed by a director on behalf of the Board of Directors, stating that the investments of CPP Investment Board held during the year were in accordance with the CPPIB Act and CPP Investment Board's investment policies, standards and procedures. Accordingly, the Investment Certificate follows.

The investments of CPP Investment Board, held during the year ended March 31, 2019, were in accordance with the CPPIB Act and CPP Investment Board's investment policies, standards and procedures.

Mary Phibbs
Chair of the Audit Committee on behalf of the Board of Directors

Toronto, Ontario
May 8, 2019

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Canada Pension Plan Investment Board

Opinion

We have audited the consolidated financial statements of Canada Pension Plan Investment Board ("CPP Investment Board"), which comprise the consolidated balance sheet as at March 31, 2019, and the consolidated statements of comprehensive income, changes in net assets and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of CPP Investment Board as at March 31, 2019, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of CPP Investment Board in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the information, other than the financial statements and our auditor's report thereon, in the Annual Report.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We obtained the Annual Report prior to the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditor's report. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing CPP Investment Board's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate CPP Investment Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing CPP Investment Board's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it

exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of CPP Investment Board's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on CPP Investment Board's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause CPP Investment Board to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on Other Legal and Regulatory Requirements

Further, in our opinion, the transactions of CPP Investment Board that have come to our attention during our audit of the financial statements have, in all material respects, been in accordance with the *Canada Pension Plan Investment Board Act* ("CPPIB Act") and the by-laws, as the case may be.

Further, in our opinion, the record of investments kept by CPP Investment Board's management, pursuant to paragraph 39(1)(c) of the CPPIB Act fairly presents, in all material respects, the information required by the CPPIB Act.

Deloitte LLP

Chartered Professional Accountants
Licensed Public Accountants

Toronto, Ontario
May 8, 2019

CONSOLIDATED BALANCE SHEET

(CAD millions)	As at March 31, 2019	As at March 31, 2018
Assets		
Investments (note 2)	$ 494,567	$ 428,827
Pending trades receivable	4,692	2,613
Premises and equipment	387	348
Other assets	244	153
Total assets	499,890	431,941
Liabilities		
Investment liabilities (note 2)	102,864	72,641
Pending trades payable	4,401	2,477
Accounts payable and accrued liabilities	645	689
Total liabilities	107,910	75,807
Net assets	$ 391,980	$ 356,134
Net assets, represented by:		
Share capital	$ –	$ –
Accumulated net income from operations	247,624	215,614
Accumulated net transfers from the Canada Pension Plan	144,356	140,520
Net assets	$ 391,980	$ 356,134

The accompanying notes are an integral part of these Consolidated Financial Statements.

On behalf of the Board of Directors

Heather Munroe-Blum
Chairperson

Mary Phibbs
Chair of the Audit Committee

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(CAD millions)	For the years ended March 31, 2019	March 31, 2018
Investment income	$ 35,276	$ 39,931
Investment management fees	(1,586)	(1,738)
Transaction costs	(477)	(401)
Net investment income (note 5)	$ 33,213	$ 37,792
Personnel costs	802	712
General operating expenses	401	341
Operating expenses (note 12)	1,203	1,053
Net income from operations and comprehensive income	$ 32,010	$ 36,739

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN NET ASSETS

(CAD millions)	Number of shares outstanding	Share capital	Accumulated net transfers from the Canada Pension Plan	Accumulated net income from operations	Total net assets
As at April 1, 2017	10	$ –	$ 137,802	$ 178,875	$ 316,677
Total net income for the year		–	–	36,739	36,739
Canada Pension Plan transfers:					
Transfers from the Canada Pension Plan		–	36,425	–	36,425
Transfers to the Canada Pension Plan		–	(33,707)	–	(33,707)
Balance at March 31, 2018	10	$ –	$ 140,520	$ 215,614	$ 356,134
As at April 1, 2018	**10**	**$ –**	**$ 140,520**	**$ 215,614**	**$ 356,134**
Total net income for the year		**–**	**–**	**32,010**	**32,010**
Canada Pension Plan transfers:					
Transfers from the Canada Pension Plan		**–**	**38,581**	**–**	**38,581**
Transfers to the Canada Pension Plan		**–**	**(34,745)**	**–**	**(34,745)**
Balance at March 31, 2019	**10**	**$ –**	**$ 144,356**	**$ 247,624**	**$ 391,980**

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(CAD millions)	For the years ended March 31, 2019	March 31, 2018
Cash flows from operating activities		
Net income from operations	$ 32,010	$ 36,739
Adjustments for non-cash items:		
Amortization of premises and equipment	20	27
Realized and unrealized losses (gains) on debt financing liabilities	895	(152)
Adjustments for net changes in operating assets and liabilities:		
(Increase) in investments	(65,317)	(58,921)
(Increase) decrease in pending trades receivable	(2,079)	621
(Increase) in other assets	(86)	(7)
Increase in investment-related liabilities	23,473	8,078
Increase (decrease) in pending trades payable	1,924	(1,154)
(Decrease) Increase in accounts payable and accrued liabilities	(44)	7
Net cash flows (used in) operating activities	(9,204)	(14,762)
Cash flows from financing activities		
Transfers from the Canada Pension Plan	38,581	36,425
Transfers to the Canada Pension Plan	(34,745)	(33,707)
Proceeds from debt financing liabilities[1]	36,784	59,652
Repayments of debt financing liabilities[1]	(30,929)	(55,360)
Net cash flows provided by financing activities	9,691	7,010
Cash flows from investing activities		
Acquisitions of premises and equipment	(59)	(28)
Disposals of premises and equipment	–	1
Net cash flows (used in) investing activities	(59)	(27)
Net increase (decrease) in cash and cash equivalents	428	(7,779)
Effect of exchange rate changes on cash and cash equivalents	(18)	(1)
Cash and cash equivalents at the beginning of the year	8,296	16,076
Cash and cash equivalents at the end of the year	8,706	8,296
Cash and cash equivalents at the end of the year are comprised of:		
Cash held for operating purposes[2]	88	83
Cash and cash equivalents held for investment purposes[3]	8,618	8,213
Total	$ 8,706	$ 8,296

1 The comparative cash flow figures have been revised for the reclassification of net cash flow of $4,292 million from operating activities to financing activities related to proceeds from and repayments of debt financing liabilities.

2 Presented as a component of other assets on the Consolidated Balance Sheet.

3 Presented as a component of investments on the Consolidated Balance Sheet and money market securities on the Consolidated Schedule of Investment Portfolio.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED SCHEDULE OF INVESTMENT PORTFOLIO

The schedule below provides information on investments and investment liabilities held by CPP Investment Board and its investment holding subsidiaries. The nature of these investments and investment liabilities is further described in note 2.

(CAD millions)	As at March 31, 2019	As at March 31, 2018[1]
Equities		
Public equities	$ 141,189	$ 146,221
Private equities	96,659	75,737
Total equities	237,848	221,958
Fixed income		
Bonds	85,604	63,851
Other debt	27,325	22,183
Money market securities	9,829	8,213
Total fixed income	122,758	94,247
Absolute return strategies	25,512	21,027
Real assets		
Real estate	45,846	44,712
Infrastructure	33,131	27,450
Energy and resources	8,002	5,729
Power and renewables	5,075	2,949
Total real assets	92,054	80,840
Investment receivables		
Securities purchased under reverse repurchase agreements and securities borrowed	11,174	6,164
Derivative assets	3,192	1,918
Other	2,029	2,673
Total investment receivables	16,395	10,755
Total investments	$ 494,567	$ 428,827
Investment liabilities		
Securities sold under repurchase agreements and securities lent	(39,491)	(32,504)
Securities sold short	(29,027)	(13,574)
Debt financing liabilities	(30,861)	(24,056)
Derivative liabilities	(2,330)	(1,712)
Other	(1,155)	(795)
Total investment liabilities	(102,864)	(72,641)
Pending trades receivable	4,692	2,613
Pending trades payable	(4,401)	(2,477)
Net investments	$ 391,994	$ 356,322

1 Certain comparatives have been reclassified to conform to the current year's presentation.

The accompanying notes are an integral part of these Consolidated Financial Statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

04

Financial Statements and Notes

Management's Responsibility for Financial Reporting	**116**
Investment Certificate	**117**
Independent Auditor's Report	**118**
Corporate information	**125**

Note	Description	
1.	Summary of significant accounting policies	126
2.	Investments and investment liabilities	127
3.	Fair value measurement	130
4.	Derivatives	137
5.	Net investment income	139
6.	Segment information	140
7.	Risk management	142
8.	Market risk	143
9.	Credit risk	145
10.	Liquidity risk	146
11.	Financial instruments – rights of offset	148
12.	Operating expenses	149
13.	Collateral	149
14.	Commitments	150
15.	Related party transactions	150
16.	Guarantees	150
17.	Base CPP and additional CPP	151

CORPORATE INFORMATION

Canada Pension Plan Investment Board (CPP Investment Board) was established in December 1997 pursuant to the *Canada Pension Plan Investment Board Act* (CPPIB Act). CPP Investment Board is a federal Crown corporation, all of the shares of which are owned by Her Majesty the Queen in right of Canada. The issued and authorized share capital of CPP Investment Board is $100 divided into 10 shares with a par value of $10 each.

CPP Investment Board is responsible for assisting the Canada Pension Plan (CPP) in meeting its obligations to contributors and beneficiaries under the legislation *Canada Pension Plan* (CPP Act). It is responsible for managing amounts that are transferred to it under Section 108.1 of the CPP Act in the best interests of CPP beneficiaries and contributors. CPP Investment Board received its first funds for investing purposes from the CPP in March 1999. CPP Investment Board's assets are to be invested in accordance with the CPPIB Act, the regulations and the investment policies with a view to achieving a maximum rate of return without undue risk of loss, having regard to the factors that may affect the funding of the CPP and the ability of the CPP to meet its financial obligations on any given business day.

In December 2016, Royal Assent was given to Bill C-26 titled *An Act to Amend the Canada Pension Plan,* the *Canada Pension Plan Investment Board Act* and the *Income Tax Act*. These legislative amendments increase the amount of CPP contributions and the corresponding retirement pensions and other benefits that will be paid on CPP contributions made after 2018. The CPP Act now defines two separate parts of the CPP. The "base CPP" refers to the existing benefits and contributions. The "additional CPP" refers to the additional benefits and additional contributions that began in January 2019. The assets attributable to CPP's additional CPP account are accounted for separately from those of the base CPP account. Note 17 provides information on the net assets, net investments and net income of the base CPP account and additional CPP account. All references to "CPP" mean base CPP and additional CPP collectively.

CPP Investment Board is exempt from Part I tax under Paragraph 149(1) (d) of the *Income Tax Act* (Canada) on the basis that all of the shares of CPP Investment Board are owned by Her Majesty the Queen in right of Canada. Further, all of CPP Investment Board's wholly owned subsidiaries are exempt from Part I tax.

The Consolidated Financial Statements provide information on the net assets managed by CPP Investment Board and do not include the liabilities and other assets of the CPP.

CPP Investment Board's registered office is located at One Queen Street East, Toronto, Ontario, Canada.

The Consolidated Financial Statements were approved by the Board of Directors and authorized for issue on May 8, 2019.

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

AT A GLANCE

This note describes significant accounting policies that are relevant to the Consolidated Financial Statements as a whole. Where an accounting policy is specific to one financial statement element, the policy is described in the note to which it relates.

Use of Estimates, Judgments and Assumptions

The preparation of the Consolidated Financial Statements requires management to make estimates, judgments and assumptions that affect the amounts recognized for assets and liabilities, principally the valuation of financial instruments which are not actively traded. Uncertainty about these estimates, judgments and assumptions may result in outcomes that could require a material adjustment to the carrying amount of the assets or liabilities affected in the future.

1.1 Basis of presentation

These Consolidated Financial Statements present the financial position and the financial performance of CPP Investment Board in accordance with International Financial Reporting Standards (IFRS).

CPP Investment Board qualifies as an investment entity as it meets the following definition of an investment entity outlined in IFRS 10, *Consolidated Financial Statements* (IFRS 10):

- Obtains funds from one or more investors for the purpose of providing those investor(s) with investment management services. In the case of CPP Investment Board, we have one investor (more specifically, we invest amounts transferred from the CPP that are not required to pay current CPP benefits), but the funds are invested in the best interests of a wide group of individuals being the contributors and beneficiaries of the CPP.
- Commits to its investor(s) that its business purpose is to invest funds solely for returns from capital appreciation, investment income, or both.
- Measures and evaluates the performance of substantially all of its investments on a fair value basis.

No significant judgments or assumptions were made in determining that CPP Investment Board meets the definition of an investment entity as defined in IFRS 10.

Statement of compliance

The Consolidated Financial Statements of CPP Investment Board have been prepared in accordance with IFRS as issued by the International Accounting Standards Board and the requirements of the CPPIB Act and the regulations of CPP Investment Board.

1.2 Subsidiaries

CPP Investment Board is required to report the results of its operations in accordance with IFRS 10. As a consequence, the Consolidated Financial Statements represent the results of operations of CPP Investment Board and its wholly owned subsidiaries that were created to provide investment-related services to support its operations. Operating subsidiaries of this nature include those that provide investment advisory services or subsidiaries that were created to provide financing to CPP Investment Board.

Subsidiaries that are managed by CPP Investment Board to hold investments are referred to herein as investment holding subsidiaries. Such subsidiaries are not consolidated in these Consolidated Financial Statements but instead are measured and reported at fair value. Fair value for unconsolidated investment holding subsidiaries is based on the fair value of the underlying investments and investment liabilities held by the investment holding subsidiary together with its accumulated net income from operations less dividends paid. The determination of the fair value of the underlying investments and investment liabilities is based on the valuation techniques and related inputs described in note 2.

1.3 Financial instruments

Classification

CPP Investment Board classifies its financial assets and financial liabilities, in accordance with IFRS 9, *Financial Instruments*, as follows:

Financial assets

Financial assets are either classified at fair value through profit or loss (FVTPL) or at amortized cost. The classification depends on (a) the business model for managing the financial assets and (b) the cash flow characteristics of the financial assets. Financial assets are classified at FVTPL on the basis that they are part of a portfolio of investments which is managed to maximize returns without undue risk of loss and whose performance is evaluated on a fair value basis in accordance with investment strategies and risk management of the CPP Investment Board. Financial assets classified at FVTPL include investments in equity, fixed income, absolute return strategies, real assets, derivatives, securities purchased under reverse repurchase agreements and securities borrowed. Financial assets carried at amortized cost are pending trades receivable and other assets.

Financial liabilities

Financial liabilities are either classified at FVTPL or at amortized cost. A financial liability is classified as at FVTPL if it is classified as held for trading, it is a derivative, or it is designated as such on initial recognition.

Financial liabilities at FVTPL are derivative liabilities and securities sold short. Financial liabilities designated at FVTPL include debt financing liabilities, securities sold under repurchase agreements and securities lent and other investment liabilities. Financial liabilities at amortized cost include pending trades payable and accounts payable and accrued liabilities.

Recognition
CPP Investment Board recognizes a financial asset or a financial liability when, and only when, it becomes a party to the contractual provisions of the financial instrument. Investments, investment receivables, investment liabilities, pending trades receivable and pending trades payable are recorded on a trade date basis.

Derecognition
A financial asset is derecognized under the following situations: (a) when the contractual rights to receive the cash flows from the financial asset expire, (b) when CPP Investment Board has transferred the financial asset and substantially all the risks and rewards of the asset, or (c) in cases where CPP Investment Board has neither retained nor transferred substantially all risks and rewards of the asset, it no longer retains control over the asset.

CPP Investment Board derecognizes a financial liability when the obligation under the liability is discharged, cancelled or expires.

Initial measurement
Financial assets and financial liabilities are measured on initial recognition at fair value.

Subsequent measurement
After initial measurement, financial assets and financial liabilities continue to be measured at fair value or amortized cost. Subsequent changes in the fair value of those financial assets and financial liabilities classified at fair value are recorded as a net gain (loss) on investments and included in investment income. Interest income and dividend income from such financial instruments are also included in investment income.

1.4 Functional and presentation currency

CPP Investment Board's functional and presentation currency is the Canadian dollar, which is the currency of the primary economic environment in which it operates. CPP Investment Board's performance is evaluated and its liquidity is managed in Canadian dollars. Therefore, the Canadian dollar is considered to be the currency that most faithfully represents the economic effects of the underlying transactions, events and conditions.

1.5 Foreign currency translation

Transactions, including purchases and sales of investments, income and expenses, are translated at the rate of exchange prevailing on the date of the transaction. Investments and monetary assets and liabilities denominated in foreign currencies are translated at the functional currency exchange rate at each balance sheet date. Non-monetary items in a foreign currency are measured at historical cost using the exchange rates at the dates of the initial transactions.

Foreign currency transaction gains and losses on financial instruments classified at FVTPL are included in investment income in the Consolidated Statement of Comprehensive Income.

NOTE 2. INVESTMENTS AND INVESTMENT LIABILITIES

AT A GLANCE

All investments and investment liabilities are measured at fair value.

This note describes the types of investments and investment liabilities held by CPP Investment Board and its investment holding subsidiaries, and explains how management determines their fair value.

Accounting Policy
Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

CPP Investment Board manages the following types of investments and investment liabilities and determines fair value as described below.

2.1 Equities

Public equities
Public equities are made directly or through funds, including hedge funds.

Fair value for publicly traded equities, including equity short positions, is based on quoted market prices. Fair value for fund investments is generally based on the net asset value reported by the external administrators or managers of the funds.

Private equities
Private equities are generally made directly or through ownership in limited partnership funds.

Fair value for investments held directly is primarily determined using accepted industry valuation methods such as earnings multiples of comparable publicly traded companies or discounted cash flows. Significant inputs for these valuation methods include company-specific earnings before interest, taxes, depreciation and amortization (EBITDA), earnings multiples of comparable publicly traded companies, projected cash flows and discount rates using current market yields of instruments with similar characteristics. Recent market transactions, where available, are also used. In the case of investments held through a limited partnership fund, fair value is generally based on relevant information reported by the general partner using similar accepted industry valuation methods.

2.2 Fixed income

Bonds

Bonds include non-marketable and marketable bonds.

Fair value for non-marketable Canadian provincial government bonds is calculated using discounted cash flows based on current market yields of instruments with similar characteristics. In the case of marketable bonds, including bond short positions, fair value is based on quoted prices or calculated using discounted cash flows based on benchmark yield curves and credit spreads pertaining to the issuer.

Other debt

Other debt includes investments in direct private debt, asset-backed securities, distressed mortgage funds, private debt funds, hedge funds and investments in royalty-related income streams.

Fair value for direct investments in private debt and asset-backed securities is based on quoted market prices or broker quotes or recent market transactions, if available. Where the market price is not available, fair value is calculated using discounted cash flows based on significant inputs such as projected cash flows and discount rates using current market yields of instruments with similar characteristics.

Fair value for fund investments is generally based on the net asset value as reported by the external administrators or managers of the funds.

In the case of investments in royalty-related income streams, fair value is primarily determined using discounted cash flows based on projected cash flows and discount rates using current market yields of instruments with similar characteristics.

Money market securities

Money market securities include cash, term deposits, treasury bills, commercial paper and floating rate notes. Cash equivalents consist of short-term deposits with a maturity of 90 days or less.

Fair value is determined using cost, which, together with accrued interest income, approximates fair value due to the short-term or floating rate nature of these securities.

2.3 Absolute return strategies

Absolute return strategies include investments in hedge funds whose objective is to generate positive returns regardless of market conditions, that is, returns with a low correlation to broad market indices. The underlying securities of the funds could include, but are not limited to, equities, fixed income securities and derivatives.

Fair value for these fund investments is generally based on the net asset value as reported by the external administrators or managers of the funds.

2.4 Real assets

Real estate

CPP Investment Board obtains exposure to real estate through direct investments in privately held real estate and real estate funds. Private real estate investments are managed by investment managers primarily through co-ownership arrangements.

Fair value for private real estate investments is determined using discounted cash flows based on various factors such as net operating income, discount rate and terminal capitalization rate, or using net asset value provided by the investment manager.

Fair value for real estate funds is generally based on the net asset value reported by the external managers of the funds.

Infrastructure, energy and resources, and power and renewables

Infrastructure, energy and resources, and power and renewables investments are generally made directly, but can also occur through limited partnership funds.

The fair value of these investments is primarily determined using discounted cash flows based on significant inputs including projected cash flows and discount rates. Earnings multiples of comparable companies may also be used for determining the fair value of certain investments.

Fair value for investments held through limited partnership funds are generally based on the net asset value as reported by the external managers of the funds.

2.5 Securities purchased under reverse repurchase agreements and sold under repurchase agreements

Accounting Policy

Securities purchased under reverse repurchase agreements represent the purchase of securities with a simultaneous agreement to sell them back at a specified price at a specified future date and are accounted for as an investment receivable. These securities are not recognized on the Consolidated Balance Sheet. The fair value of securities to be resold under reverse repurchase agreements is monitored and additional collateral is obtained, when appropriate, to protect against credit exposure. In the event of counterparty default, CPP Investment Board has the right to liquidate the collateral held.

Securities sold under repurchase agreements are accounted for as collateralized borrowing because they represent the sale of securities with a simultaneous agreement to buy them back at a specified price at a specified future date. The securities sold continue to be recognized on the Consolidated Balance Sheet with any changes in fair value recorded as net gain (loss) on investments and included in investment income.

Interest earned on reverse repurchase agreements and interest incurred on repurchase agreements is included in investment income.

Reverse repurchase and repurchase agreements are carried at the amounts at which the securities were initially acquired or sold, which, together with accrued interest income or expense, approximates fair value due to the short-term nature of these agreements.

2.6 Securities borrowed and lent

Accounting Policy
Securities borrowing and lending agreements are transactions in which CPP Investment Board borrows securities from or lends securities to third parties.

Borrowed securities are not recognized on the Consolidated Balance Sheet. The lent securities remain on the Consolidated Balance Sheet as CPP Investment Board retains substantially all of the risks and rewards of ownership of the transferred securities.

Collateral received or pledged is generally in the form of cash, equities or fixed income securities. Cash collateral received is accounted for as an investment liability while equities and fixed income securities received as collateral are not recognized on the Consolidated Balance Sheet. Cash collateral pledged is accounted for as an investment receivable, while securities collateral pledged by CPP Investment Board in securities borrowing agreements remain on the Consolidated Balance Sheet.

2.7 Securities sold short

Securities sold short represent securities that are sold, but not owned, by CPP Investment Board. CPP Investment Board has an obligation to cover these short positions, which are accounted for as an investment liability based on the fair value of the securities sold. Collateral is pledged to the counterparty, as required. Interest and dividends accrued on securities sold short are included in investment income.

2.8 Debt financing liabilities

Debt financing liabilities consist of commercial paper payable and term debt. Commercial paper payable is recorded at the amount originally issued, which, together with accrued interest expense, approximates fair value due to the short-term nature of these liabilities. Fair value for term debt is based on quoted market prices.

2.9 Derivatives assets and liabilities

A derivative is a financial contract, the value of which is derived from the value of underlying assets, indices, interest rates, currency exchange rates or other market-based factors. Derivatives are transacted through regulated exchanges or negotiated in over-the-counter markets.

Fair value for exchange-traded derivatives, which includes futures, options and warrants, is based on quoted market prices. Fair value for over-the-counter derivatives, which includes forwards, swaps, options and warrants, is determined based on valuation techniques such as option pricing models, discounted cash flows and consensus pricing from independent brokers and/or third-party vendors. Inputs used in these valuation techniques can include, but are not limited to, spot prices, price volatilities, currency exchange rates, interest rate curves and credit spreads. In determining fair value, consideration is also given to the credit risk of the counterparty.

CPP Investment Board uses the types of derivative described below.

Futures and forwards
Futures are standardized contracts transacted on an exchange, whereas forwards are customized over-the-counter contracts negotiated between counterparties. Futures contracts may be cash-settled or require physical delivery of the underlying asset. Examples of futures and forwards are described below.

Equity futures are contractual obligations to purchase or sell a specified quantity of an equity index, a basket of stocks, or a single stock at a predetermined price and date in the future.

Foreign exchange forwards are contractual obligations negotiated between counterparties to either purchase or sell a specified amount of foreign currencies at a predetermined price and date in the future.

Interest rate futures and forwards, including bond futures, are contractual obligations to purchase or sell a specified amount of an interest rate-sensitive financial instrument(s) or index at a predetermined price and date in the future.

Commodity futures are contractual obligations to purchase or sell a specified quantity of a commodity, such as precious metals and energy-related products at a predetermined price and date in the future.

Swaps
Swaps are over-the-counter contracts between two parties to exchange a series of cash flows. Examples of swaps are described below.

Equity-based swaps include equity swaps, volatility swaps and variance swaps. Equity swaps are contracts where one counterparty agrees to pay or receive from the other, cash flows based on changes in the value of an equity index, a basket of stocks, or a single stock in exchange for a return based on a fixed or floating interest rate or the return on another instrument. Volatility and variance swaps are contracts where cash flows are exchanged based on the realized volatility or variance of an equity index, a basket of stocks, or a single stock compared to the fixed strike level specified in the contract, respectively.

Interest rate-related swaps include bond swaps, interest rate swaps and cross-currency interest rate swaps. Bond swaps are contracts in which counterparties exchange the return on a bond, or group of such instruments, for the return on a fixed or floating interest rate or the return on another instrument. Interest rate swaps are contracts where counterparties exchange cash flows based on different interest rates applied to a notional amount in a single currency, with no exchange of a notional amount. Cross-currency interest rate swaps involve the exchange of both interest and notional amounts in two different currencies.

Credit default swaps are contracts that provide credit protection against a specified credit event such as the default or bankruptcy of the underlying financial instrument (referenced asset). The purchaser (buyer) pays a premium to the writer (seller) in return for payment, which is contingent on a credit event affecting the referenced asset. Credit default swaps require the writer to compensate counterparties for the decline in value of the referenced asset as a result of the occurrence of a specified credit event. The notional amount represents the maximum amount payable to these counterparties under these written credit default swap contracts.

Options and warrants

Options are contractual agreements where the seller (writer) gives the purchaser the right, but not the obligation, to buy or sell a specified amount of an equity, currency, interest rate, credit, commodity or other financial instrument at or before a specified future date at a predetermined price. The purchaser pays a premium to the seller for this right. Options can be transacted in standardized amounts on regulated exchanges or customized in over-the-counter markets.

Call or put options may require the writer to sell or purchase the underlying asset at a fixed date or at any time within a fixed future period. Due to the nature of these contracts, CPP Investment Board cannot reasonably estimate the potential maximum amount of future payments.

Warrants are transacted both over-the-counter and through exchanges. Under a warrant, the issuer gives the purchaser the right, but not the obligation, to buy a specified quantity of stock of the issuer at or before a specified future date at a predetermined price.

NOTE 3. FAIR VALUE MEASUREMENT

AT A GLANCE

In an active market, fair value is best evidenced by an independent quoted market price. In the absence of an active market, valuation can be significantly more complex and often subjective, requiring judgment.

This note categorizes the fair values of investments and investment liabilities within the three levels of the fair value hierarchy. For investment valuations that require significant judgment, the note further provides the roll-forward of these investments during the year and the range of valuation techniques and inputs used.

Accounting Policy

The fair value of CPP Investment Board's investments and investment liabilities is categorized into the following fair value hierarchy based on the level of significant inputs used in the fair value measurement:

- Level 1 – Quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices); and
- Level 3 – Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Significant Estimate

Level 3 investments consist of instruments held at fair value that are not traded or quoted in active markets. Fair value is, therefore, determined using valuation techniques that use models with unobservable inputs whilst maximizing the use of inputs observed from markets. The resulting values are particularly judgmental. Refer to note 3.4 for the valuation techniques used to determine the fair value of Level 3 investments.

3.1 Fair value hierarchy

(CAD millions)	As at March 31, 2019 Level 1	Level 2	Level 3	Total
Investments				
Equities				
Public equities	$ 129,212	$ 11,769	$ 208	$ 141,189
Private equities	–	–	96,659	96,659
Total equities	129,212	11,769	96,867	237,848
Fixed income				
Bonds	49,912	35,692	–	85,604
Other debt	–	5,215	22,110	27,325
Money market securities	–	9,829	–	9,829
Total fixed income	49,912	50,736	22,110	122,758
Absolute return strategies	–	23,588	1,924	25,512
Real assets				
Real estate	–	–	45,846	45,846
Infrastructure	–	–	33,131	33,131
Energy and resources	–	–	8,002	8,002
Power and renewables	–	–	5,075	5,075
Total real assets	–	–	92,054	92,054
Investment receivables				
Securities purchased under reverse repurchase agreements and securities borrowed	–	11,174	–	11,174
Derivative assets	2	3,189	1	3,192
Other	–	1,962	67	2,029
Total investment receivables	2	16,325	68	16,395
Total investments	$ 179,126	$ 102,418	$ 213,023	$ 494,567
Investment liabilities				
Securities sold under repurchase agreements and securities lent	–	(39,491)	–	(39,491)
Securities sold short	(29,027)	–	–	(29,027)
Debt financing liabilities	(26,538)	(4,323)	–	(30,861)
Derivative liabilities	(48)	(2,282)	–	(2,330)
Other	–	(1,155)	–	(1,155)
Total investment liabilities	(55,613)	(47,251)	–	(102,864)
Pending trades receivable[1]	–	4,692	–	4,692
Pending trades payable[1]	–	(4,401)	–	(4,401)
Net investments	$ 123,513	$ 55,458	$ 213,023	$ 391,994

	As at March 31, 2018[2]			
(CAD millions)	Level 1	Level 2	Level 3	Total
Investments				
Equities				
Public equities	$ 136,855	$ 9,093	$ 273	$ 146,221
Private equities	–	1,174	74,563	75,737
Total equities	136,855	10,267	74,836	221,958
Fixed income				
Bonds	36,347	27,504	–	63,851
Other debt	–	5,557	16,626	22,183
Money market securities	–	8,213	–	8,213
Total fixed income	36,347	41,274	16,626	94,247
Absolute return strategies	–	19,442	1,585	21,027
Real assets				
Real estate	–	–	44,712	44,712
Infrastructure	–	–	27,450	27,450
Energy and resources	–	–	5,729	5,729
Power and renewables	–	–	2,949	2,949
Total real assets	–	–	80,840	80,840
Investment receivables				
Securities purchased under reverse repurchase agreements and securities borrowed	–	6,164	–	6,164
Derivative assets	–	1,918	–	1,918
Other	–	2,667	6	2,673
Total investment receivables	–	10,749	6	10,755
Total investments	$ 173,202	$ 81,732	$ 173,893	$ 428,827
Investment liabilities				
Securities sold under repurchase agreements and securities lent	–	(32,504)	–	(32,504)
Securities sold short	(13,574)	–	–	(13,574)
Debt financing liabilities	(17,802)	(6,254)	–	(24,056)
Derivative liabilities	(11)	(1,701)	–	(1,712)
Other	–	(795)	–	(795)
Total investment liabilities	(31,387)	(41,254)	–	(72,641)
Pending trades receivable[1]	–	2,613	–	2,613
Pending trades payable[1]	–	(2,477)	–	(2,477)
Net investments	$ 141,815	$ 40,614	$ 173,893	$ 356,322

1 Pending trades receivable and payable are measured at amortized cost, which is a reasonable approximation of fair value.
2 Certain comparatives have been reclassified to conform to the current year's presentation.

3.2 Transfers between Level 1 and Level 2

During the year ended March 31, 2019, there were $11 million of transfers from Level 1 to Level 2 (March 31, 2018 – $137 million) and $338 million of transfers from Level 2 to Level 1 (March 31, 2018 – $13 million).

Transfers between Level 1 and Level 2 depend on the availability of quoted market prices in active markets and valuations using inputs other than quoted prices that are observable. These transfers have been recognized at the end-of-year values.

3.3 Level 3 reconciliation

The following presents the reconciliations for investments included in Level 3 of the fair value hierarchy:

Reconciliation of changes in fair value for Level 3 investments

	For the year ended March 31, 2019							
(CAD millions)	Fair value as at April 1, 2018	Gain (loss) included in investment income	Purchases	Sales[1]	Transfers into Level 3[2]	Transfers out of Level 3[2]	Fair value as at March 31, 2019	Change in unrealized gains (losses) on investments still held at March 31, 2019[3,4]
Investments								
Equities								
Public equities	$ 273	$ 20	$ –	$ (85)	$ –	$ –	$ 208	$ 15
Private equities	74,563	12,712	22,191	(11,816)	1	(992)	96,659	6,488
Total equities	74,836	12,732	22,191	(11,901)	1	(992)	96,867	6,503
Fixed income								
Other debt	16,626	(162)	12,851	(6,911)	246	(540)	22,110	115
Absolute return strategies	1,585	68	550	(279)	–	–	1,924	57
Real assets								
Real estate	44,712	1,705	2,868	(3,439)	–	–	45,846	1,524
Infrastructure	27,450	3,257	2,952	(528)	–	–	33,131	3,301
Energy and resources	5,729	49	2,829	(605)	–	–	8,002	28
Power and renewables	2,949	8	2,387	(269)	–	–	5,075	9
Total real assets	80,840	5,019	11,036	(4,841)	–	–	92,054	4,862
Investment receivable								
Derivative assets	–	2	–	(1)	–	–	1	1
Other	6	(32)	93	–	–	–	67	(32)
Total investment receivables	6	(30)	93	(1)	–	–	68	(31)
Total	$ 173,893	$ 17,627	$ 46,721	$ (23,933)	$ 247	$ (1,532)	$213,023	$ 11,506

	For the year ended March 31, 2018[5]							
(CAD millions)	Fair value as at April 1, 2017	Gain (loss) included in investment income	Purchases	Sales[1]	Transfers into Level 3[2]	Transfers out of Level 3[2]	Fair value as at March 31, 2018	Change in unrealized gains (losses) on investments still held at March 31, 2018[3,4]
Investments								
Equities								
Public equities	$ 229	$ 8	$ 66	$ (36)	$ 6	$ –	$ 273	$ 4
Private equities	59,889	10,647	18,940	(13,628)	11	(1,296)	74,563	4,380
Total equities	60,118	10,655	19,006	(13,664)	17	(1,296)	74,836	4,384
Fixed income								
Other debt	15,728	131	8,329	(7,430)	–	(132)	16,626	–
Absolute return strategies	1,536	45	392	(388)	–	–	1,585	(84)
Real assets								
Real estate	38,732	2,864	5,877	(2,761)	–	–	44,712	2,328
Infrastructure	23,467	2,613	1,546	(176)	–	–	27,450	2,676
Energy and resources	3,688	116	1,930	(5)	–	–	5,729	117
Power and renewables	4,432	(865)	–	(618)	–	–	2,949	(638)
Total real assets	70,319	4,728	9,353	(3,560)	–	–	80,840	4,483
Investment receivables								
Derivative assets	1	(1)	–	–	–	–	–	–
Other	–	–	6	–	–	–	6	–
Total investment receivables	1	(1)	6	–	–	–	6	–
Total	$147,702	$ 15,558	$ 37,086	$ (25,042)	$ 17	$ (1,428)	$173,893	$ 8,783

1 Includes return of capital.

2 Transfers into and out of Level 3 are deemed to have occurred at the end of year values.

3 Includes the entire change in fair value for the year for those investments that were transferred into Level 3 during the year, and excludes the entire change in fair value for the year for those investments that were transferred out of Level 3 during the year.

4 Included in investment income.

5 Certain comparatives have been reclassified to conform to the current year's presentation.

During the years ended March 31, 2019 and March 31, 2018, transfers into and out of Level 3 were primarily due to changes in the availability of market observable inputs used to determine fair value.

3.4 Level 3 – Significant unobservable inputs

The following presents fair values of the investments held by CPP Investment Board and its investment holding subsidiaries categorized within Level 3 of the fair value hierarchy, valuation techniques used to determine their fair values, ranges and weighted averages of unobservable inputs:

	As at March 31, 2019				
(CAD millions)	Fair value	Primary valuation techniques used[1,2]	Significant unobservable inputs	Range of input values[3]	Weighted average[3]
Public equities					
Fund investments	$ 208	Net asset value provided by investment manager	–	–	–
Private equities					
Direct	38,106	Earnings multiples of comparable companies	EBITDA multiple	6.1X–16.9X	13.0X
		Discounted cash flow	Discount rate	11.6%–13.0%	12.6%
	9,340	Value provided by investment manager	–	–	–
Fund investments	49,213	Net asset value provided by investment manager	–	–	–
Other debt					
Direct private debt	10,534	Discounted cash flow	Discount rate	6.9%–29.4%	11.5%
	2,191	Value provided by investment manager	–	–	–
Direct private real estate debt	5,084	Discounted cash flow	Discount rate	4.5%–11.0%	6.7%
Asset-backed securities	2,010	Comparable pricing	Price	97.7%–103.7%	99.5%
Fund investments	2,291	Net asset value provided by investment manager	–	–	–
Absolute return strategies					
Fund investments	1,924	Net asset value provided by investment manager	–	–	–
Real estate					
Direct	17,862	Discounted cash flow	Discount rate	5.0%–14.3%	6.7%
			Terminal capitalization rate	3.7%–10.5%	5.5%
	25,353	Net asset value provided by investment manager	–	–	–
Fund investments	2,631	Net asset value provided by investment manager	–	–	–
Infrastructure					
Direct	33,080	Discounted cash flow	Discount rate	7.0%–11.9%	8.7%
Fund investments	51	Net asset value provided by investment manager	–	–	–
Energy and Resources					
Direct	8,002	Discounted cash flow	Discount rate	9.0%–15.0%	11.0%
Power and Renewables					
Direct	5,075	Discounted cash flow	Discount rate	7.9%–14.4%	10.4%
Investment receivables					
Derivative assets	1	Option model	Market volatility	30%	30%
Other	67	Discounted cash flow	Discount rate	9.2%–10.4%	10.1%
Total	$ 213,023				

1 In certain cases, external valuations are prepared by a third party and hence, valuation information is not available.

2 May include certain recently acquired investments held at cost, which approximates fair value.

3 The range of input values represents the highest and lowest inputs used to value the investments in a particular asset class. The weighted average of the input values is calculated based on the relative fair values of the investments within the asset class. The diversity of investments reported within each asset class, such as the geographic location and industry sector of the investments, may result in certain ranges of inputs being wide and unevenly distributed across the range.

4 Certain comparatives have been reclassified to conform to the current year's presentation.

	As at March 31, 2018[4]				
(CAD millions)	Fair value	Primary valuation techniques used[1,2]	Significant unobservable inputs	Range of input values[3]	Weighted average[3]
Public equities					
Fund investments	$ 273	Net asset value provided by investment manager	–	–	–
Private equities					
Direct	25,896	Earnings multiples of comparable companies	EBITDA multiple	8.5X–15.9X	12.6X
		Discounted cash flow	Discount rate	12.0%–12.9%	12.1%
	6,578	Value provided by investment manager	–	–	–
Fund investments	42,089	Net asset value provided by investment manager	–	–	–
Other debt					
Direct private debt	10,696	Discounted cash flow	Discount rate	5.7%–29.6%	12.1%
Direct private real estate debt	3,581	Discounted cash flow	Discount rate	4.7%–10.1%	6.6%
Asset–backed securities	3	Valuation model by third-party pricing vendor	–	–	–
Fund investments	2,346	Net asset value provided by investment manager	–	–	–
Absolute return strategies					
Fund investments	1,585	Net asset value provided by investment manager	–	–	–
Real estate					
Direct	21,318	Discounted cash flow	Discount rate	5.0%–14.0%	6.3%
			Terminal capitalization rate	3.5%–9.5%	5.2%
	20,071	Net asset value provided by investment manager	–	–	–
Fund investments	3,323	Net asset value provided by investment manager	–	–	–
Infrastructure					
Direct	27,401	Discounted cash flow	Discount rate	7.1%–15.3%	9.6%
Fund investments	49	Net asset value provided by investment manager	–	–	–
Energy and Resources					
Direct	5,729	Discounted cash flow	Discount rate	10.0%–13.6%	11.9%
Power and Renewables					
Direct	2,949	Discounted cash flow	Discount rate	10.0%–11.0%	10.5%
Investment receivables					
Other	6	Value provided by investment manager	–	–	–
Total	$ 173,893				

1 In certain cases, external valuations are prepared by a third party and hence, valuation information is not available.

2 May include certain recently acquired investments held at cost, which approximates fair value.

3 The range of input values represents the highest and lowest inputs used to value the investments in a particular asset class. The weighted average of the input values is calculated based on the relative fair values of the investments within the asset class. The diversity of investments reported within each asset class, such as the geographic location and industry sector of the investments, may result in certain ranges of inputs being wide and unevenly distributed across the range.

4 Certain comparatives have been reclassified to conform to the current year's presentation.

3.5 Sensitivity analysis of valuations using unobservable inputs

Significant changes in any of the above unobservable inputs would result in a significantly higher or lower fair value measurement. The interrelationship of significant unobservable inputs and fair value measurement for the most significant key inputs identified in the table above is as follows:

- An increase (decrease) in the EBITDA multiple will result in a higher (lower) fair value.
- An increase (decrease) in the discount rate and terminal capitalization rate will result in a lower (higher) fair value.

The fair value of these direct investments classified within Level 3 of the fair value hierarchy above are based on accepted industry valuation methods that may include the use of estimates made by management, appraisers or both where significant judgment is required. By using valuation methods based on reasonable alternative assumptions, different fair values could result. With all other variables held constant the use of reasonable alternative assumptions would result in a decrease of $7,900 million (March 31, 2018 – $5,200 million) or increase of $5,600 million (March 31, 2018 – $6,000 million) in net assets. This sensitivity analysis is subject to the exercise of judgment and excludes investments where fair values are provided by investment managers as the underlying assumptions used are not available to CPP Investment Board.

NOTE 4. DERIVATIVES

AT A GLANCE

CPP Investment Board enters into a variety of derivatives to manage its exposure to currency exchange, credit, interest and other market risks, and to adjust the exposure in its assets and asset classes.

The fair values, notional amounts and contractual maturities of all derivative financial instruments are set out below. Through these breakdowns, information is provided regarding the extent to which different types of derivatives are used.

4.1 Fair value of derivatives

Derivatives generate positive or negative value, as the value of underlying assets, indices, interest rates, currency exchange rates or other market-based factors change such that the previously contracted terms of the derivative transactions have become more or less favourable than what can be negotiated under current market conditions for contracts with the same terms and remaining period to expiry.

The derivative-related market risk is a component of the total portfolio market risk, which is managed through the Risk/Return Accountability Framework described in note 7.

The maximum exposure to credit risk is represented by the positive fair value of the derivative and is normally a small fraction of the contract's notional amount. Negotiated over-the-counter derivatives generally present greater credit exposure than exchange-traded contracts. Credit risk on exchange-traded or centrally cleared contracts is limited because these transactions are either executed on regulated exchanges, or settled through well-capitalized clearing houses that assume the obligation of the writer of a contract and guarantees their performance. The fair value of derivative contracts is as follows:

	As at March 31, 2019		As at March 31, 2018	
(CAD millions)	Positive fair value	Negative fair value	Positive fair value	Negative fair value
Equity contracts				
Futures	$ –	$ –	$ –	$ –
Swaps	2,164	(1,596)	1,326	(967)
Options:				
Over-the-counter – purchased	1	–	–	–
Over-the-counter – written	–	(41)	–	(12)
Warrants	1	–	–	–
Total equity contracts	2,166	(1,637)	1,326	(979)
Foreign exchange contracts				
Forwards	88	(135)	185	(273)
Options:				
Over-the-counter – purchased	1	–	–	–
Over-the-counter – written	–	(12)	–	(2)
Total foreign exchange contracts	89	(147)	185	(275)
Interest rate contracts				
Futures	–	–	–	–
Forwards	–	–	–	–
Swaps	692	(206)	225	(271)
Options:				
Exchange-traded – purchased	2	–	–	–
Exchange-traded – written	–	(1)	–	–
Over-the-counter – purchased	1	–	–	–
Over-the-counter – written	–	(46)	–	–
Total interest rate contracts	695	(253)	225	(271)
Credit contracts				
Purchased credit default swaps	7	(229)	2	(174)
Written credit default swaps	235	(8)	180	(2)
Options:				
Over-the-counter – written	–	(9)	–	–
Total credit contracts	242	(246)	182	(176)
Commodity contracts				
Futures	–	–	–	–
Options:				
Exchange-traded – written	–	(47)	–	(11)
Total commodity contracts	–	(47)	–	(11)
Total	$ 3,192	$ (2,330)	$ 1,918	$ (1,712)

4.2 Notional amounts of derivatives by terms to maturity

Notional amounts of derivatives represent the contractual amounts to which a rate or price is applied for computing the cash flows to be exchanged. The notional amounts are used to determine the gains/losses and fair value of the contracts. They are not recorded as assets or liabilities on the Consolidated Balance Sheet. Notional amounts do not necessarily represent the amount of potential market risk or credit risk arising from derivatives. The terms to maturity of the notional amounts for derivatives are as follows:

	Terms to maturity					
					As at March 31, 2019	As at March 31, 2018
(CAD millions)	Within 1 year	1 to 5 years	6 to 10 years	Over 10 years	Total	Total
Equity contracts						
Futures	$ 6,386	$ –	$ –	$ –	$ 6,386	$ 532
Swaps	104,749	3,618	–	–	108,367	89,708
Options:						
Over-the-counter – purchased	1	–	–	–	1	–
Over-the-counter – written	1,918	–	–	–	1,918	721
Warrants	–	3	23	–	26	10
Total equity contracts	113,054	3,621	23	–	116,698	90,971
Foreign exchange contracts						
Forwards	16,894	75	–	–	16,969	46,689
Options:						
Over-the-counter – purchased	375	–	–	–	375	–
Over-the-counter – written	4,282	–	–	–	4,282	849
Total foreign exchange contracts	21,551	75	–	–	21,626	47,538
Interest rate contracts						
Futures	4,110	–	–	–	4,110	6,571
Forwards	2,707	–	–	–	2,707	101
Swaps	48,987	24,379	12,422	7,641	93,429	34,645
Options:						
Exchange-traded – purchased	26,719	–	–	–	26,719	–
Exchange-traded – written	26,719	–	–	–	26,719	–
Over-the-counter – purchased	675	–	–	–	675	–
Over-the-counter – written	4,809	–	–	–	4,809	–
Total interest rate contracts	114,726	24,379	12,422	7,641	159,168	41,317
Credit contracts						
Purchased credit default swaps	1,986	10,376	1,410	–	13,772	7,276
Written credit default swaps	1,970	11,681	1,678	8	15,337	7,908
Options:						
Over-the-counter – written	4,676	–	–	–	4,676	–
Total credit contracts	8,632	22,057	3,088	8	33,785	15,184
Commodity contracts						
Futures	3,408	–	–	–	3,408	330
Options:						
Exchange-traded – written	1,847	–	–	–	1,847	538
Total commodity contracts	5,255	–	–	–	5,255	868
Total	$ 263,218	$ 50,132	$ 15,533	$ 7,649	$ 336,532	$ 195,878

NOTE 5. NET INVESTMENT INCOME

AT A GLANCE

Components of net investment income are included below to provide additional information on the nature of the income.

Investment income on investments made through investment holding subsidiaries and not directly held by CPP Investment Board legal entity, are presented as unrealized gains or losses under IFRS 10 in note 5.1. Further details on such investments are provided in note 5.2.

Accounting Policy
The accounting policies related to categories of income and expenses are described below.

Income from investments includes realized gains and losses from investments, changes in unrealized gains and losses on investments, dividend income and interest income. Dividend income is recognized on the ex-dividend date, which is when CPP Investment Board's right to receive the dividend has been established. Interest income is recognized as earned.

Transaction costs are incremental costs that are directly attributable to the acquisition or disposal of an investment. Transaction costs are expensed as incurred and included in net investment income.

Investment management fees, which include hedge fund performance fees, are paid to investment managers for externally managed investments. Investment management fees are expensed as incurred and included in net investment income.

5.1 Net investment income by nature

(CAD millions)	For the years ended March 31, 2019	March 31, 2018
Interest, dividends, and other investment income[1]	$ 20,990	$ 6,323
Realized gains on private equities and real assets[2]	49	78
Unrealized gains on private equities and real assets[2]	3,651	1,005
Unrealized gains on investment holding subsidiaries[2] (note 5.2)	3,291	17,338
Realized and unrealized gains on public and other investments[2,3]	7,295	15,187
Total investment income	35,276	39,931
Investment management fees[4]	(1,586)	(1,738)
Transaction costs[5]	(477)	(401)
Net investment income	$ 33,213	$ 37,792

1 Net of interest expense on debt financing liabilities of $507 million (March 31, 2018 – $290 million).
2 Includes foreign currency gains or losses.
3 Consists of investment income from public equities, fixed income, absolute return strategies, derivatives and other.
4 Includes investment management fees of $1,140 million (March 31, 2018 – $1,101 million) incurred by investment holding subsidiaries.
5 Includes transaction costs of $156 million (March 31, 2018 – $141 million) incurred by investment holding subsidiaries.

5.2 Supplemental information on investment income

The unrealized gains generated from investment holding subsidiaries are a composite of the following income and expenses:

	For the years ended	
(CAD millions)	**March 31, 2019**	March 31, 2018[3]
Interest, dividends, and other investment income	**$ 4,308**	$ 3,119
Realized gains on private equities and real assets[1]	**6,400**	8,870
Unrealized gains on private equities and real assets[1]	**7,469**	5,945
Realized and unrealized gains on public and other investments[1,2]	**1,060**	1,252
Dividends paid to CPP Investment Board	**(15,946)**	(1,848)
Investment income from investment holding subsidiaries	**$ 3,291**	$ 17,338

1 Includes foreign currency gains or losses.
2 Consists of investment income from public equities, fixed income, absolute return strategies, derivatives and other.
3 Certain comparatives have been reclassified to conform to the current year's presentation.

NOTE 6. SEGMENT INFORMATION

6.1 Investment segments

CPP Investment Board's purpose is to manage amounts transferred to it under Section 108.1 of the *CPP Act* in the best interests of CPP beneficiaries and contributors. This requires investing in assets with a view to achieving a maximum rate of return without undue risk of loss. During the first quarter, CPP Investment Board made executive management and organizational changes.

This resulted in the reorganization of the previous five investment departments into six investment departments as described below. Comparative numbers have been revised to reflect this change.

- Total Portfolio Management – ensures the investing activities of the organization collectively produce a total portfolio that maximizes returns without taking undue risk. Total Portfolio Management also directs the Balancing Portfolio (the remaining portion of the CPP Investment Portfolios after excluding the assets of all active programs managed by the other investment departments) to achieve overall desired investment exposures.
- Capital Markets and Factor Investing – invests assets globally in public equities, fixed income securities, currencies, commodities and derivatives, and engages investment managers and co-investments to invest in public market securities. Capital Markets and Factor Investing is also responsible for managing CPP Investment Board's liquidity needs.
- Active Equities – invests globally in public and soon-to-be public companies as well as securities focused in emerging markets or long-term global changes, which can include earlier stage private companies. Active Equities also works with departments across the organization to ensure that environmental, social and governance risks and opportunities are incorporated into investment decision-making and asset management activities.
- Credit Investments – responsible for public and private credit investments globally. Credit Investments invests across the entire credit structure, including term loans, high-yield bonds, mezzanine lending, structured products and other credit instruments for borrowers in all sectors.
- Private Equity – responsible for private equity investments globally including funds, secondaries and direct private equity investments.
- Real Assets – responsible for investments in real estate, infrastructure, energy and resources, and power and renewables, which are typically long-term, tangible assets with steady income streams.

6.1.1 Net income from operations by investment segment

	For the year ended March 31, 2019						
(CAD millions)	Total Portfolio Management	Capital Markets and Factor Investing	Active Equities	Credit Investments	Private Equity	Real Assets	Total
Investment income	$ 10,379	$ 143	$ 1,323	$ 3,161	$ 12,853	$ 7,417	$ 35,276
Expenses[1]	(297)	(980)	(261)	(185)	(849)	(694)	(3,266)
Net income (loss) from operations	**$ 10,082**	**$ (837)**	**$ 1,062**	**$ 2,976**	**$ 12,004**	**$ 6,723**	**$ 32,010**

	For the year ended March 31, 2018						
(CAD millions)	Total Portfolio Management	Capital Markets and Factor Investing	Active Equities	Credit Investments	Private Equity	Real Assets	Total
Investment income	$ 16,730	$ 2,112	$ 1,855	$ 2,157	$ 10,136	$ 6,941	$ 39,931
Expenses[1]	(310)	(1,240)	(210)	(138)	(811)	(483)	(3,192)
Net income from operations	$ 16,420	$ 872	$ 1,645	$ 2,019	$ 9,325	$ 6,458	$ 36,739

1 Includes investment management fees, transaction costs and operating expenses.

6.1.2 Net assets (liabilities) by investment segment

	Net assets (liabilities)						
(CAD millions)	Total Portfolio Management[1]	Capital Markets and Factor Investing	Active Equities	Credit Investments	Private Equity	Real Assets	Total
As at:							
March 31, 2019	**$172,599**	**$ (31)**	**$ 1,047**	**$ 36,579**	**$ 87,696**	**$ 94,090**	**$391,980**
March 31, 2018	176,422	410	1,117	25,050	69,345	83,790	356,134

1 Net assets attributable to Total Portfolio Management include debt financing liabilities of $30,861 million (March 31, 2018 – $24,056 million) and net corporate liabilities of $14 million (March 31, 2018 – net corporate liabilities of $188 million).

6.2 Geographic information

Net investments are presented in the table below based on the region to which they have primary economic exposure:

	Net investments[1]						
(CAD millions)	Canada	U.S.	Asia	Europe (excluding U.K.)	U.K.	Other	Total
As at:							
March 31, 2019	**$ 60,897**	**$131,196**	**$ 90,060**	**$ 53,959**	**$ 22,078**	**$ 33,804**	**$391,994**
March 31, 2018	53,977	135,058	72,512	47,068	19,844	27,863	356,322

1 Includes debt financing liabilities of $3,828 million, $20,803 million, $6,230 million (March 31, 2018 – $3,466 million, $15,807 million, $4,783 million), based on the currencies of the issuances, in Canada, the U.S., and Europe (excluding the U.K.), respectively.

NOTE 7. RISK MANAGEMENT

AT A GLANCE

The base CPP Investment Portfolio and additional CPP Investment Portfolio (collectively CPP Investment Portfolios) are exposed to a variety of financial risks which is managed through a total portfolio risk approach. The underlying risk categories, exposures, and the related risk management techniques are described in the following notes:

- Note 8 – Market risk
- Note 9 – Credit risk
- Note 10 – Liquidity risk

Any references to the investment activities and risk exposures of CPP Investment Board also include those of its unconsolidated investment holding subsidiaries.

7.1 Introduction

CPP Investment Board employs the Risk/Return Accountability Framework, which establishes accountability of the Board of Directors, the various committees and the investment departments to manage investment-related risks. CPP Investment Board manages and mitigates financial risks through the Risk Policy approved by the Board of Directors at least once every fiscal year. This policy contains risk limits and risk management provisions that govern investment decisions. It has been designed to achieve the mandate of CPP Investment Board.

Upper and Lower Absolute Risk Limits and the Absolute Risk Operating Range (AROR) are included within the Risk Policy, and these govern the amount of total investment risk that CPP Investment Board can take in the CPP Investment Portfolios. CPP Investment Board monitors potential investment losses in CPP Investment Portfolios daily and reports to the Board of Directors on at least a quarterly basis. The target equity content for the base CPP Investment Portfolio and additional CPP Investment Portfolio is assessed using an equity/debt risk equivalence ratio for each of the Investment Portfolios that must reside within Board approved Absolute Risk Limits.

7.1.1 Independent risk oversight

The Risk Group within CPP Investment Board reports to the Chief Financial and Risk Officer. The function is responsible for assessing, monitoring and ensuring Management of the CPP Investment Portfolios is consistent with the risk appetite on limits established. This oversight is exercised through independent control and support functions.

Investment departments are accountable for managing risk within prescribed limits.

7.1.2 Investment risk measures

A suite of measures are used to estimate the risk of loss from small, moderate and significant market moves over various time horizons. In addition to industry standard market and credit risk models, CPPIB uses proprietary models to assess potential losses to the portfolio over longer time horizons. Furthermore, a number of trading desk-specific risk measures are tracked that are related to the specific nature of the strategy. For example, factor risks for real estate and public market equity portfolios.

7.1.3 Stress testing

To complement the suite of potential loss measures used to monitor the CPP Investment Portfolios, CPP Investment Board further examines the potential impact of exceptional but plausible adverse market events. Stress testing considers the effect of various hypothetical and historical based scenarios using a bottom-up approach that considers the effect of market shocks across the entire portfolio. Generally, the forecasted time line considered is one year in order to appropriately include the effect of private asset valuations, as well as the initial public market shocks. These assessments are reported to both Senior Management and the Board.

7.1.4 Model review and validation

The model validation function within the Risk Group validates strategically important portfolio construction and risk management models as well as valuation methodologies within our main investment systems.

7.2 Total portfolio risk

CPP Investment Board uses a simulation methodology to derive a distribution of potential portfolio outcomes at a future point in time. These distributions are used to estimate a variety of risk measures to monitor the absolute risk for each of the CPP Investment Portfolios across various time periods. The primary risk governance measure within the Risk/Return Accountability Framework is expressed using an equity/debt risk equivalency ratio. It is the proportion of equity versus debt in a simple two-asset-portfolio (Global Equity and Canadian Government Bonds) that would give the same measured absolute risk as that of the base CPP Investment Portfolio and additional CPP Investment Portfolio, separately. Absolute Risk for this purpose is defined as the Conditional Value at Risk (CVaR), after inflation, at the 90th percentile expressed over a five-year horizon and encompasses both market and credit risks.

The Absolute Risk measure, CVaR, is based on the average of the worst ten percent outcomes in the simulated return distribution over a five-year period. It captures the impact of extreme market events that would lead to large losses in the base CPP Investment Portfolio and additional CPP Investment Portfolio, separately.

The methodology employed to calculate CVaR assumes that historical market data is a sound basis for estimating potential future losses but it allows for the incorporation of forward-looking return expectations. If future market conditions and interrelationships of equity markets, interest rates, foreign exchange rates and other market prices differ significantly from those of the past, then the actual losses could materially differ from those estimated. To ensure a variety of business cycles and market conditions are captured within the risk model, a long historical data period (1971 – current) is used in simulating the distribution of potential outcomes. The CVaR measure provides an estimate of the average value in this distribution of potential losses that each Investment Portfolio could experience. It is not an estimate of the worst-case scenario.

As a result of different risk characteristics and the risk appetite of the base CPP and the additional CPP, the Absolute Risk of the two accounts is measured separately using the same methodology. As at March 31, 2019, the CVaR of the base CPP Investment Portfolio was $71,880 million (March 31, 2018 – $70,328 million) with an associated equity/debt risk equivalency ratio of 87% (March 31, 2018 – 86%). The CVaR of the additional CPP Investment Portfolio was $39 million with an associated equity/debt risk equivalency ratio of 51%. The CVaR estimate is strongly influenced by equity returns realized throughout the historical data period used within the risk model. As forward-looking expectations are further considered within the modelling process the CVaR value may move materially as the mean return estimates change through time. Changes in equity/debt risk equivalency ratio will also occur, but likely smaller in magnitude.

NOTE 8. MARKET RISK

Market risk is the risk that the fair value or future cash flows of an investment or investment liability will fluctuate because of changes in market prices and rates.

CPP Investment Board uses a tiered structure of limits to govern market risk by controlling the size of risk exposures. Board limits are based upon the equity/debt risk equivalency ratios of the two CPP Investment Portfolios. The next level of risk limits are set at management level and ensure that none of the individual investment departments' market risks grow faster than originally anticipated in the annual planning period. These measures are supplemented with drawdown triggers that highlight to Senior Management any individual strategies that are having losses outsized to their estimated investment risk levels. The lowest set of limits are investment program specific and are tailored to the way that the strategies are managed. Examples include DV01 that measures the possible loss/gain in the investment strategy as a result of 1 basis point increase/decrease in interest rate yield curves and divergence limits that track the portfolios' risks against their respective benchmarks.

Investment departments are expected to stay within their limits but are allowed to request increases to management level limits from the relevant Senior Management Team (SMT) member or Investment Planning Committee (IPC) dependent upon established escalation guidelines. Any limit excesses are reported to the SMT member and/or the IPC. These groups will then make an assessment as to whether to increase the limit or reduce the position.

Market risk includes equity risk, interest rate risk, credit spread risk and currency risk.

8.1 Equity

CPP Investment Portfolios invest in both publicly traded and private equities. Equity risk, which is the risk that the fair value or future cash flows will fluctuate because of changes in equity prices, is a significant source of risk of the two Investment Portfolios.

After taking into account derivative positions and with all other variables held constant, a 1% decrease/increase in the S&P 500 Index would result in a loss/profit of $1,021 million (March 31, 2018 – $1,200 million) on public equity investments. This calculation assumes that equities other than the S&P 500 Index would move in accordance with their historical behaviour conditional on a 1% decrease/increase in the S&P 500 Index.

8.2 Interest rate

Interest rate risk is the risk that the fair value or future cash flows of an investment or investment-related liability will fluctuate because of changes in market interest rates. The CPP Investment Portfolios are exposed to interest rate risk primarily through holdings of fixed income securities, certain investment liabilities and interest rate derivatives.

8.2.1 Interest rate risk sensitivity[1]

With all other variables held constant, 25 basis points increase/decrease in nominal risk-free rates would result in a decrease/increase in the value of investments directly impacted by interest rate changes as follows:

	As at March 31, 2019	As at March 31, 2018
(CAD millions)	Decrease of 25 basis points on net assets	
Maturity		
Within 1 year	$ (14)	$ (13)
1 to 5 years	557	306
6 to 10 years	434	329
Over 10 years	1,091	934
Total	$ 2,068	$ 1,556

1 This sensitivity only applies to debt instruments and interest rate-sensitive derivatives.

CPP Investment Portfolios' sensitivity to various countries' risk-free rates are concentrated in North America with 39% (March 31, 2018 – 51%) in Canada, 43% (March 31, 2018 – 47%) in the United States, 11% (March 31, 2018 – 1%) in Europe, and minor exposures to other regions in both years.

8.3 Credit spread

Credit spread is the difference in yield on certain securities compared to a comparable risk-free security (i.e. government issued) with the same maturity date. Credit spread risk is the risk that the fair value of these securities will fluctuate because of changes in credit spread. As at March 31, 2019, 75% (March 31, 2018 – 80%) of credit spread risk was in A or better rated debt, primarily in Canadian provincial bonds.

With all other variables held constant, a 1 basis point widening of the credit spreads would result in a decrease in net assets by $31 million (March 31, 2018 – $30 million).

8.4 Currency

CPP Investment Portfolios are exposed to currency risk through holdings of investments or investment liabilities in various currencies. Fluctuations in the relative value of foreign currencies against the Canadian dollar can result in a positive or negative effect on the fair value or future cash flows of these investments and investment liabilities.

8.4.1 Currency risk exposures

In Canadian dollars, the net currency exposures, after allocating foreign currency derivatives are as follows:

	As at March 31, 2019		As at March 31, 2018	
(CAD millions)	Net exposure	% of total	Net exposure	% of total
Currency				
United States dollar	$ 204,605	52%	$ 171,898	48%
Euro	33,539	9	36,135	10
British pound sterling	18,219	5	19,329	5
Australian dollar	13,587	3	11,889	3
Chinese renminbi	12,577	3	6,412	2
Hong Kong dollar	10,376	3	8,086	2
Japanese yen	8,416	2	15,019	4
Indian rupee	6,509	2	4,947	1
Brazilian real	3,620	1	2,422	1
South Korean won	3,136	1	3,680	1
Chilean peso	2,722	1	2,695	1
Swiss franc	2,623	1	4,002	1
Other	11,873	2	12,694	5
Total foreign exposure	331,802	85	299,208	84
Canadian dollar	60,192	15	57,114	16
Total	$ 391,994	100%	$ 356,322	100%

8.4.2 Currency risk sensitivity

With all other variables and underlying values held constant, a 10% appreciation/depreciation of the Canadian dollar against all other currencies would result in a decrease/increase in net investments as follows:

(CAD millions)	As at March 31, 2019	As at March 31, 2018
	Depreciation of 10% of the Canadian dollar against other currencies on net assets	
Currency		
United States dollar	$ 20,461	$ 17,190
Euro	3,354	3,614
British pound sterling	1,822	1,933
Australian dollar	1,359	1,189
Other	6,184	5,996
Total	$ 33,180	$ 29,922

NOTE 9. CREDIT RISK

Credit risk is the risk of financial loss due to a counterparty failing to meet its contractual obligations, or a reduction in the value of the assets due to a decline in the credit quality of the underlying entity. CPP Investment Portfolios' credit risk exposure arises primarily through its investment in debt securities and over-the-counter derivatives. The carrying amounts of these investments as presented in the Consolidated Schedule of Investment Portfolio represent the maximum direct credit risk exposure at the Balance Sheet date.

9.1 Counterparty exposures

The fair value of debt securities and over-the-counter derivatives exposed to credit risk, by credit rating category and without taking account of any collateral held or other credit enhancements was as follows:

	As at March 31, 2019						
(CAD millions)	Bonds[1]	Money market securities[1]	Reverse repurchase agreements[1]	Over-the-counter derivatives	Other debt[1,2]	Total	% of total
Credit rating							
AAA	$ 22,975	$ –	$ –	$ –	$ 1,111	$ 24,086	20%
AA	30,802	4,002	1,414	338	674	37,230	30%
A	25,231	3,857	5,001	2,398	614	37,101	30%
BBB	4,151	–	1,792	451	1,290	7,684	6%
BB	1,976	17	–	–	3,844	5,837	5%
B	1,240	–	–	–	7,874	9,114	8%
CCC/D	47	–	–	–	1,600	1,647	1%
Total	$ 86,422	$ 7,876	$ 8,207	$ 3,187	$ 17,007	$ 122,699	100%

	As at March 31, 2018						
(CAD millions)	Bonds[1]	Money market securities[1]	Reverse repurchase agreements[1]	Over-the-counter derivatives	Other debt[1,2]	Total	% of total
Credit rating							
AAA	$ 12,048	$ 24	$ –	$ –	$ –	$ 12,072	13%
AA	26,251	2,339	168	43	–	28,801	32%
A	24,638	2,788	4,066	1,500	465	33,457	37%
BBB	1,284	–	1,930	375	1,449	5,038	6%
BB	181	–	–	–	3,589	3,770	4%
B	–	–	–	–	6,065	6,065	7%
CCC/D	1	–	–	–	782	783	1%
Total	$ 64,403	$ 5,151	$ 6,164	$ 1,918	$ 12,350	$ 89,986	100%

1 Includes accrued interest.

2 Includes direct investments in private debt and asset-backed securities.

In addition to the above, CPP Investment Portfolios are indirectly exposed to credit risk on the underlying securities of fund investments.

CPP Investment Board limits credit risk on over-the-counter contracts through a variety of means, including dealing only with authorized counterparties that meet the minimum credit rating and limiting the maximum exposures to any individual counterparty, and the use of master netting agreements and collateral.

Credit risk exposure is mitigated on certain financial assets and financial liabilities, which have conditional offset rights in the event of default, insolvency or bankruptcy. For securities purchased under reverse repurchase agreements, securities sold under repurchase agreements and over-the-counter derivatives, collateral is collected from or pledged to counterparties to manage credit exposure (see note 13). In addition, in the event of default, amounts with a specific counterparty are settled on a net basis under master netting or similar arrangements, such as the Global Master Repurchase Agreement and the International Swaps and Derivatives Association Netting Agreements.

9.2 Credit VaR

Credit Risk for the two CPP Investment Portfolios is estimated using a Monte Carlo simulation that incorporates likelihood of default, credit rating migration and recovery in the event of default for underlying credit instruments. As at March 31, 2019, Credit VaR (99% Confidence level) of the base CPP Investment Portfolio was $5,317 million (March 31, 2018 – $4,106 million) which implies there is a 1% chance that the base CPP Investment Portfolio of credit instruments will lose more than this amount in any given year due to default and credit migration risk. As at March 31, 2019, the Credit VaR (99% Confidence level) of the additional CPP Investment Portfolio was $3 million.

NOTE 10. LIQUIDITY RISK

Liquidity risk includes two main components:

- Solvency risk – The risk of failing to obtain the funds needed to meet payment obligations as they come due.
- Portfolio Rebalancing risk – The risk that CPP Investment Board is unable to fund investment programs and optimize/rebalance investment portfolios.

Liquidity risk increases by the use of various forms of leverage which CPP Investment Board uses to manage certain other risks and enhance fund returns. The use of leverage is governed through various liquidity risk limits which require sufficient liquidity to be available to manage both components of liquidity risk. In addition, CPP Investment Board seeks to maintain its issuer credit rating at “AAA” and maintains leverage ratios consistent with this rating.

Management of liquidity risk is supplemented through the ability to raise funds through activities such as the issuance of commercial paper and term debt and transacting in securities sold under repurchase agreements. CPP Investment Board also maintained $6,176 million (March 31, 2018 – $6,012 million) of unsecured credit facilities to meet potential liquidity requirements. There were no credit facilities drawn as at March 31, 2019 and 2018. The ability to readily dispose of certain investments to meet liquidity needs is facilitated by maintaining a liquid portfolio of publicly traded equities, money market securities and marketable bonds.

CPP Investment Board is exposed to liquidity risk through its obligations to remit cash to the CPP. In order to manage associated liquidity risk, certain assets are segregated and managed separately. Liquidity risk is also managed by investing these assets in liquid money market instruments with the primary objective of ensuring that the CPP has the necessary liquidity to meet benefit payment obligations on any business day.

10.1 Terms to maturity

The tables below present the contractual maturities of investments and investment liabilities of CPP Investment Board and its investment holding subsidiaries:

Non-derivative investments

	Terms to maturity							
	As at March 31, 2019						As at March 31, 2018	
(CAD millions)	Within 1 year	1 to 5 years	6 to 10 years	Over 10 years	Total[3]	Average effective yield	Total[3]	Average effective yield
Non-marketable bonds								
Canadian provincial government	$ 1,558	$ 5,820	$ 3,521	$ 12,540	$ 23,439	2.7%	$ 23,527	2.9%
Marketable bonds								
Government of Canada	–	7,007	380	1,166	8,553	1.7%	5,017	2.1%
Canadian provincial government	–	821	1,976	3,361	6,158	2.7%	6,483	2.9%
Canadian government corporations	–	1,881	1,043	357	3,281	2.2%	2,626	2.6%
Foreign government	554	13,358	8,858	13,700	36,470	2.3%	23,113	2.9%
Corporate bonds	96	3,200	3,249	1,158	7,703	4.4%	3,085	3.4%
Other debt								
Private debt[1]	48	4,483	4,948	1,871	11,350	8.1%	9,573	8.4%
Private real estate debt[1]	583	2,057	2,361	–	5,001	6.7%	3,582	6.6%
Asset-backed securities	–	6	67	1,937	2,010	3.0%	5	4.4%
Securities purchased under reverse repurchase agreements	8,205	–	–	–	8,205	0.8%	6,164	1.8%
Securities borrowed[2]	2,969	–	–	–	2,969	n/a	–	n/a
Total	$ 14,013	$ 38,633	$ 26,403	$ 36,090	$115,139	n/a	$ 83,175	n/a

1 Includes direct investments and excludes fund investments.
2 Relates to cash collateral, which has no effective yield.
3 Represents fair value.

Non-derivative investment liabilities

	Terms to maturity									
	As at March 31, 2019							As at March 31, 2018		
(CAD millions)	Within 1 year	1 to 5 years	6 to 10 years	Over 10 years	Total[4]	Fair value	Weighted average interest rate	Total[4]	Fair value	Weighted average interest rate
Securities sold under repurchase agreements	$ 38,548	$ –	$ –	$ –	$ 38,548	$ 38,375	2.3%	$ 32,559	$ 32,504	1.7%
Securities lent[1]	1,116	–	–	–	1,116	1,116	n/a	–	–	n/a
Securities sold short[2,3]	29,027	–	–	–	29,027	29,027	n/a	13,574	13,574	n/a
Debt financing liabilities										
Commercial paper payable	4,378	–	–	–	4,378	4,323	2.7%	6,263	6,254	1.9%
Term debt	4,590	12,673	7,336	1,500	26,099	26,538	1.6%	17,910	17,802	1.8%
Total	$ 77,659	$ 12,673	$ 7,336	$ 1,500	$ 99,168	$ 99,379	n/a	$ 70,306	$ 70,134	n/a

1 Relates to cash collateral, which has no effective yield.
2 Considered repayable within one year based on the earliest period in which the counterparty could request payment under certain conditions.
3 Includes equities sold short for which the average interest rate is not applicable.
4 Represents contractual amounts.

NOTE 11. FINANCIAL INSTRUMENTS – RIGHTS OF OFFSET

Accounting policy

Financial assets and financial liabilities are offset and the net amount reported in the Consolidated Financial Statements if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the asset and settle the liability simultaneously.

The following table presents the effect of offsetting for derivatives and repurchase and reverse repurchase agreements that are subject to master netting arrangements or similar agreements that meet the criteria for offsetting. The table also presents the amounts that are subject to enforceable netting arrangements but do not qualify for offsetting. For certain derivatives, the gross amounts subject to netting arrangements include the daily settlement of variation margin which is netted against the fair value of the derivatives.

	As at March 31, 2019					
				Less: Amounts subject to master netting or similar arrangements but not presented net		
(CAD millions)	Gross amounts subject to netting arrangements	Less: Amounts offset in Consolidated Financial Statements	Net amount presented in the Consolidated Schedule of Investment Portfolio	Subject to agreements	Securities and cash collateral[1]	Net exposure
Securities purchased under reverse repurchase agreements	$ 8,205	$ –	$ 8,205	$ (7,335)	$ (870)	$ –
Derivative assets	3,192	–	3,192	(1,834)	(965)	393
Total investment receivables	$ 11,397	$ –	$ 11,397	$ (9,169)	$ (1,835)	$ 393
Securities sold under repurchase agreements	$ (38,375)	$ –	$ (38,375)	$ 7,335	$ 31,040	$ –
Derivative liabilities	(2,330)	–	(2,330)	1,834	235	(261)
Total investment payables	$ (40,705)	$ –	$ (40,705)	$ 9,169	$ 31,275	$ (261)

	As at March 31, 2018					
				Less: Amounts subject to master netting or similar arrangements but not presented net		
(CAD millions)	Gross amounts subject to netting arrangements	Less: Amounts offset in Consolidated Financial Statements	Net amount presented in the Consolidated Schedule of Investment Portfolio	Subject to agreements	Securities and cash collateral[1]	Net exposure
Securities purchased under reverse repurchase agreements	$ 6,164	$ –	$ 6,164	$ (6,164)	$ –	$ –
Derivative assets	1,918	–	1,918	(1,290)	(628)	–
Total investment receivables	$ 8,082	$ –	$ 8,082	$ (7,454)	$ (628)	$ –
Securities sold under repurchase agreements	$ (32,504)	$ –	$ (32,504)	$ 6,164	$ 26,340	$ –
Derivative liabilities	(1,712)	–	(1,712)	1,290	320	(102)
Total investment payables	$ (34,216)	$ –	$ (34,216)	$ 7,454	$ 26,660	$ (102)

1 Securities and cash collateral exclude over-collateralization and collateral in transit. Refer to note 13 for the total amount of collateral.

NOTE 12. OPERATING EXPENSES

12.1 Compensation of key management personnel

Key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of CPP Investment Board, consisting of the Senior Management Team and the Board of Directors.

Compensation of key management personnel of CPP Investment Board is as follows:

	For the years ended	
(CAD millions)	**March 31, 2019**	March 31, 2018
Short-term employee compensation and benefits	**$ 26**	$ 22
Other long-term compensation and benefits	**26**	19
Total	**$ 52**	$ 41

12.2 General operating expenses

General operating expenses consist of the following:

	For the years ended	
(CAD millions)	**March 31, 2019**	March 31, 2018
Information technology and data services	**$ 118**	$ 98
Professional services[1]	**107**	71
Premises and equipment	**40**	38
Custodial fees	**36**	32
Tax on international operations	**35**	40
Travel and accommodation	**25**	21
Amortization of premises and equipment	**20**	27
Communications	**14**	9
Directors' remuneration	**2**	2
Other	**4**	3
Total	**$ 401**	$ 341

1 Includes auditor's remuneration of $4 million (March 31, 2018 – $3 million).

NOTE 13. COLLATERAL

Collateral transactions are conducted to support investment activities under terms and conditions that are common and customary to collateral arrangements. The net fair value of collateral held and pledged was as follows:

	As at	As at
(CAD millions)	**March 31, 2019**	March 31, 2018
Third-party assets held as collateral on[1]:		
Reverse repurchase agreements	**$ 8,207**	$ 6,187
Over-the-counter derivative transactions	**965**	692
Securities lent[2]	**1,627**	–
Other debt	**772**	760
Own and third-party assets pledged as collateral on:		
Repurchase agreements	**(38,383)**	(32,621)
Securities sold short[3]	**(34,549)**	(16,610)
Over-the-counter derivative transactions	**(407)**	(315)
Private equities	**(7,849)**	(5,942)
Other debt	**(4,562)**	(4,417)
Total	**$ (74,179)**	$ (52,266)

1 The fair value of the collateral held that may be sold or repledged as at March 31, 2019 was $9,557 million (March 31, 2018 – $6,967 million). The fair value of collateral sold or repledged as at March 31, 2019 was $3,504 million (March 31, 2018 – $5,969 million).

2 Includes cash collateral of $1,116 million (March 31, 2018 – nil). The fair value of securities lent as at March 31, 2019 was $1,602 million (March 31, 2018 – nil).

3 The fair value of securities borrowed as at March 31, 2019 was $27,110 million (March 31, 2018 – $13,045 million) of which $26,631 million was sold or repledged (March 31, 2018 – $12,547 million) for securities sold short.

NOTE 14. COMMITMENTS

14.1 Investment commitments

CPP Investment Board and its investment holding subsidiaries have entered into commitments related to the funding of investments. These commitments are generally payable on demand based on the funding needs of the investment subject to the terms and conditions of each agreement. As at March 31, 2019, the unfunded commitments totalled $47,408 million (March 31, 2018 – $41,767 million).

14.2 Lease and other commitments

CPP Investment Board made lease and other commitments, which require future annual payments as follows:

(CAD millions)	As at March 31, 2019	As at March 31, 2018
Within one year	$ 42	$ 36
After one year but not more than five years	115	115
More than five years	10	26
Total	**$ 167**	$ 177

NOTE 15. RELATED PARTY TRANSACTIONS

Related parties of CPP Investment Board include unconsolidated subsidiaries, joint ventures and associates and all related party investments are measured at fair value.

Unconsolidated subsidiaries include 219 wholly owned investment holding subsidiaries (see note 1.2) (March 31, 2018 – 210) managed by CPP Investment Board. These investment holding subsidiaries hold private investments, debt, funds and real assets. The 219 investment holding subsidiaries are incorporated as follows: 148 in Canada (March 31, 2018 – 145), 25 in the United States (March 31, 2018 – 22), 20 in Australia (March 31, 2018 – 20), six in Hong Kong (March 31, 2018 – five), and 20 in other jurisdictions (March 31, 2018 – 18). CPP Investment Board provides financial or other support to these investment holding subsidiaries to fund their day-to-day operations and investment activities under loan agreements or shareholder's resolutions, as needed.

In addition, CPP Investment Board also owns interests in unconsolidated subsidiaries that are themselves investments. These investments, some of which may be wholly owned, are controlled through ownership rights directly or indirectly by CPP Investment Board.

Investments in joint ventures are those arrangements where CPP Investment Board has joint control. An associate is an entity which CPP Investment Board has the ability to exercise significant influence over decision-making.

Related party transactions consist of investments and investment income primarily in private equities, debt, funds and real assets. These transactions are measured at fair value and will, therefore, have the same impact on net assets and net investment income as those investment transactions with unrelated parties. Related party transactions with consolidated subsidiaries are eliminated upon consolidation.

NOTE 16. GUARANTEES

16.1 Guarantees

As part of certain investment transactions, CPP Investment Board and its investment holding subsidiaries agreed to guarantee, as at March 31, 2019, up to $4,437 million (March 31, 2018 – $2,842 million) to other counterparties in the event certain investee entities default under the terms of loan and other related agreements.

16.2 Indemnifications

CPP Investment Board provides indemnifications to its officers, directors, certain others and, in certain circumstances, to various counterparties and other entities. CPP Investment Board may be required to compensate these indemnified parties for costs incurred as a result of various contingencies such as changes in laws, regulations and litigation claims. The contingent nature of these indemnification agreements prevents CPP Investment Board from making a reasonable estimate of the maximum potential payments CPP Investment Board could be required to make. To date, CPP Investment Board has not received any material claims nor made any material payments pursuant to such indemnifications.

NOTE 17. BASE CPP AND ADDITIONAL CPP

AT A GLANCE

As a result of legislative amendments in December 2016, the *CPP Act* now defines two separate parts of the CPP:

1. base CPP – the part of the CPP that existed before January 1, 2019; and
2. additional CPP – the additional part of the CPP that came into effect on January 1, 2019.

The following note discloses the net assets, net investments and net income of base CPP account and additional CPP account.

17.1 Changes in net assets

Pursuant to Section 108.1 of the *CPP Act*, the *CPPIB Act* and an administrative agreement between Her Majesty the Queen in right of Canada and CPP Investment Board, amounts not required to meet specified obligations of the CPP are transferred weekly to CPP Investment Board. The funds originate from employer and employee contributions to the CPP. CPP Investment Board remits cash to the CPP as required, including the periodic return, on at least a monthly basis, of funds required to meet CPP benefits and expenses.

The accumulated transfers from/to the CPP and its two parts, the base CPP and additional CPP, as well as their accumulated net income since inception, are as follows:

	Accumulated net transfers from CPP			Accumulated net income			
(CAD millions)	base CPP	additional CPP	Total	base CPP	additional CPP	Total	Total net assets
As at April 1, 2017	$ 137,802	$ –	$ 137,802	$ 178,875	$ –	$ 178,875	$ 316,677
Total net income for the year	–	–	–	36,739	–	36,739	36,739
Transfers from CPP	36,425	–	36,425	–	–	–	36,425
Transfers to CPP	(33,707)	–	(33,707)	–	–	–	(33,707)
Balance as at March 31, 2018	$ 140,520	$ –	$ 140,520	$ 215,614	$ –	$ 215,614	$ 356,134
As at April 1, 2018	**$ 140,520**	**$ –**	**$ 140,520**	**$ 215,614**	**$ –**	**$ 215,614**	**$ 356,134**
Total net income for the year	**–**	**–**	**–**	**32,008**	**2**	**32,010**	**32,010**
Transfers from CPP	**38,160**	**421**	**38,581**	**–**	**–**	**–**	**38,581**
Transfers to CPP	**(34,745)**	**–**	**(34,745)**	**–**	**–**	**–**	**(34,745)**
Balance as at March 31, 2019	**$ 143,935**	**$ 421**	**$ 144,356**	**$ 247,622**	**$ 2**	**$ 247,624**	**$ 391,980**

17.2 Net assets of base CPP and additional CPP

The net assets of base CPP and additional CPP are as follows:

	As at March 31, 2019			As at March 31, 2018
(CAD millions)	base CPP	additional CPP	Total	Total
Cash and cash equivalents held for investment purposes	$ 8,606	$ 12	$ 8,618	$ 8,213
Net investments other than cash and cash equivalents	382,979	397	383,376	348,109
Net investments	391,585	409	391,994	356,322
Premises and equipment	373	14	387	348
Other assets[1]	243	1	244	153
Accounts payable and accrued liabilities	(644)	(1)	(645)	(689)
Net Assets	$ 391,557	$ 423	$ 391,980	$ 356,134

1 Includes cash held for operating purposes.

In preparation for the additional investment and reporting responsibilities associated with the additional CPP, CPP Investment Board incurred approximately $23 million of start-up costs. These costs were paid with funds transferred to CPP Investment Board on account of the base CPP. CPP Investment Board has reimbursed the base CPP account, with interest, using funds transferred to CPP Investment Board on account of the additional CPP during the year. $14 million of the start-up costs were incurred in connection with system changes and are capitalized in premises and equipment, the remaining $9 million was expensed.

17.3 Schedule of investment portfolio for base CPP and additional CPP

The table below provides details of the investments and investment liabilities for base CPP and additional CPP:

	As at March 31, 2019			As at March 31, 2018
(CAD millions)	base CPP	additional CPP	Total	Total
Equities				
Public equities	$ 141,105	$ 84	$ 141,189	$ 146,221
Private equities	96,601	58	96,659	75,737
Total equities	237,706	142	237,848	221,958
Fixed income				
Bonds	85,379	225	85,604	63,851
Other debt	27,309	16	27,325	22,183
Money market securities	9,817	12	9,829	8,213
Total fixed income	122,505	253	122,758	94,247
Absolute return strategies	25,497	15	25,512	21,027
Real assets				
Real estate	45,819	27	45,846	44,712
Infrastructure	33,111	20	33,131	27,450
Energy and resources	7,997	5	8,002	5,729
Power and renewables	5,072	3	5,075	2,949
Total real assets	91,999	55	92,054	80,840
Investment receivables				
Securities purchased under reverse repurchase agreements and securities borrowed	11,167	7	11,174	6,164
Derivative assets	3,190	2	3,192	1,918
Other	2,027	2	2,029	2,673
Total investment receivables	16,384	11	16,395	10,755
Total investments	$ 494,091	$ 476	$ 494,567	$ 428,827
Investment liabilities				
Securities sold under repurchase agreements and securities lent	(39,467)	(24)	(39,491)	(32,504)
Securities sold short	(29,010)	(17)	(29,027)	(13,574)
Debt financing liabilities	(30,843)	(18)	(30,861)	(24,056)
Derivative liabilities	(2,329)	(1)	(2,330)	(1,712)
Other	(1,154)	(1)	(1,155)	(795)
Total investment liabilities	(102,803)	(61)	(102,864)	(72,641)
Pending trades receivable	4,689	3	4,692	2,613
Pending trades payable	(4,392)	(9)	(4,401)	(2,477)
Net investments	$ 391,585	$ 409	$ 391,994	$ 356,322

17.4 Net income of base CPP and additional CPP

Details of net income of base CPP and additional CPP are as follows:

	For the years ended March 31, 2019			March 31, 2018
(CAD millions)	base CPP	additional CPP	Total	Total
Investment income	$ 35,265	$ 11	$ 35,276	$ 39,931
Investment management fees	(1,586)	–	(1,586)	(1,738)
Transaction costs	(477)	–	(477)	(401)
Net investment income	33,202	11	33,213	37,792
Operating expenses[1]	(1,194)	(9)	(1,203)	1,053
Net income	$ 32,008	$ 2	$ 32,010	$ 36,739

1 Operating expenses of additional CPP includes $9 million of start-up costs expensed in the year.

10-YEAR REVIEW[1]

										For the year ended March 31
($ billions)	**2019**	2018	2017	2016	2015	2014	2013	2012	2011	2010
Change in Net Assets										
Net investment income	**33.2**	37.8	34.4	10.0	41.4	30.7	16.7	9.9	15.5	16.2
Operating expenses	**(1.2)**	(1.1)	(0.9)	(0.9)	(0.8)	(0.6)	(0.5)	(0.4)	(0.3)	(0.2)
Net contributions	**3.9**	2.7	4.3	5.2	4.9	5.7	5.5	3.9	5.4	6.1
Increase in net assets	**35.9**	39.4	37.8	14.3	45.5	35.8	21.7	13.4	20.6	22.1
Net assets	**392.0**	356.1	316.7	278.9	264.6	219.1	183.3	161.6	148.2	127.6

										As at March 31
($ billions)	**2019**	2018[2]	2017[2]	2016[2]	2015[2]	2014[2]	2013[2]	2012[2]	2011[2]	2010[2]
Equities										
Canada	**8.9**	9.7	11.7	13.5	19.5	18.6	15.3	14.2	21.0	18.5
Foreign developed markets	**162.7**	165.1	140.0	112.6	98.0	75.6	64.0	56.7	50.8	46.2
Emerging market	**51.5**	36.0	23.7	17.6	15.5	12.6	12.4	10.6	7.6	6.5
Fixed Income										
Non-marketable bonds	**22.2**	23.6	24.0	24.4	25.8	23.4	24.4	23.6	21.8	22.7
Marketable bonds	**63.9**	53.2	49.1	32.5	34.4	31.0	28.5	21.2	19.7	17.1
Cash and Absolute Return Strategies	**(16.2)**	(13.6)	(2.4)	16.8	18.8	17.4	8.7	2.5	2.3	1.7
External debt issuance	**(30.9)**	(24.1)	(19.9)	(15.6)	(9.9)	(9.7)	(9.5)	(2.4)	(1.4)	(1.3)
Credit Investments	**35.8**	22.6	17.6	17.0	17.2	11.4	8.6	8.8	6.1	3.5
Real Assets										
Real estate	**47.5**	46.1	40.1	36.7	30.3	25.5	19.9	17.1	10.9	7.0
Infrastructure	**33.3**	28.6	24.3	21.3	15.2	13.3	11.2	9.5	9.5	5.8
Energy and Resources	**8.2**	6.1	4.3	1.4	–	–	–	–	–	–
Power and Renewables	**5.1**	3.0	4.4	0.9	–	–	–	–	–	–
Net Investments[3]	**392.0**	356.3	316.9	279.1	264.8	219.1	183.5	161.8	148.3	127.7
Net Return										
Base CPP	**8.9%**	11.5%	11.8%	3.4%	18.2%	16.0%	9.7%	6.2%	11.5%	14.6%
Additional CPP[4]	**5.0%**									
Total Fund	**8.9%**	11.5%	11.8%	3.4%	18.2%	16.0%	9.7%	6.2%	11.5%	14.6%

1 The net investment table aligns with the Asset Mix within the Management's Discussion & Analysis.

2 Historical figures for fiscal 2016 to 2018 are consistent with the current year's presentation. Fiscal 2010 to 2015 figures have not been updated to the current year's presentation.

3 Includes $391.6 billion of base CPP and $0.4 billion of additional CPP.

4 Additional CPP return for 2019 is not annualized, representing the net return since the initial cash flow received from the additional CPP contributions in January 2019. Additional CPP return excludes the $9 million start-up costs that has been expensed and captured in the total Fund net return in fiscal 2019.

HEAD OFFICE

Toronto

One Queen Street East,
Suite 2500, Toronto, Ontario
M5C 2W5
Canada

T: +1 416 868 4075

Toll Free:
+1 866 557 9510

contact@cppib.com

INTERNATIONAL OFFICES

Hong Kong

18/ F York House, The Landmark,
15 Queen's Road Central
Hong Kong

T: +852 3973 8788

London

40 Portman Square, 2nd Floor
London W1H 6LT
United Kingdom

T: +44 20 3205 3500

Luxembourg

10-12 Boulevard F.D. Roosevelt
Grand Duchy of Luxembourg
L-2450

T: +352 2747 1400

Mumbai

3 North Avenue, Maker Maxity,
5th Floor, Bandra Kurla Complex,
Bandra (East) Mumbai 400051
India

T: +91 22 615 14400

New York

510 Madison Avenue, 15th Floor
New York, NY 10022
U.S.A.

T: +1 646 564 4900

São Paulo

Av. Brigadeiro Faria Lima,
4300 – 14° andar
São Paulo – SP, 04538-132, Brasil

T: +55 11 3216 5700

Sydney

Suite 5, Level 30,
Governor Macquarie Tower
1 Farrer Place
Sydney, NSW 2000, Australia

T: +61 2 8257 7777

CPP
INVESTMENT
BOARD

Ce rapport est aussi disponible en français.

2018

Annual Report

Quality.
Resilience.

Caisse de dépôt et placement du Québec

4 2018 Highlights

6 Long-term Partnerships

8 Stewardship Investing

10 Supporting the Growth of Québec's Economy and Companies

12 Behind Our Clients are Quebecers

14 Results by Asset Class

16 Our Achievements

18 Message from the Chairman of the Board

20 Message from the President and Chief Executive Officer

23 Our Clients, the Depositors

29 Management Report

61 La Caisse in Québec

75 Reports of the Board of Directors and Board Committees

103 Board of Directors and Executive Committee

109 Sustainable Development Report

119 Financial Report

127 Consolidated Financial Statements

This report presents an overview of our 2018 results, our achievements and our progress across the organization.

Declining global stock markets and geopolitical uncertainties put la Caisse's portfolio to the test in 2018.

The performance generated for our depositors over one and five years **reflects the strategy we deployed in recent years to build a robust and resilient portfolio.**

This benefits all Quebecers.

Resilience

This word sums up 2018. The challenging market context confirmed the resilience of la Caisse's portfolio.

This was the result of work accomplished over the last several years to build an all-terrain investment strategy that is up to the challenge of difficult market conditions.

Quality

Above all, our focus on quality – in our transactions, in our partnerships, and in our selection of securities – is why our portfolio succeeded in generating performance that exceeded its benchmark.

Our focus on quality serves as the foundation for our portfolio's performance and resilience.

Diversified assets

Over the last few years, we have invested significantly in less-liquid assets. Once again in 2018, we completed major infrastructure, real estate and private equity transactions around the world.

In addition, our exposure to international markets has grown considerably over five years. Why a global approach? To benefit from the growth of dynamic economies and seize the best investment opportunities.

Partnerships

To create long-term value, it takes the right partners. This is why, now more than ever, our partnership approach is central to our investment strategy.

In 2018, we created a new team responsible for strategic partnerships. By optimizing our existing business relationships and developing new ones, this team will allow us to benefit from the strengths of world-class partners.

Québec

Québec is at the heart of our actions – and represents a significant portion of our investments. These investments help to stimulate the economy, year after year.

In 2018, we continued to support Québec's private sector by concentrating on the new economy. Whether it's supporting companies that innovate or are globalizing, or through growth-creating projects, our objective remains the same: to drive the economy of today and tomorrow.

Long term

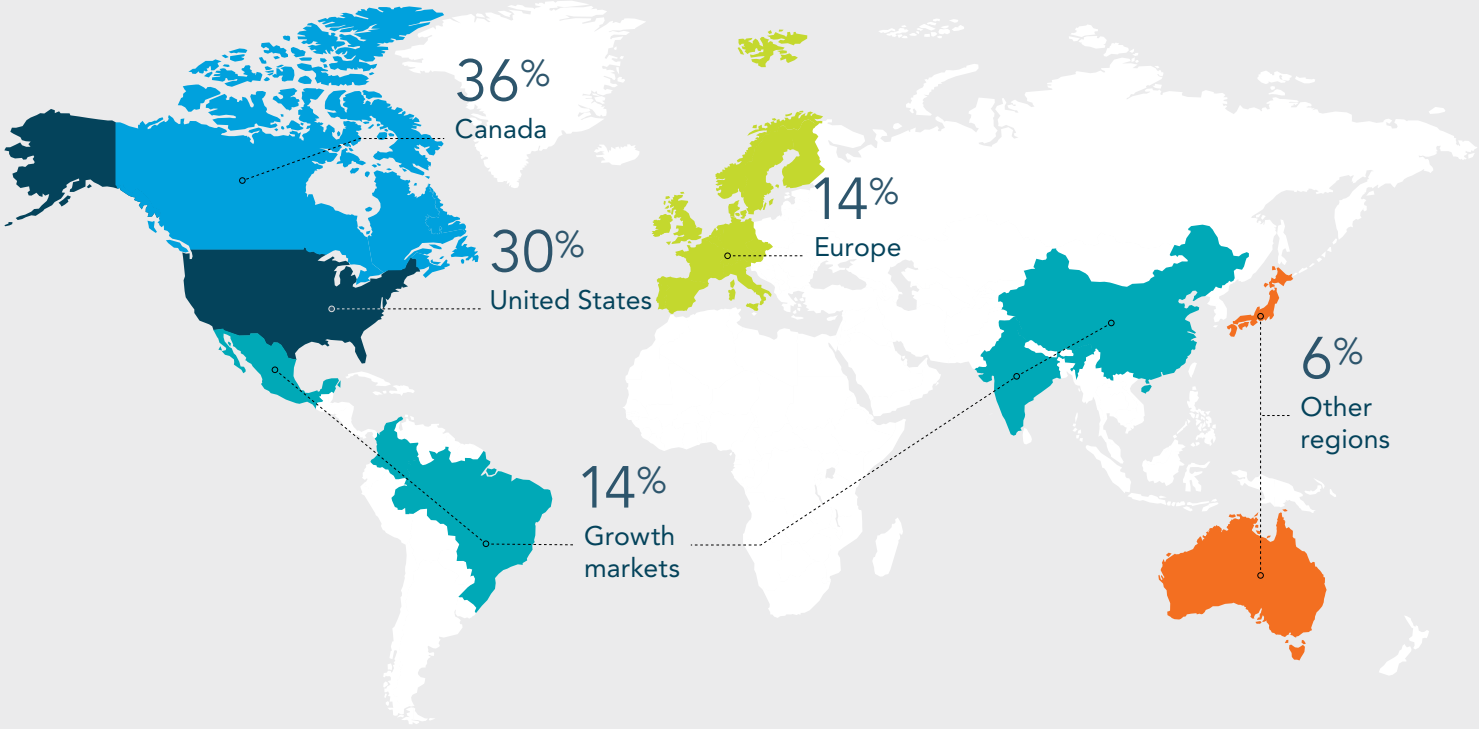
Delivering solid annual returns is important. But we measure our performance over a longer period. Over the past five years, we obtained results that exceeded our depositors' long-term needs.

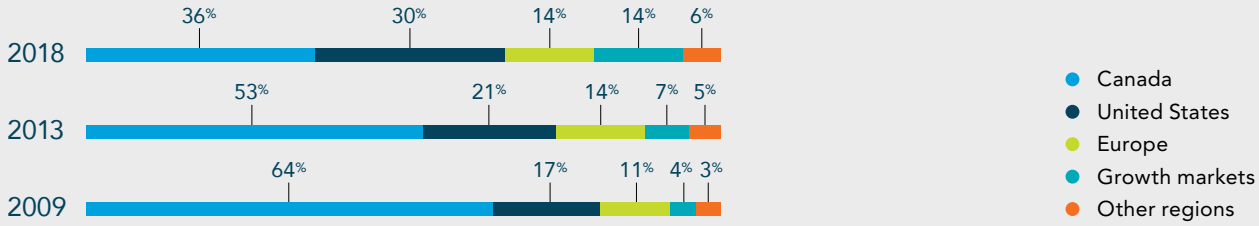
With our eye on an even longer horizon, we are staying the course on our strategy – to deliver solid returns to Quebecers, with a focus on sustainability.

We passed the $300-billion mark in net assets in 2018 with investments around the world.

Overall portfolio geographical exposure

as at December 31, 2018





As at December 31, 2018

$309.5 B
NET ASSETS

2018 results

4.2%

RETURN

$11.8 B

NET INVESTMENT RESULTS

Results over five years

8.4%

ANNUALIZED RETURN

$98.7 B

NET INVESTMENT RESULTS

Results over ten years

9.2%

ANNUALIZED RETURN

$171.6 B

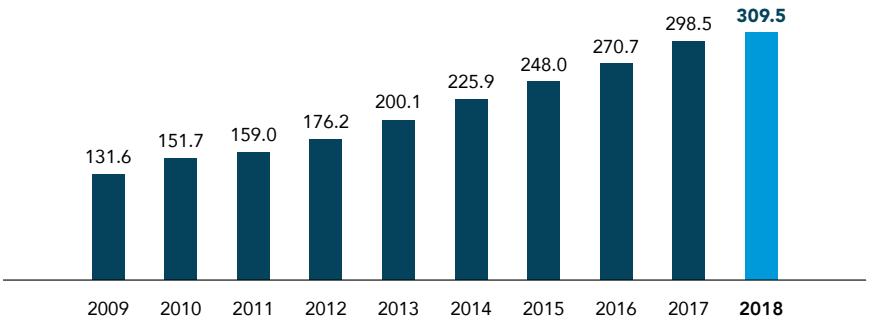
NET INVESTMENT RESULTS

Highest credit ratings reaffirmed

AAA

The DBRS, Standard & Poor's and Moody's rating agencies have reaffirmed the credit ratings of la Caisse and CDP Financial with a stable outlook. At the beginning of 2019, Fitch issued both an initial credit rating of AAA.

Caisse net assets from 2009 to 2018
(in billions of dollars)



We build long-term business relationships with knowledgeable partners.

Working and collaborating with trusted partners is key to standing out when competition is fierce. This is especially true when we operate in global markets that are as dynamic as they are diversified.

Our partners provide us with greater scope and capacity to seize the best business opportunities. We work with them to build innovative investment platforms with a long-term view. Whether they are major investors or operating companies, they share our vision, interests and values.

That is why we strengthened our approach in 2018 by creating a team dedicated to partnerships.

By combining our expertise and networks with global partners, we can innovate and execute high-caliber transactions.

Strong global partnerships in 2018

CDPQ-Generation

- Creation of a US$3-billion sustainable investment partnership with Generation Investment Management
- First acquisition: FNZ, a global company working in the FinTech sector

(Picture 1)

1

Prologis

- New partnership for Ivanhoé Cambridge with the world leader in logistics real estate
- Investments of US$890 million to acquire, develop and operate logistics properties in Brazil

(Picture 2)

FDN and Colombian pension funds

- Launch of an infrastructure co-investment platform in Colombia
- Long-term investments of up to US$1 billion

(Picture 3)

2

3

Ardian

- Private equity partner since 2006
- Joint acquisition of a significant equity interest in Alvest, a leading airport ground-support equipment company in France

(Picture 4)

4

We want to contribute **to addressing** society's challenges.

At la Caisse, we believe that environmental, social and governance matters should not be seen as constraints. They are opportunities to generate sustainable growth that benefits everyone.

We have therefore implemented a strategy that governs our investments and speaks to our role as a community-minded shareholder. We take a global approach – prioritizing climate change and working with our partners to increase our impact.

Our objective is both ambitious and realistic: to demonstrate that commercial interests are compatible with the public interest. Because as a long-term investor, we know that our performance will only be as sustainable as the world in which we invest.

Our approach

Global approach

Integration of our strategy into the heart of our investment cycle and our decision-making process for our entire portfolio and all of our activities.

Priority: climate

Deployment of a strategy to address the climate challenge and encourage the transition to a low-carbon economy.

Leadership

Mobilization of our partners around our priorities – and on collective and constructive engagement regarding the sustainability of communities and the planet.

Focal areas

Acting in five focal areas: climate, governance, expanding opportunities for women in business, international taxation and community involvement.

Centralizing expertise

Consolidation of expertise within a team dedicated to stewardship investing.

A few promising results

+$10 B

in low-carbon assets.
This exceeds our 2020 target, which we have now increased.

–10%

in our portfolio's carbon intensity.
This puts us firmly on track to reach our 25% reduction target by 2025.

Coalition of

+$6 T

Leading role in the creation of the Investor Leadership Network, comprised of 12 members with over $6 trillion in assets under management.

For more details regarding our achievements, please read our 2018 Stewardship Investing Report at www.cdpq.com.

We help **build important projects and strong companies** that are focused on innovation and open to the world.

$44.3 B

TOTAL ASSETS IN THE PRIVATE SECTOR

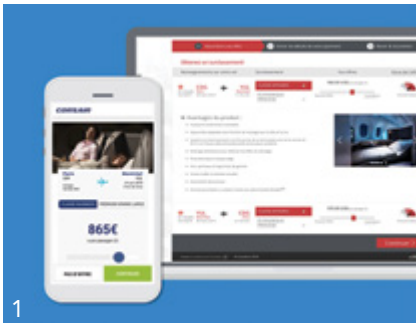
Vitality in the private sector is a sign of a prosperous economy. That is why, for several years now, our efforts in Québec have focused on this growth driver. We have partnered with nearly 775 Québec companies, including some 685 SMEs. Our objective? To accelerate their growth and foster their global expansion so they can compete with the best in their industry.

Since la Caisse wants to stimulate today's economy while strengthening its foundations for tomorrow, we are sharpening our focus on innovation. In 2018, we supported the ambitions of promising technology companies in new economy sectors – while also supporting digital transformation in more traditional fields.

As always, entrepreneurship is an essential link in developing the next generation of private-sector successes.

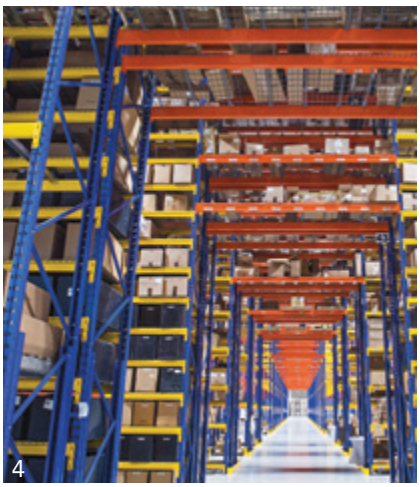
Achievements in Québec in 2018

1. **Plusgrade**
   Global expansion
2. **Espace CDPQ | Axe IA**
   Initiatives for AI startups
3. **Hopper**
   Growth and AI integration
4. **Metro Supply Chain Group**
   Global expansion
5. **Réseau express métropolitain (REM)**
   REM construction started
6. **Ocean Group**
   Expansion of its activities
7. **Breather**
   AI project


1

2

3


4

5

6

7

We invest our depositors' funds to benefit more than six million Quebecers.

For our eight main clients, we generated returns that vary between

7.6% and 9.2%

OVER 5 YEARS

3.7% and 4.4%

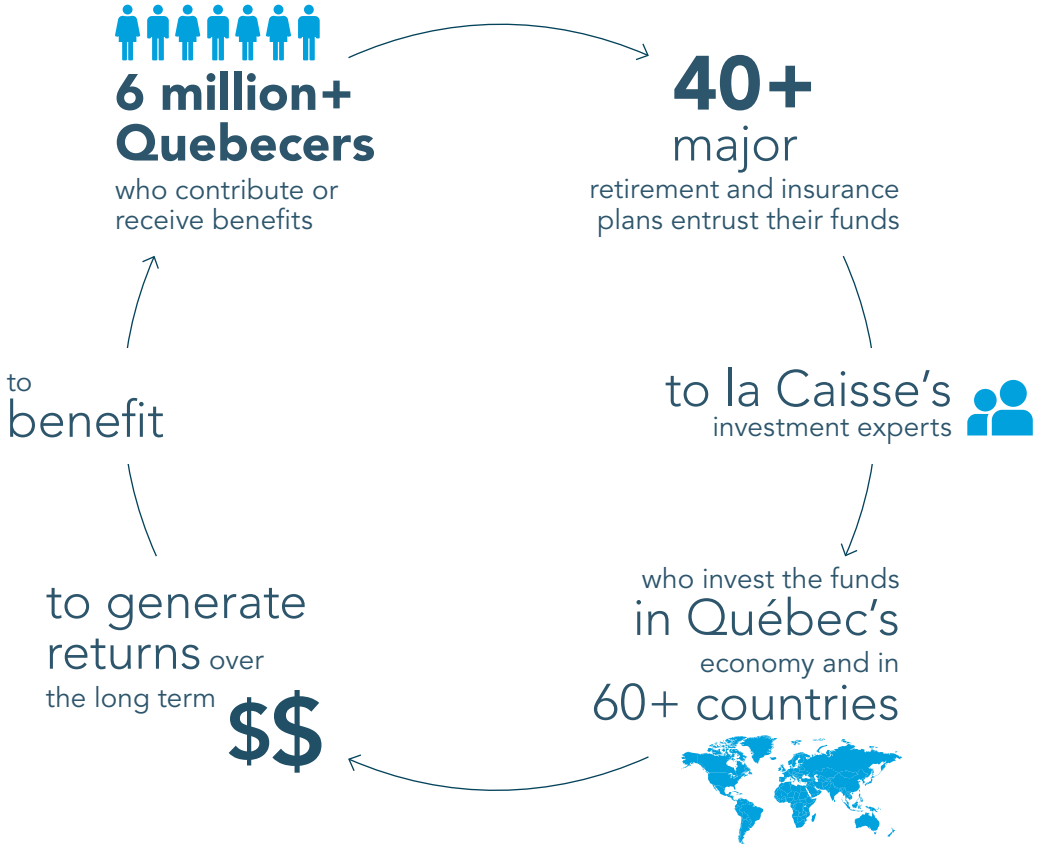
IN 2018

Our depositors' needs are at the heart of all our decisions. They are why we work to build a robust and resilient portfolio, capable of generating results that meet their long-term expectations.

Our depositors are mainly pension funds and insurance plans with very distinct realities. In addition to maintaining open communications, we leverage our teams' expertise and our knowledge of the financial environment to support our depositors in their investment decisions.

In other words, we work for millions of Quebecers every day.

La Caisse at a glance



Our main depositors

Finances Québec
Retirement Plans Sinking Fund

Retraite Québec
Québec Pension Plan Fund

RREGOP
Government and Public Employees Retirement Plan

Commission de la construction du Québec
Supplemental Pension Plan for Employees of the Québec Construction Industry

CNESST
Commission des normes, de l'équité, de la santé et de la sécurité du travail

Société de l'assurance automobile Québec

Finances Québec
Generations Fund

RRPE
Pension Plan of Management Personnel

For the complete list of our depositors, see page 28.

We generate sustained returns through key transactions in our major asset classes.

Techem

Interest in a consortium led by Partners Group to acquire this German company, a leader in the global market for energy sub-metering services, valued at €4.6 billion

Tillman Infrastructure

Loan of US$500 million, alongside AMP Capital, to this U.S. telecommunication infrastructure owner and operator to finance the construction of cellular towers across the United States

IDI Logistics

Fifty-fifty partnership between Ivanhoé Cambridge and Oxford, OMERS' real estate division, for a total investment of $4.6 billion in this U.S. logistics company as well as in all of its assets

Results by asset class

Equities

10.4% OVER 5 YEARS

3.5% IN 2018

Fixed Income

4.2% OVER 5 YEARS

2.1% IN 2018

Real Assets

10.0% OVER 5 YEARS

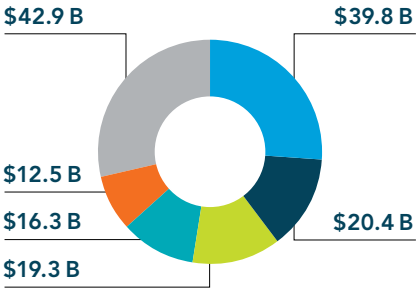
9.0% IN 2018

Net assets as at December 31, 2018

Equities

$151.2 B

NET ASSETS BY PORTFOLIO AND MANDATE

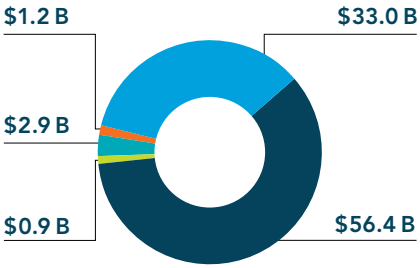


- Global Quality
- Canada
- Growth Markets
- Alternative Beta
- Other
- Private Equity

Fixed Income

$94.3 B

NET ASSETS BY PORTFOLIO

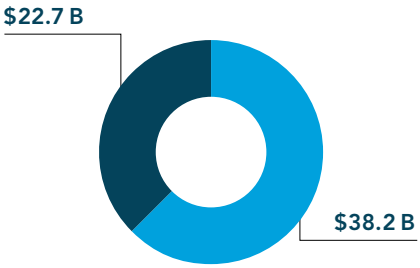


- Rates
- Credit
- Short Term Investments
- Long Term Bonds
- Real Return Bonds

Real Assets

$61.0 B

NET ASSETS BY PORTFOLIO



- Real Estate
- Infrastructure

Note: Totals may vary due to rounding.

Our main achievements stem from **continuity and reflect the major priorities in our strategy.**

In 2018, we:

Continued to increase our pace of investment in less-liquid assets and credit by focusing on our expertise and competitive advantages

- **Infrastructure:** Total investments of $5.8 billion, including increasing our stake in renewable energy leaders in North America and in India.
- **Private Equity:** Over $9 billion deployed internationally, with major investments in sustainable industry in Europe and the United States, as well as in commercial real estate services in Canada.
- **Real Estate:** Total transaction volume of $16.6 billion and continuation of portfolio repositioning, with an important increase in investment in the rapidly growing industrial and logistics sector.
- **Credit:** Increase and diversification of activities through loans for the construction of telecom towers in the United States, the acquisition of solar power assets in Spain and the optimization of a leading insurer's capital structure in Québec.

Developed new investment value creation levers to take advantage of trends shaping the economy

- Advancement of innovation culture through a dedicated team responsible for targeting investment opportunities, accelerating their execution and fostering innovation within the organization.
- Development of a structured approach and leading-edge expertise to take better advantage of the changes resulting from disruptive technologies.
- Establishment of a US$3-billion stewardship investment partnership with Generation Investment Management, resulting in the acquisition of FNZ, a global firm in the FinTech sector.

Continued maximizing our impact in Québec by concentrating our actions on our strategy's three pillars

Growth-creating projects

- Réseau express metropolitain (REM) construction officially started after selecting the consortia and closing its financing.
- Modernization of Ivanhoé Cambridge's commercial real estate portfolio, with the continuation of the Projet Nouveau Centre, totalling more than $1 billion in investments in downtown Montréal, in addition to renovating Laurier Québec.

Growth and globalization

- Investment in and support of numerous companies in Québec with their growth and expansion, including AddÉnergie, Ocean Group, Plusgrade and Transcontinental.
- Launch of Cheffes de file, an initiative aimed at driving the growth of companies owned by women.

Innovation and the next generation

- Support of the Québec economy's digital transformation through investments in companies such as Breather and Hopper, and in companies that use technological solutions to support their growth, such as BFL Canada and Frank And Oak.
- Creation of Espace CDPQ | Axe IA to support startups from innovative sectors in the marketing of their artificial intelligence (AI) solutions.

Continued globalizing our activities with major investments around the world, including in growth markets

- Diversification of our assets worldwide, with 64% exposure to global markets at the end of 2018.
- Increased beneficial exposure in the United States and expansion of our investments in Asia Pacific, specifically in logistics real estate.
- In Latin America, creation of an infrastructure co-investment platform in Colombia and a significant increase in assets in Mexico.
- Strengthening of our strategic partnerships approach, in both developed and growth markets, with the implementation of a dedicated team.

Deployed our investment strategy to address climate change through concrete actions with conclusive results

- A $10-billion increase in low-carbon assets, exceeding the initial target of $8 billion, with a new target set at $32 billion by 2020.
- A 10% reduction in our portfolio's carbon intensity, with a target of a 25% reduction by 2025.
- High-quality transactions in renewable electricity in the United States, Europe, India and Latin America.
- Consolidating expertise within a team dedicated to stewardship investing and initiatives.

Message from the Chairman of the Board

La Caisse's stable strategy and solid portfolio have once again resulted in good returns for our depositors this year.

In 2018, with difficult and uncertain market conditions, la Caisse has proven the soundness of its investment strategy. It is a strategy based on a solid foundation, yet in sync with the times.

The Board of Directors knew that la Caisse's portfolio was robust – but this year, there was new proof of its resilience. The Board is satisfied with the one-year and five-year results that added significant value compared to the benchmark.

In an economic environment vulnerable to a slowdown and facing ongoing uncertainty, it is difficult to predict where the markets will be in the medium and long term. However, the Board is fully confident that la Caisse will continue to move forward thanks to its advantages: a clear vision, sound governance, critical mass and talented teams.

During 2018, la Caisse continued to diversify its portfolio with quality transactions, including in private equity, infrastructure, real estate and credit, both in Québec and in international markets. This shows that its strategy, focused on its impact in Québec as well as on the globalization of its activities, is bearing fruit.

In Québec, its teams have put their expertise and knowledge of the market to good use in substantially supporting the private sector and Québec companies that are innovating and looking to globalize. They have continued to focus on the new economy, a significant growth vector for the future.

Internationally, the resources deployed over the last few years to strengthen its capacities have resulted in tangible investments. Thanks to experienced teams from Montréal to Singapore, from London to Sydney, from New York to New Delhi, la Caisse is better positioned today to take advantage of the dynamism of high-potential economies.

Along the way, la Caisse has established itself as a partner of choice, sought by major investors and companies alike. I would be remiss in neglecting to highlight the creation of a team responsible for strategic partnerships, an initiative that confirms the importance that la Caisse places on collaboration.

The Board also welcomes the creation of a team focusing on innovation. This will enable la Caisse to more swiftly take advantage of new opportunities that emerge as the world changes.

Additionally, we look forward to the contributions of the Stewardship Investing team, which will support la Caisse's leadership role in the fight against climate change. The Board supported the decision to include a carbon factor in the calculation of employees' incentive compensation. We are convinced that this decision will allow la Caisse to better advance its strategy.

Lastly, 2018 marked the beginning of construction of the Réseau express métropolitain (REM). This innovative public transportation network will improve the daily life of citizens in the greater Montréal area. We must remember that this project was still on the drawing board barely two years ago!

I would like to thank my colleagues on the Board of Directors for their diligence and rigour in fulfilling their functions. Their contribution to the organization's governance is crucial. I would like to thank Bertrand Cesvet for the work he accomplished during his term on the Board, which ended in 2018, and I would like to welcome Sylvain Brosseau.

On behalf of the Board, I want to express our gratitude for the work done by all employees, who successfully navigated a complex environment in 2018. La Caisse has strong leadership. The management team is competent, and a talented next generation is being developed. Engagement reached a new high – and pride has continually increased since the arrival of Michael Sabia 10 years ago.

So much progress has been made since March 2009! Under Michael's direction, net assets have grown from $120 billion to nearly $310 billion, with an average annual return of 9.2% over 10 years. These are solid results.

In addition, under his direction, la Caisse has become a source of pride for Quebecers and an institution that enjoys an excellent international reputation.

ROBERT TESSIER
Chairman of the Board

Message from the President and Chief Executive Officer

Several years ago, we decided to revise our investment strategy to define a new two-fold approach: to benefit from growth when markets are up while emphasizing the resilience of the portfolio to react better when markets are down or very volatile.

In 2018, this strategy was tested by a difficult year end for equity markets.

First, tightening financial conditions in the first three quarters created substantial uncertainty in the markets. Then came the fourth quarter, when markets plummeted: the S&P 500 lost 13%; the MSCI ACWI lost 12% and the MSCI Europe lost 11%. For the first time in eight years, markets closed out a year in negative territory.

Confronted with this turbulence, our portfolio performed as expected. We delivered a 4.2% return, outperforming our benchmark portfolio by around 180 basis points – in other words, adding $5.3 billion of value.

In brief, it was a demanding year that could be a precursor of what's ahead over the medium term: volatility, slowing economic growth and geopolitical risks.

In this context, our strategy is built on four pillars:

1. Quality – a characteristic common to all our portfolios. A priority for all our asset classes. For example, the Global Quality mandate in our public equity portfolio performed very well thanks to investments in high-quality companies that are better positioned to withstand market turbulence.
2. Diversification of our portfolio toward less-liquid assets. Investing in growing and resilient companies, with a focus on four sectors: health care, financial services, technology and sustainable industry. Investing in quality infrastructure that generates a good current return. Investing in the industrial and logistics sector, which offers strong potential in real estate.
3. Geographic diversification with a growing emphasis on emerging markets. In 2018, the U.S. economy was the world's only economy with strong growth, so our greater exposure there paid important dividends. In contrast, for growth markets, the year was full of challenges. Still, these emerging markets have generated high returns in recent years, making it important to increase our investments in them. Because the world's economic centre of gravity is migrating to the south and east. A trend and top priority for the future.
4. In Québec, the fundamentals of our strategy have not changed: focus on innovation, globalization of Québec's economy and growth-creating projects like the REM. Our ongoing priority is to invest in the private sector, the true driver of economic development in Québec. This is why in 2018 we increased our investments in this sector to nearly $44.3 billion. This represents investments in close to 775 Québec companies, of which some 685 are SMEs.

In addition, in just one year, we made substantial progress in implementing our plan to address the challenges and opportunities of climate change. In 2018, we added $10 billion in low-carbon assets to our portfolio, exceeding our target of $8 billion set for 2020. So we raised our goal, setting a new target of $14 billion for the same period. We also reduced our portfolio's carbon intensity by 10%. We are on track to achieve our 25% reduction target by 2025.

This progress is due to the work of our teams in Québec and around the world, who each day lend their talent and expertise to delivering sustained results for our depositors, the people of Québec.

Our priorities for the future

Going forward, despite continued uncertainty, we will stay the course, focusing on a few core long-term priorities.

First, we will continue to focus on quality, a key to our success in recent years.

Then, we will continue to develop the best partnerships we can around the world – and continue to diversify our assets by:

- Adapting our portfolio to increase the share of our investments in less-liquid assets. These have demonstrated a capacity for solid performance, especially in uncertain markets.
- Continuing to globalize our activities, so we can harness growth wherever it is in the world, to benefit Quebecers.

In Québec, we will pay particular attention to the development of the new economy, and support solid companies as they grow and expand into global markets. Additionally, we are building the Réseau express métropolitain (REM), always with the goal of enhancing productivity and strengthening Montréal as the metropolis of Québec.

In 2018, we began to focus more on innovation by creating a team dedicated to this important issue. We will continue this work to accelerate innovation across the organization, creating different investment opportunities that will distinguish us even more. Along the same lines, we are developing internal expertise on disruptive technology, not only to better understand the impact of coming changes on our portfolio, but also to act on the investment opportunities they will provide.

Along the way, with a view to sustainability, we will continue to execute our strategy on climate change to contribute to the transition toward a low-carbon economy.

At all times, we will be guided by one ambition: to realize the full potential of la Caisse to the benefit of every Quebecer.

MICHAEL SABIA
President and Chief Executive Officer

Our Clients, the Depositors

Our Clients, the Depositors

The year 2018 was characterized by increasing uncertainty regarding the global economy's growth potential, which resulted in financial market turbulence. In this context, la Caisse's investment strategy decisions over the last few years combined with depositors' decisions regarding benchmark portfolios were proven to be sound.

PRODUCTIVE COLLABORATION

Through its investments, la Caisse aims to contribute to the financial solidity of its depositors' funds. La Caisse puts its knowledge of global markets and its portfolio management expertise to use in supporting its depositors in their investment decisions. The relationship between la Caisse and its depositors is based on a business model where collaboration, listening, transparency and clear sharing of each entity's roles and responsibilities are central.

In 2018, la Caisse's teams and its depositors' representatives held regular discussions on various topics. In the context of the work on investment policies, the strategic orientations proposed by la Caisse were focused on optimizing its clients' risk-return profiles.

A DEPOSITORS' CONTEXT THAT HAS CHANGED OVER THE LAST FEW YEARS

After several years of additional contribution payments to overcome actuarial deficits, as well as significant returns on financial markets, the depositors' pension and insurance plans are in a much better financial position today.

However, this new reality is not without challenges. For example, these plans' demographic profiles have changed significantly over the years. Therefore, the investment orientations and tools available for sound risk management must be revised for each one.

In 2018, both la Caisse's and depositors' teams continued their work and held discussions regarding these questions.

CUSTOMIZED ADVISORY SERVICES

With its advisory services, la Caisse offers its depositors support in their investment policy decisions, specifically those affecting the choice of a long-term benchmark portfolio (strategic asset allocation). These services include:

- Financial market analyses and economic outlook evaluations;
- Long-term risk and return assumptions for the principal asset classes and specialized portfolios offered;
- Simulations comparing the expected long-term effect of various benchmark portfolio choices on a plan's returns, risk, financial position and its financing.

Several analysis projects were thus carried out with depositors over the last few years. This work permitted the analysis of the strategic allocation of assets in place and, for certain depositors, changing it based on their financial reality, risk tolerance, liquidity needs, changes to la Caisse products, etc.

Specific attention was also paid to analyzing various stress tests developed to measure the resilience of the benchmark portfolio when faced with various scenarios.

Also, to address the plans' new demographic realities, emphasis was placed on asset management tools used to reduce the sensitivity of their financial position to interest rate fluctuations.

DEPOSITORS' INDIVIDUAL RETURNS

On the whole, over five years, the various depositors' funds generated returns corresponding to their needs, while showing the resilience expected in periods of volatility.

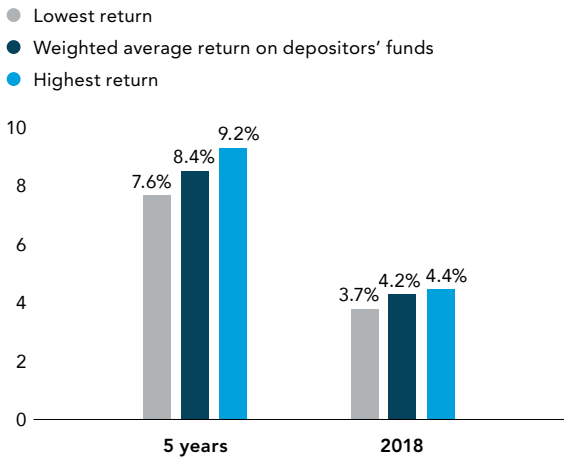
The decisions made with respect to the allocation of assets among the three major asset classes in the overall portfolio – Equities, Fixed Income and Real Assets – have a significant impact on the returns of each depositor. With support from la Caisse, depositors make these decisions based, most notably, on their target returns, risk tolerance and their investment horizon.

Over five years, the annualized returns of the eight principal depositors' funds ranged from 7.6% to 9.2%.

For 2018, depositors' returns varied between 3.7% and 4.4%.

FIGURE 1

RETURNS ON THE EIGHT PRINCIPAL DEPOSITORS' FUNDS



AN ADAPTED PORTFOLIO OFFERING

La Caisse enables its depositors to allocate their funds to specialized portfolios that hold the same type of securities (see Table 2). The vast majority of these portfolios are managed actively. Each one is managed based on rules set out in an investment policy, which specifies the:

- management approach;
- investment universe and benchmark index;
- target returns;
- risk oversight.

In addition to its specialized portfolios, la Caisse provides overlay options to enable each depositor to customize its exposure to interest rates.

In 2018, adjustments were made to the activities of some of la Caisse's portfolios.

Thus, the allocation targets for the Equity Markets portfolio mandates were reviewed, and more specifically, those for Growth Markets. This adjustment also required a change to the portfolio's benchmark.

In addition, as planned at the time of its launch in 2017, the Credit portfolio saw its target allocation increase. Thus, the target weight of its specialty finance activities was increased, which was offset by an equivalent reduction in the target exposure for the corporate credit mandate. This adjustment also required a change to the portfolio's benchmark.

Lastly, the customized overlay operations that allow depositors to customize the exposure of their funds to interest rates were modified to optimize the risk-return profile. Since September 2018, futures contracts on U.S. interest rates are used for exposing these activities to interest rates.

TABLE 2

SPECIALIZED PORTFOLIO OFFERING
(as at December 31, 2018)

	ACTIVELY MANAGED	INDEXED	OBJECTIVES
FIXED INCOME	Rates Credit	Short Term Investments Long Term Bonds Real Return Bonds	Reduce the portfolio's overall risk level Match depositors' assets and liabilities Provide an important source of liquidity
REAL ASSETS	Real Estate Infrastructure		Have exposure to markets for which investment income is indexed to inflation Partially hedge the inflation risk associated with the liabilities of several depositors
EQUITIES	Equity Markets Private Equity		Increase depositors' long-term target returns
OTHER INVESTMENTS	Active Overlay Strategies Asset Allocation		Achieve diversification and complementarity of la Caisse's overall portfolio

Eight principal depositors' funds

Represented 96.1% of net assets as at December 31, 2018

1 Retirement Plans Sinking Fund

$83.2 B

NET ASSETS

- Fund used by the Government of Québec to capitalize the employer's portion of retirement benefits of employees in the public and parapublic sectors

2 Retraite Québec

$72.6 B

NET ASSETS

- Québec Pension Plan Fund
- 4.1 million contributors
- 2.0 million beneficiaries
- $13.9 billion in benefits paid annually

3 Government and Public Employees Retirement Plan

$70.4 B

NET ASSETS

- 539,000 contributors
- 271,000 retirees and 18,000 surviving spouses and orphans
- $5.7 billion in retirement benefits paid annually

4 Supplemental Pension Plan for Employees of the Québec Construction Industry

$23.3 B

NET ASSETS

- 157,500 contributors
- 94,000 retirees or surviving spouses
- $906 million in benefits paid annually

5 Commission des normes, de l'équité, de la santé et de la sécurité du travail

$16.6 B

NET ASSETS

- 224,000 contributing employers
- 3.9 million workers covered
- $2.1 billion in benefits paid annually

6 Société de l'assurance automobile du Québec

$12.1 B

NET ASSETS

- 5.4 million driver's licence holders
- 6.5 million registered vehicles
- $1 billion paid in compensation annually

7 Generations Fund

$11.3 B

NET ASSETS

- Fund used to repay Québec's debt

8 Pension Plan of Management Personnel

$8.0 B

NET ASSETS

- 27,000 contributors
- 30,000 retirees and 2,500 surviving spouses and orphans
- $1.4 billion in benefits paid annually

TABLE 3

LA CAISSE'S 41 DEPOSITORS – Comparison of net assets as at December 31, 2017, and as at December 31, 2018

(fair value as as December 31 – in millions of dollars)

	First deposit	Depositors' net assets 2018 $	2018 %	2017 $	2017 %
PENSION PLANS					
Retraite Québec	1966	**72,584**	**23.5**	69,282	23.2
Supplemental Pension Plan for Employees of the Québec Construction Industry	1970	**23,312**	**7.5**	22,389	7.5
Government and Public Employees Retirement Plan	1973	**70,406**	**22.7**	68,467	23.0
Pension Plan of Management Personnel	1973	**8,035**	**2.6**	6,871	2.3
Pension Plan for Federal Employees Transferred to Employment with the Government of Québec	1977	**264**	**0.1**	262	0.1
Pension Plan of Elected Municipal Officers	1989	**270**	**0.1**	264	0.1
Retirement Plan for the Mayors and Councillors of Municipalities	2015	**1**	**–**	1	–
Régime complémentaire de rentes des techniciens ambulanciers/paramédics et des services préhospitaliers d'urgence	1990	**611**	**0.2**	588	0.2
Ministère des Finances, Government of Québec[1]					
Retirement Plans Sinking Fund	1994	**83,176**	**26.9**	78,468	26.3
Superannuation Plan for the Members of the Sûreté du Québec – employers' fund	2009	**873**	**0.3**	654	0.2
Régime de retraite de l'Université du Québec	2004	**635**	**0.2**	549	0.2
Régime de retraite du personnel des CPE et des garderies privées conventionnées du Québec	2005	**471**	**0.2**	387	0.1
Régime de retraite pour certains employés de la Commission scolaire de la Capitale	2006	**31**	**–**	33	–
Pension Plan of the Non-Teaching Staff of the Commission des écoles catholiques de Montréal	2007	**184**	**0.1**	197	0.1
Superannuation Plan for the Members of the Sûreté du Québec – participants' fund	2007	**524**	**0.2**	474	0.2
Régime de retraite des employés de la Ville de Laval	2007	**427**	**0.1**	347	0.1
Retirement Plan for Active Members of the Centre hospitalier Côte-des-Neiges	2010	**89**	**–**	88	–
Fonds commun de placement des régimes de retraite de l'Université Laval	2012	**322**	**0.1**	267	0.1
Fiducie globale Ville de Magog	2012	**70**	**–**	69	–
Régime de retraite des employées et employés de la Ville de Sherbrooke	2012	**52**	**–**	42	–
Régime de retraite des agents de la paix en services correctionnels	2013	**661**	**0.2**	643	0.2
Régime complémentaire de retraite des employés réguliers de la Société de transport de Sherbrooke	2013	**80**	**–**	81	–
Régime de retraite de la Corporation de l'École Polytechnique	2014	**68**	**–**	58	–
Régime de retraite de la Ville de Terrebonne	2015	**69**	**–**	64	–
Régime de retraite des cadres de la Ville de Québec	2016	**256**	**0.1**	264	0.1
Régime de retraite des employés manuels de la Ville de Québec	2016	**315**	**0.1**	318	0.1
Régime de retraite des fonctionnaires de la Ville de Québec	2016	**559**	**0.2**	560	0.2
Régime de retraite du personnel professionnel de la Ville de Québec	2016	**220**	**0.1**	213	0.1
Régime de retraite des policiers et policières de la Ville de Québec	2016	**462**	**0.2**	453	0.2
Régime de retraite des pompiers de la Ville de Québec	2016	**170**	**0.1**	165	0.1
Régime de retraite des employés du Réseau de transport de la Capitale	2016	**83**	**–**	70	–
Régime de retraite des chauffeurs d'autobus de la Société de transport de Laval	2017	**127**	**–**	122	–
INSURANCE PLANS					
Régie des marchés agricoles et alimentaires du Québec	1967	**11**	**–**	11	–
La Financière agricole du Québec	1968	**900**	**0.3**	933	0.3
Autorité des marchés financiers	1969	**881**	**0.3**	843	0.3
Commission des normes, de l'équité, de la santé et de la sécurité du travail	1973	**16,640**	**5.4**	16,214	5.4
Société de l'assurance automobile du Québec	1978	**12,072**	**3.9**	11,924	4.0
Les Producteurs de bovins du Québec	1989	**6**	**–**	6	–
Survivor's Pension Plan	1997	**448**	**0.1**	460	0.2
Conseil de gestion de l'assurance parentale	2005	**141**	**–**	–	–
OTHER DEPOSITORS					
Office de la protection du consommateur	1992	**142**	**0.1**	155	0.1
Ministère des Finances, Government of Québec[1]					
Generations Fund	2007	**11,298**	**3.6**	13,780	4.6
Accumulated Sick Leave Fund	2008	**1,240**	**0.4**	1,191	0.4
Territorial Information Fund	2011	**189**	**0.1**	155	–
Agence du revenu du Québec	2012	**136**	**–**	130	–
TOTAL		**309,511**	**100.0**	298,512	100.0

1. The Ministère des Finances entrusts la Caisse with a total of five funds.

Management Report

Global Macroeconomic Environment

It has been ten years since the beginning of the 2008-2009 financial crisis. But the excess capacity in all developed countries caused by the severity of the crisis has only recently been reabsorbed, even though significant cross-regional divergences persist.

To achieve this, central banks had to drastically lower their key rates, with some implementing massive asset purchase programs, thus inflating their balance sheet and global liquidity to record levels (see Figure 4).

Growth market economies benefited from this environment of generalized monetary easing to continue closing the standard of living gap with developed countries. The synchronized global economic rebound observed in 2017, however, gave way to a slight slowdown in 2018 (see Figure 5).

FIGURE 4

BALANCE SHEETS OF MAIN DEVELOPED COUNTRIES' CENTRAL BANKS
(in billions of U.S. dollars)

- Bank of Japan
- U.S. Federal Reserve
- European Central Bank

Source: Datastream

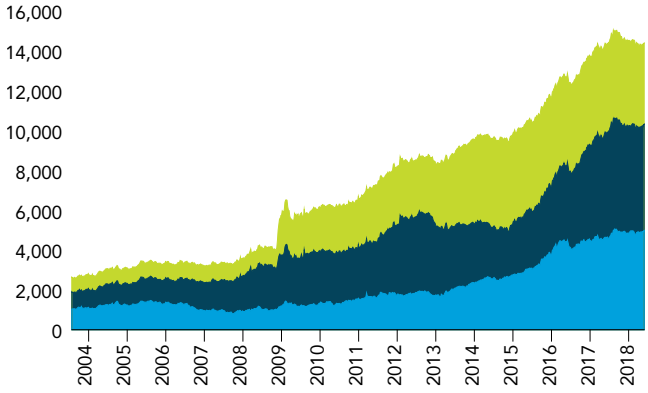
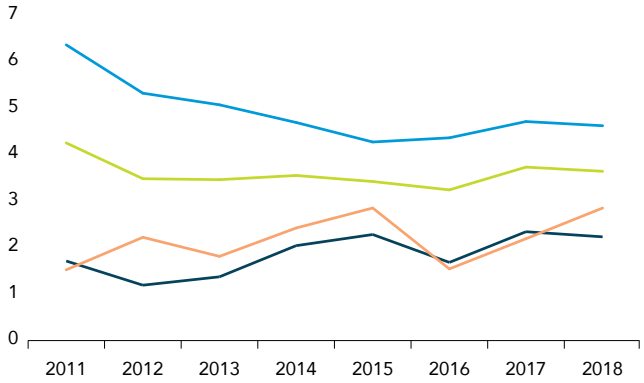


FIGURE 5

GLOBAL GROWTH SLOWED IN 2018, BUT THE UNITED STATES KEPT ITS MOMENTUM
Annual real GDP growth (as a percentage)

- Growth markets
- World
- Developed economies
- United States

Source: IMF



GLOBAL GROWTH DECELERATED IN 2018 AND RAISED CONCERNS AT THE END OF THE YEAR

Even though global economic growth is higher than that recorded over the last five years, it slowed in 2018. A series of factors explain this deceleration. First, in China, debt control efforts resulted in a sharp decrease in private sector credit growth, at a time when business confidence was fragile. China's slowing growth affected a significant number of its trade partners, including Germany, which was already facing difficulties adjusting to new pollution emission standards in its important automobile sector. These events, combined with monetary tightening initiated by several central banks, weighed on business confidence. Specifically, the tone adopted by the U.S. Federal Reserve (Fed) over the last quarter of the year worried investors that the announced tightening would slow down the U.S. economy more than necessary, in a context where the global economy remained fragile. This caused bond yields to fall sharply, as well as significant market corrections all over the world, prompting fears of an imminent end to the expansion cycle.

Geopolitical factors also undermined business confidence. Among these factors, the threat of a trade war between the U.S. and China no doubt had the greatest impact. Concerns with Brexit, tensions between Italy and its European partners and protests associated with the yellow vests movement in France are also worth noting.

THE UNITED STATES LEADS THE PACK IN DEVELOPED COUNTRIES

Even with a backdrop of uncertainty, U.S. growth still accelerated in 2018, especially as a result of the fiscal stimulus at the end of 2017 and the beginning of 2018. The U.S. economy recorded the best growth among the major developed countries in 2018, as well as over the previous five years. According to the International Monetary Fund (IMF), the U.S. economy was in excess demand starting in 2017. Even though inflation remained under control over the last few years, the Fed started normalizing its monetary policy by increasing its key rate at the end of 2015 and decreasing the size of its balance sheet in October 2017. Despite this monetary tightening, U.S. 10-year bond yields remained largely below 3%. They were pushed lower by downward pressure from the increase in global uncertainty and the Fed's balance sheet, which remains very high. U.S. bond yields also came under pressure from much lower rates in Europe and Japan, resulting in investors preferring to purchase U.S. government bonds.

In the euro zone, growth was relatively weak over the past five years, despite extraordinary monetary easing measures by the European Central Bank (ECB). The zone's economy still had production overcapacity in 2018, and the unemployment rate remained higher than before the crisis. After the growth rebound in 2017, the euro zone's economy slowed sharply throughout 2018. Even so, the ECB ended its asset purchasing program at the end of the year.

THE CANADIAN AND QUÉBEC ECONOMIES ARE ALMOST AT FULL EMPLOYMENT, BUT DEBT AND INTERNATIONAL COMPETITION REMAIN IMPORTANT ISSUES

The Canadian economy has performed well over the past five years. GDP increased an average 1.9% per year, a pace that is higher than its potential growth. This helped drive the unemployment rate down to 5.6%, a historical low and nearly full employment, by the end of 2018. After strongly accelerating in 2017, the Canadian economy slowed in 2018, mainly because of the sharp weakness in Canadian oil prices, the slowdown in the real estate sector and uncertainties around negotiations on the agreement to replace NAFTA. The Bank of Canada still increased its key rate by 25 bps three times, but it remained cautious in its end-of-year statements on upcoming increases. The sharp slowdown in growth in the last quarter of the year surprised markets.

Québec's economic performance was similar to that of Canada, resulting in a very dynamic job market. That said, Québec, with the accelerated aging of its population, is also facing, like the rest of Canada, significant household debt and international competition issues that could weigh on its future growth. The signing of the new free trade agreement, the Canada–United States–Mexico Agreement (CUSMA), however, dispelled a significant risk.

U.S. TRADE AND MONETARY POLICIES WEIGHED ON GROWTH MARKETS IN 2018

Growth markets have experienced notable cyclical fluctuations over the past five years, reflecting internal factors, such as the economic slowdown in China and the deep recession in Brazil. External factors also caused problems in growth markets, including tightening of U.S. monetary policy and the fall in commodities prices, which harmed exporters. In 2017, despite differences among countries, overall activity for growth markets had started to accelerate in synchronization with that of developed countries. This was due to the recovery of global trade and a greater appetite for risk that encouraged capital investments.

The cyclical slowdown in 2018 was fairly widespread across the main growth markets, with the appreciation of the U.S. dollar as a backdrop. First, the slowdown in China, amplified by U.S. trade policies, had global repercussions that hurt the business climate and worsened market sentiment. In India, growth accelerated slightly in 2018 while the effects of demonetization and the introduction of the goods and services tax dissipated. This momentum subsided, however, in the wake of the uncertainty surrounding the upcoming general elections. In Mexico, even though the signing of the CUSMA reduced aversion to risk, the new government's planned economic policies raised questions. Lastly, in Brazil, the new president's appointment of an economic team that seems determined to implement significant structural reforms has been favourably received by the markets.

Analysis of Overall Performance

Over five years, la Caisse generated results that exceeded depositors' long-term needs, with significant value added.

$309.5 B
NET ASSETS

$98.7 B
5-YEAR
NET INVESTMENT RESULTS

8.4%
5-YEAR
ANNUALIZED RETURN

4 asset classes: Fixed Income / Real Assets / Equities / Other Investments

FIVE-YEAR RETURN

Over the last five years, la Caisse has continued to pursue its investment strategy, which emphasizes globalization, absolute return, less-liquid assets and credit activities, its impact in Québec, and the transition toward a low-carbon economy. By following this strategy, the overall portfolio generated net investment results of $98.7 billion. As at December 31, 2018, net assets stood at $309.5 billion (see Table 7, p. 35), up over 50% from December 31, 2013.

Over five years, the annualized weighted average return on depositors' funds was 8.4%, with performance ranging from 12.0% in 2014 to 4.2% in 2018 (see Table 6, p. 35). The benchmark index posted an annualized return of 7.1%. The 1.3% difference represents $16.7 billion in value added. All the portfolios in each asset class contributed to the overall return.

Fixed Income

Over five years, this asset class generated net investment results of $16.7 billion. The annualized return of 4.2% exceeded that of its index, which was 3.5%, representing $3.0 billion in value added. This result was due in part to the current return on portfolio assets as well as the narrower credit spreads before 2017. La Caisse's decision to diversify its sources of fixed income returns also proved beneficial. This led to increased exposure to market segments with better profiles than those of more traditional bonds, as evidenced by changes in the Credit portfolio since it was first created in 2017.

Real Assets

The Real Assets class generated net investment results of $20.2 billion over five years and a 10.0% annualized return, the same as its benchmark index. The Infrastructure and Real Estate portfolios posted average annual returns of 10.4% and 9.8%, respectively. Their performance was due to both higher values for assets held and current return. In a highly competitive market for real assets, la Caisse was able to make the most of its comparative advantages and complete a high volume of transactions globally, alongside world-class partners.

Equities

The Equities asset class, which represents close to half of the overall portfolio, posted a 10.4% annualized return, the best five-year return of all the investment classes. The class outperformed its benchmark index by 2.3% as a result of the strategy based on quality implemented over the last few years, in terms of both security selection and choice of partners. This has made the Equities class la Caisse's primary source of value added, with $13.2 billion, and the greatest contributor to overall return, with $59.1 billion in net investment results. Both of the class's portfolios stood out, with net investment results of $41.5 billion for Equity Markets and $17.7 billion for Private Equity, due to annualized returns of 9.5% and 12.8%, respectively.

2018 RETURN

La Caisse's strategy was tested in 2018. For the first time since 2011, global stock markets ended the year in negative territory, due in particular to the normalization of monetary policies, geopolitical uncertainties and a tariff escalation provoked by tensions between the world's leading economies.

La Caisse was nevertheless able to deliver a 4.2% return in this environment, outperforming its benchmark index, which posted a 2.4% return (see Table 7). The $5.3 billion of value added created in this environment reflects the institution's strategy of building a robust and resilient portfolio that can perform in difficult markets. In 2018, the overall portfolio generated net investment results of $11.8 billion, with significant contributions from three major asset classes.

TABLE 6

CAISSE RETURNS
(for periods ended December 31 – as a percentage)

	Caisse overall return[1]
5 years (2014-2018)	**8.4**
2018	4.2
2017	9.3
2016	7.6
2015	9.1
2014	12.0

1. Weighted average return on depositors' funds.

TABLE 7

NET ASSETS AND RETURNS IN RELATION TO BENCHMARK INDEXES
(for periods ended December 31, 2018)

		5 years			1 year		
Asset class	Net assets $B	Net investment results $M	Return %	Index %	Net investment results $M	Return %	Index %
Fixed Income	**94.3**	**16,695**	**4.2**	**3.5**	1,897	2.1	0.9
Real Assets	**61.0**	**20,154**	**10.0**	**10.0**	4,771	9.0	10.1
Equities	**151.2**	**59,123**	**10.4**	**8.1**	4,840	3.5	0.3
Active Overlay Strategies	**0.6**	**12**	**N/A**	**N/A**	(163)	N/A	N/A
Asset Allocation	**1.8**	**1,235**	**N/A**	**N/A**	203	N/A	N/A
Total[1,2]	**309.5**	**98,687**	**8.4**	**7.1**	11,790	4.2	2.4

1. The total includes customized overlay operations, cash activities and terminated activities.
2. See General Notes 3 and 6 of the Annual Report, on page 185.

Fixed Income

Despite a high level of uncertainty, which led to major swings in bond markets during the year, the Fixed Income asset class generated net investment results of $1.9 billion. This performance was primarily due to the shift begun in the Credit portfolio the previous year. Its activities, which include corporate credit, sovereign credit, real estate debt and specialty finance, had a positive impact on returns for the Fixed Income portfolios, which were 2.1%, or 1.2% higher than the benchmark index.

Real Assets

The Infrastructure and Real Estate portfolios posted a combined return of 9.0% in 2018, with net investment results of $4.8 billion. For the five-year period, these results were primarily due to higher asset values and the current return. Major transactions were completed during the year in both portfolios, including several in promising sectors such as logistics and renewable energy.

Equities

The Equities asset class generated a 3.5% return in 2018, compared to 0.3% for its benchmark index. This performance reflects the strategy based on quality implemented over the last few years, and resulted in net investment results of $4.8 billion, with $4.6 billion of value added. The Equity Markets portfolio proved resilient with a return of -0.9%, outperforming the -2.5% return of its benchmark index. The Global Quality mandate stood out with very strong results, given the environment, and generated $2.9 billion in value added. The Private Equity portfolio posted the best return of all la Caisse's portfolios, at 16.6%, with net investment results of $5.9 billion.

GEOGRAPHIC DIVERSIFICATION

La Caisse diversifies its investments by investing not only in varied asset classes but also in different parts of the world. In addition to reducing the risk in the overall portfolio, this geographic diversification allows la Caisse to seize attractive opportunities in dynamic economies.

Through its globalization strategy, la Caisse has expanded its presence in international markets by approximately $116 billion over five years. Its geographic exposure has evolved considerably as a result, with exposure outside Canada reaching 64.3% of the portfolio at the end of 2018 compared to 46.6% at the end of 2013 (see Table 8).

TABLE 8

GEOGRAPHIC EXPOSURE OF THE OVERALL PORTFOLIO

(as at December 31 – as a percentage)

	2018	2013
Canada	**35.7**	53.4
United States	**30.2**	21.1
Europe	**14.5**	14.0
Growth markets	**13.6**	6.9
Other regions	**6.0**	4.6
Total	**100.0**	100.0

La Caisse nevertheless remains very active in Québec and Canada, which account for over one third of its total geographic exposure.

During the period, the greatest increase in exposure was in the United States, where it rose 9.1%. Investments also increased at a strong pace in growth markets, where la Caisse's exposure has nearly doubled over the last five years. To deploy capital in these markets, la Caisse employs a partnership strategy and targets high-potential countries such as China, India, Brazil, Mexico and Colombia.

CURRENCY EXPOSURE AND FOREIGN EXCHANGE HEDGING

As at December 31, 2018, la Caisse's exposure to foreign currencies amounted to 55% of total net assets, up 6% from the end of 2017. Over the last several years this share has grown considerably with the globalization of la Caisse's activities.

All of the liquid portfolios, with the exception of certain fixed income securities, now have foreign exchange exposure. This is also the case for all the less-liquid portfolios as a result of the gradual de-hedging from 2016 to 2018.

Note that la Caisse's exposure to foreign currencies had a positive impact on the overall return in 2018 as well as over five years, mainly due to the U.S. dollar's appreciation relative to the Canadian dollar.

BENCHMARK PORTFOLIO

La Caisse's benchmark portfolio corresponds to the weighted average of the asset allocation decisions made by each of the depositors when their investment policies are established.

In 2018, the depositors reviewed the composition of their respective benchmark portfolios, and this has influenced the composition of la Caisse's benchmark portfolio. As at December 31, 2018, it presented increases in the weighting of the Real Assets class and, to a lesser extent, in the weighting of the Equities class compared to the previous year. In contrast, the weighting of the Fixed Income class decreased. These changes reflect la Caisse's strategic directions (see Table 9, p. 38).

OVERALL PORTFOLIO

The composition of la Caisse's overall portfolio reflects decisions made by the depositors about their benchmark portfolios and by la Caisse in relation to the upper and lower limits set for each specialized portfolio. The last two columns of Table 9, on page 38, present the changes in the composition of the overall portfolio over one year.

TABLE 9

COMPOSITION OF THE BENCHMARK PORTFOLIO AND CHANGES IN THE OVERALL PORTFOLIO

(percentage of depositors' net assets)

	Benchmark portfolio				Overall portfolio	
	as at December 31, 2018[1]			as at December 31, 2017[1]		
	Lower limit %	Benchmark portfolio %	Upper limit %	Benchmark portfolio %	as at December 31, 2018 %	as at December 31, 2017 %
Fixed Income						
Rates	**7.8**	**12.6**	**18.8**	13.5	**10.7**	13.4
Credit	**11.9**	**16.7**	**23.1**	16.0	**18.2**	17.0
Short Term Investments	**0.2**	**1.1**	**8.6**	1.2	**0.3**	0.6
Long Term Bonds	**0.7**	**0.9**	**4.5**	1.0	**0.9**	1.0
Real Return Bonds	**0.3**	**0.4**	**2.2**	0.4	**0.4**	0.4
Total		**31.7**		32.1	**30.5**	32.4
Real Assets						
Real Estate	**8.4**	**12.1**	**14.8**	12.0	**12.4**	11.5
Infrastructure	**3.4**	**6.5**	**9.2**	6.3	**7.3**	5.4
Total		**18.6**		18.3	**19.7**	16.9
Equities						
Equity Markets	**25.7**	**37.2**	**45.1**	37.6	**35.1**	37.6
Private Equity	**9.1**	**12.5**	**15.6**	12.0	**13.9**	12.5
Total		**49.7**		49.6	**49.0**	50.1
Other Investments						
Active Overlay Strategies	**0.0**	**0.0**	**0.5**	0.0	**0.2**	0.2
Asset Allocation	**0.0**	**0.0**	**1.0**	0.0	**0.6**	0.4
Total		**100.0**		100.0	**100.0**	100.0

1. The benchmark portfolio and its upper and lower limits are the result of the weighted average of the depositors' respective benchmark portfolios.

Fixed Income

The results for this asset class benefited from the decision to diversify sources of returns.

$94.3 B
NET ASSETS

30.5%
OF LA CAISSE'S OVERALL PORTFOLIO

4.2%
5-YEAR ANNUALIZED RETURN

5 portfolios: Rates / Credit / Short Term Investments / Long Term Bonds / Real Return Bonds

All the figures in this section are detailed in Table 17 (p. 52).

RATES

Return since inception

This actively managed portfolio has two main activities: interest rate management and sovereign credit. Since its inception in 2017, it has delivered $1.4 billion of net investment results.

2018 return

The portfolio generated a 2.3% return and net investment results of $751 million, essentially due to the current return on securities. The impact of changes in rates was virtually neutral, since rates were steady for the year. The generally favourable economic environment in Canada resulted in a gradual increase in rates over the first three quarters. However, uncertainty in the markets at the end of the year led to a general decrease in rates and wider credit spreads on provincial bonds.

RATES PORTFOLIO

COMPOSITION

- More traditional government bonds with excellent credit quality:
  - Governments of Canada and other developed countries
  - Governments of Canadian provinces

ADVANTAGES

- Low risk level and protection of the overall portfolio
- Main source of la Caisse's liquidity
- Diversification
- Source of current yield
- Potential to match assets with the long-term financial commitments of depositors

As can be seen in Table 10, which presents FTSE TMX Canada bond index returns, provincial bonds, including those of Québec, generated the lowest returns in 2018, followed by corporate bonds. Among the various issuer categories, federal government bonds delivered the best performance. In 2018, the FTSE TMX Canada Universe Index posted a modest 1.4% return, compared to 3.5% over five years.

CREDIT

Return since inception

This portfolio, which was also launched in 2017, includes investment activities grouped into four main mandates: Corporate Credit, Real Estate Debt, Specialty Finance and Sovereign Credit. It generated net investment results of $3.4 billion.

2018 Return

In 2018, the portfolio generated a 2.3% return and $1.1 billion of net investment results. It outperformed its benchmark index by 2.0%, adding $1.0 billion in value. Of these mandates, Real Estate Debt profited from the high current return on this type of activity. Specialty Finance also delivered strong performance. In Sovereign Credit, despite volatility in growth market bonds during the year, the return benefited from a sharp drop in yields in certain countries such as Brazil and India.

CREDIT PORTFOLIO

COMPOSITION

- Expanded universe of instruments with features of fixed income securities according to the mandate:
  - Corporate Credit: quality or high-yield bonds (public companies) and direct or syndicated loans (private companies)
  - Real Estate Debt: mortgage and commercial construction loans, mostly senior, on office, retail, industrial and residential buildings
  - Specialty Finance: debt, hybrid or equity securities with certain features of debt instruments, and project financing
  - Sovereign Credit: a focus on sovereign and quasi-sovereign securities from growth markets

ADVANTAGES

- Market segments featuring better performance and a return that is superior to the traditional bond market
- Diversified sources of value
- Potential to match assets with the long-term financial commitments of depositors
- In real estate debt, low credit risk due to a prudent underwriting approach and the quality of the assets

TABLE 10

FTSE TMX CANADA BOND INDEX RETURNS
(as a percentage)

				2018				2017				5 years
FTSE TMX Canada bond indexes	**Short-term**	**Medium-term**	**Long-term**	**Total**	Short-term	Medium-term	Long-term	Total	Short-term	Medium-term	Long-term	Total
Federal	**1.9**	**2.4**	**3.4**	**2.4**	(0.6)	(0.7)	2.7	0.1	1.3	3.0	5.5	2.6
Provincial	**2.0**	**1.9**	**(0.6)**	**0.7**	0.1	1.3	8.0	4.3	1.9	3.8	6.2	4.5
Québec	**2.0**	**1.9**	**(0.2)**	**0.9**	0.2	1.4	8.2	4.3	2.0	3.9	6.7	4.8
Corporate	**1.8**	**1.3**	**(0.4)**	**1.1**	1.0	2.6	8.8	3.4	2.3	4.3	6.3	3.7
Universe	**1.9**	**1.9**	**0.3**	**1.4**	0.1	1.0	7.0	2.5	1.7	3.7	6.1	3.5

In 2018, la Caisse pursued its strategy to expand credit activities through major transactions, including:

- Tillman Infrastructure: With AMP Capital, an investment of US$500 million, which could double depending on the company's growing needs, to finance the construction of telecommunications towers across the United States;
- SSQ Insurance: Financing of up to $150 million so that the company, which is one of the largest insurance companies in Québec, can optimize its capital structure and execute its strategic plan;
- ContourGlobal: A loan of $150 million (€100 million) for the acquisition of solar power assets in Spain through this growth platform that targets long-term contract-backed energy assets.

SHORT TERM INVESTMENTS

This indexed portfolio consists of liquid short-term investments on the Canadian money market. A reflection of the low rate environment that has characterized the last few years, the portfolio's annualized five-year return was 0.9%, representing net investment results of $172 million. In 2018, the rise in the Bank of Canada's key interest rates boosted the current return on the assets. This led to a 1.5% return for the portfolio.

LONG TERM BONDS

This portfolio of long-term provincial bonds is managed using an index-style approach. It has generated a five-year annualized return of 6.4% and net investment results of $702 million. The portfolio benefited from the significant current yield of securities, stable over time, as well as an advantageous price effect due to the decrease in long-term rates in Canada and Québec over the period. In 2018, the high volatility of rates had an unfavourable effect on the portfolio, given its long-term maturity. This resulted in a negative market effect, which erased the current yield of securities over one year, resulting in a neutral return.

REAL RETURN BONDS

The goal of this indexed portfolio is to protect the overall portfolio against rising Canadian inflation rates. Over five years, it generated a 3.8% annualized return and net investment results of $193 million due to rising inflation in Canada. In 2018, despite a positive inflation effect, the portfolio posted a slightly negative return. This was due to an unfavourable market effect resulting from the increase in real rates in the wake of the Bank of Canada's key rate hikes.

Real Assets

In addition to generating solid results, this asset class provides diversification for the overall portfolio.

$61.0 B
NET ASSETS

19.7%
OF LA CAISSE'S OVERALL PORTFOLIO

10.0%
5-YEAR ANNUALIZED RETURN

2 portfolios: Real Estate / Infrastructure

All the figures in this section are detailed in Table 17 (p. 52).

REAL ESTATE

Five-year return

Managed by Ivanhoé Cambridge, a Caisse real estate subsidiary, this portfolio underwent a major repositioning that began a few years ago centred around some key themes. They include a major shift toward the industrial and logistics sector, innovative development projects and greater geographical diversification. As a result, the portfolio generated a 9.8% annualized return and $13.4 billion of net investment results.

Among the properties that added the most value during the period were office buildings in the United States, France and Canada, residential properties in the United States and Canadian shopping centres. More recently, returns on investments in the industrial and logistics sector, in growth markets and in development projects also had notable positive impacts. The current return on assets held also contributed to performance. The portfolio's return differed from the return on its benchmark index by -0.9%. This was due to various factors, including a more long-term debt structure and different geographical and sectoral positionings.

Figures 11 and 12 on page 43 present changes in the Real Estate portfolio's exposure over five years, by region and by sector.

REAL ESTATE PORTFOLIO

COMPOSITION

- Quality buildings and portfolios or companies, mostly located in key cities around the world
- Investments in equities and debt, primarily in shopping centres and in office, residential, industrial and logistics buildings

ADVANTAGES

- Source of current return
- Attractive risk-return profile and substantial cash flows
- Diversification of the risk in la Caisse's overall portfolio due to a lower correlation between the assets held and global markets
- Some long-term capital protection against inflation due to lease indexing

2018 return

During the year, Ivanhoé Cambridge's transaction volume totalled $16.6 billion. Of this amount, $7.3 billion was from strategic sales made to reposition the portfolio, including 19 assets in the U.S. office building segment and two Canadian shopping centres. New investments reached $9.3 billion and were focused on key themes, with major investments in the industrial and logistics sector. The following are a few highlights from 2018:

- Pure Industrial Real Estate Trust ($1.6 billion): Acquisition, in partnership with Blackstone Property Partners, of this trust that manages a real estate investment fund in industrial and logistics properties in Canada and the United States;
- Prologis: Creation of a partnership with this firm that has become the global leader in logistics real estate to invest US$890 million to acquire, develop and operate properties in this sector in Brazil;
- IDI Logistics ($2.3 billion): A 50-50 partnership with Oxford, the real estate arm of OMERS, for a total investment of $4.6 billion in this U.S. logistics company and all of its assets;
- Texas Tower: Beginning of construction of a high-quality office tower in downtown Houston that is aiming for LEED Platinum certification, in partnership with Hines;
- In Asia Pacific: Growth of almost $2 billion in investments and commitments in Australia, China, India, Indonesia and Singapore, mainly for logistics development projects and mixed-used projects with its partners, LOGOS, Piramal and Chongbang.

For the year, the return was 7.8%, amounting to net investment results of $2.7 billion. These results stem largely from appreciation in the value of assets in the office, residential and industrial sectors. In terms of geography, properties in the United States made a significant contribution, particularly in the residential sector. In terms of sectors, office buildings contributed most to the return. The difference between the return on the portfolio and that of its benchmark index was due to various factors, including less geographic diversification, less exposure to the industrial and logistics sector, and the publicly listed companies held, whose securities were volatile.

FIGURE 11

GEOGRAPHIC EXPOSURE – REAL ESTATE
(as a percentage)

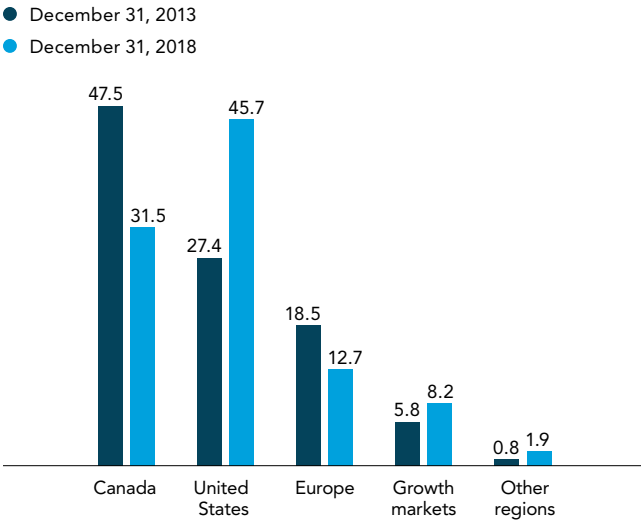
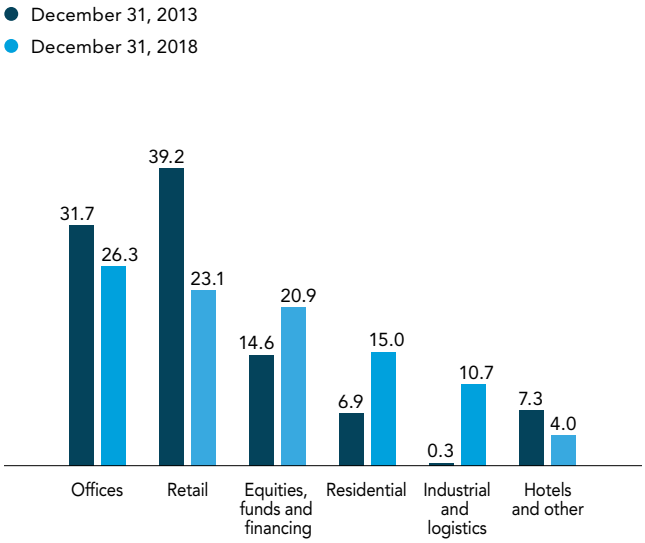


FIGURE 12

SECTORAL EXPOSURE – REAL ESTATE
(as a percentage)



INFRASTRUCTURE

Five-year return

This portfolio generated net investment results of $6.7 billion and an annualized return of 10.4%. This performance was primarily due to the current return on the companies held, especially those that operate with regulated and contracted assets. The contributions of HAH (Heathrow airport), Colonial Pipeline, London Array in the offshore wind sector and Trencap (Énergir) are worth noting. This confirms the relevance of the strategy of focusing on quality investments that offer consistent revenues over the long term. The portfolio also benefited from the appreciation in value of the assets held, in particular Airport Holdings, which operates the Budapest airport, the Port of Brisbane, in Australia, and Invenergy Renewables, in the United States. Over five years, it has generated $1.7 billion in value added compared to its index due to the quality of the partnerships in direct investments, effective monitoring of asset management teams, and favourable geographic and sectoral allocations.

Figures 13 and 14 illustrate changes in the portfolio's diversification over the last five years.

2018 return

In 2018, the portfolio generated net investment results of $2.0 billion. It benefited from the same factors that contributed to its good performance over five years: first, the high current return on assets, but also strong appreciation in their value. At 11.2%, it outperformed its benchmark index by 4.7%. This represents $929 million in added value.

In 2018, la Caisse made world-class investments in infrastructure, including:

- Invenergy Renewables: Increasing in its stake to 53.6% in this renewable energy leader, the largest independent private company in this sector in North America;
- Co-investment platform in Colombia: Creation of a platform to invest up to US$1 billion in infrastructure projects and companies, jointly with all the Colombian pension plans under the leadership of FDN, a firm specialized in infrastructure financing and development;

FIGURE 13

GEOGRAPHIC EXPOSURE – INFRASTRUCTURE
(as a percentage)

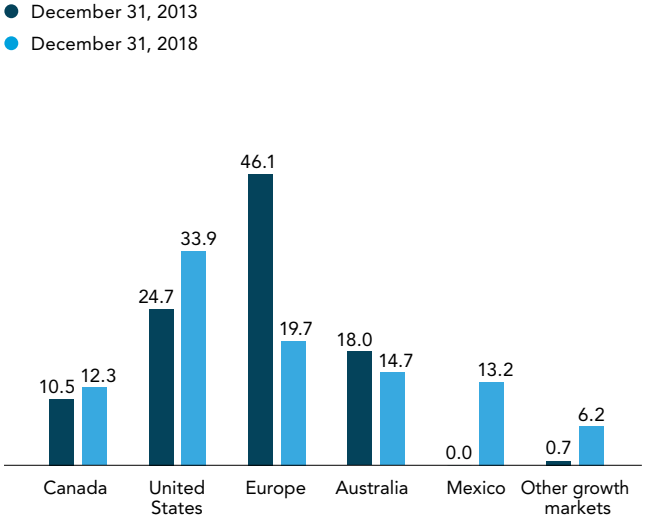
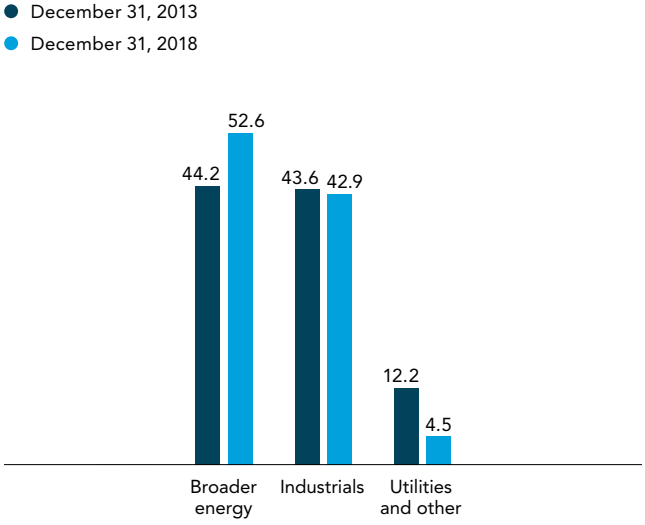


FIGURE 14

SECTORAL EXPOSURE – INFRASTRUCTURE[1]
(as a percentage)



1. Data for 2013 were adjusted to reflect the new classification of assets in the portfolio.

- Azure Power Global: A US$100-million investment to increase la Caisse's stake in this Indian solar energy producer to 40.3%;
- Renewable portfolio in Mexico: Acquisition of 80% of a portfolio of wind and solar farms owned by Enel Green Power, through a platform shared by la Caisse and CKD IM, a consortium of Mexican institutional investors;
- Student Transportation: Privatization and delisting from the Toronto Stock Exchange of this leader in school transportation that operates over 13,500 vehicles in the United States and Canada (la Caisse 79.9%, Ullico 20.1%).

Futhermore, some major milestones were achieved in the Réseau express métropolitain (REM) project led by la Caisse's subsidiary, CDPQ Infra. In addition to announcing the consortia, la Caisse completed the project financing of $6.3 billion and broke ground in the spring of 2018.

INFRASTRUCTURE PORTFOLIO

COMPOSITION

- Interests in companies that operate various types of infrastructure (ports, airports, highways, wind and solar farms, energy transmission and distribution networks, social infrastructure and passenger transportation systems)
- Quality companies with low risk profiles that are less sensitive to changing economic conditions

ADVANTAGES

- Stable and predictable revenues over the long term
- Steady cash flows and a better risk-return profile than other asset classes due to the regulatory frameworks governing many sectors
- Distinct risk profile that can be used to diversify risk in the overall portfolio
- Some long-term capital protection against inflation

Equities

This quality-focused asset class generated the highest five-year return and strong value added.

$151.2 B
NET ASSETS

49.0%
OF LA CAISSE'S OVERALL PORTFOLIO

10.4%
5-YEAR ANNUALIZED RETURN

2 portfolios: Equity Markets / Private Equity

All the figures in this section are detailed in Table 17 (p. 52).

EQUITY MARKETS

Five-year return

La Caisse benefited from its strategy based on the construction of a portfolio that will be robust in the long term and focused on absolute-return management. Over the last five years, the Equity Markets portfolio delivered net investment results of $41.5 billion, with an annualized return of 9.5%. It outperformed its index by 1.9%, amounting to $7.8 billion of value added.

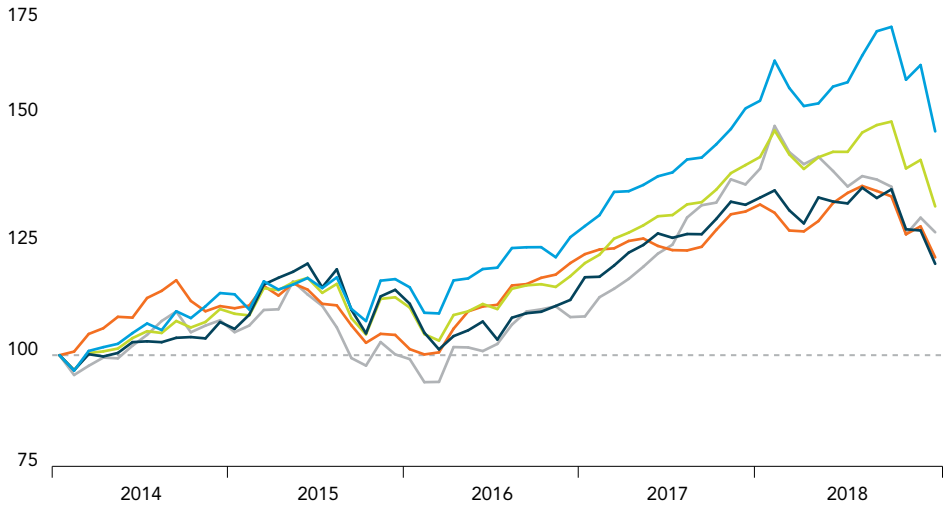
This performance took place in generally favourable market conditions for Equity Markets, except for 2018. From 2014 to 2018, the main global indexes all posted positive average gains (see Figure 15). The U.S. S&P 500 stood out with an annual average return of 8.5% (in local currency). The portfolio also benefited greatly from its significant exposure to the United States, where the economy experienced strong growth over the last five years.

FIGURE 15

EQUITY MARKETS PERFORMANCE 2014-2018
(December 31, 2013 = 100, in local currencies)

- S&P 500
- MSCI EAFE
- MSCI ACWI
- S&P/TSX
- MSCI EM

Source: Rimes



2018 return

In 2018, the main stock market indexes posted some of their worst annual returns since the 2008-2009 financial crisis. Despite strong growth in corporate earnings around the world, valuation multiples were down in an environment where U.S. monetary policy was being normalized, certain tariffs were higher and trade and geopolitical tensions were on the rise.

In a volatile market environment, the portfolio proved resilient, posting a return of -0.9% compared to -2.5% for its index, amounting to $1.8 billion of value added. This result is a reflection of la Caisse's strategy. The mandates in the portfolio are based on the same basic principle: the selection of quality assets. This focus on quality explains the positive difference with the index, both for 2018 and over five years.

GLOBAL QUALITY MANDATE

Five-year return

A pillar of la Caisse's absolute-return management strategy, this mandate is the largest in the Equity Markets portfolio. Since its creation in 2013, it has captured almost all market highs but only a fraction of market lows. Over five years, the mandate has generated net investment results of $17.0 billion. With an annualized return of 11.8%, it outperformed its index by 3.4%, creating $4.8 billion of value added. This is by far the strongest contribution of all the mandates to the portfolio's total value added. In particular, the mandate benefited from its exposure to the U.S. market, as American companies accounted for over 50% of the securities held.

2018 return

The mandate posted a return of 6.4%, the highest in the portfolio in 2018. This generated net investment results of $2.5 billion and strong value added of $2.9 billion compared to the index. These results for 2018 and over five years were largely due to the selection of quality securities and sectoral positioning resulting from absolute-return management. This performance shows the resilience of the mandate, which fully plays its defensive role in the portfolio, demonstrating how valuable its behaviour is during the turbulent periods observed in the second half of the year.

GLOBAL QUALITY MANDATE

COMPOSITION

- Securities in high-quality companies, exposed to global economic growth, traded on the stock exchanges of the countries included in the MSCI ACWI Index (the United States, Canada, Europe, Australasia, the Far East and emerging markets)
- Highly profitable and stable companies that have strong fundamentals over time and demonstrate a conservative use of financial leverage

ADVANTAGES

- Risk-adjusted return exceeding that of public equities over a long-term horizon
- Geographic diversification
- Protection against inflation over the long term
- Investments that are less sensitive to market fluctuations, and provide higher liquidity during periods of market turmoil

CANADA MANDATE

Five-year return

The mandate obtained an annualized return of 6.0% compared to 4.5% for its index. The selection of securities based on the absolute-return management approach has proven successful, as has the selection of Canadian companies well positioned to take advantage of the vitality in the U.S. economy. Accordingly, the mandate generated net investment results of $7.0 billion and value added of $1.7 billion. This essentially stems from Québec securities, which were responsible for nearly two thirds of the return for the period. Securities that provided high contributions included CN, CGI, Alimentation Couche-Tard and Gildan, companies that all have a quality management team and significant activities in the United States.

2018 return

Like the Canadian stock exchange, which posted a negative return for 2018, the mandate earned -7.2% for the year. This downturn is primarily attributable to the finance sector. However, it should be noted that the mandate generated considerable value added. Its 1.7% difference with the index was particularly due to the strong performance of companies such as CGI and Alimentation Couche-Tard, as well as by an advantageous selection of stocks related to natural resources.

GROWTH MARKETS MANDATE

Five-year return

Over the last five years, the mandate's return was driven by the performances of the major Asian markets, including China and India, as well as by Taiwanese and South Korean information technology companies. In addition, careful partner selection made a difference thanks to their expertise and extensive knowledge in their fields. Accordingly, the mandate recorded an annualized return of 7.7%, 1.4% above its benchmark. This difference represents $1.0 billion of value added, which was largely generated by external managers in China. Since 2014, $5.3 billion in net investment results have been generated.

2018 return

After achieving the portfolio's best performance in 2017, the mandate recorded the sharpest decline of the Equity Markets portfolio mandates in 2018, with a return of - 7.9%. Uncertainty around trade and geopolitical tensions created a risk-averse environment, which drove investors out of growth markets and into countries considered safer, such as the United States. Lower returns largely stemmed from China and South Korea. However, the mandate generated positive value added of 1.0% above its benchmark, resulting from external management and alternative beta activities.

CANADA MANDATE

COMPOSITION

- Securities of publicly listed Canadian corporations, with an emphasis on the construction of a quality, concentrated portfolio that reflects distinctive aspects of the Canadian universe
- Businesses exposed to growth, with fundamental qualities and competitive advantages that will persist in the long term
- The mandate is 37.7% composed of Québec companies, compared to 16.0% for the S&P/TSX Index

ADVANTAGES

- Better understanding of investments and role of influence due to market proximity
- Protection against inflation over the long term

GROWTH MARKETS MANDATE

COMPOSITION

- Growth market securities traded on the stock exchanges of countries mainly in the MSCI EM Index (emerging markets)
- Class A shares listed on the Shanghai and Shenzhen stock exchanges

ADVANTAGES

- Return exceeding those of the equity markets of developed countries over the long term
- Geographic diversification
- Significant absolute-return management component of the mandate implemented alongside well-established local partners that have deep knowledge of the target markets

ALTERNATIVE BETA MANDATE

Return since inception

This mandate emphasizes a strategy that consists of weighting securities based on various fundamental measures, such as sales, cash flows and dividends, rather than on market capitalization. Since it was created in 2016, it has generated net investment results of $3.5 billion.

2018 return

The geographic allocation resulting from the securities' weighting, particularly high in Europe, had a negative impact on the mandate in 2018. This was reflected in a neutral return.

ALTERNATIVE BETA MANDATE

COMPOSITION

- Securities in the developed markets included in the MSCI World Index, excluding Canada

ADVANTAGES

- Reduced exposure to securities that the market values highly, regardless of their fundamental values
- Investments evenly distributed among the sectors to avoid overconcentration in any particular sector

PRIVATE EQUITY

Five-year return

This portfolio generated net investment results of $17.7 billion. It posted an annualized return of 12.8%, compared to 8.9% for its benchmark index, representing a value added of $5.4 billion. Over the past several years, the composition of the Private Equity portfolio has changed considerably, as the share of funds has decreased while direct interests in companies have increased. Large deployments were also made during the period. Furthermore, the portfolio's geographic exposure changed, with more investments outside North America, mainly in Europe, as shown in Figure 16, on page 50.

This significant change in the portfolio explains the quality of the performance over five years and in 2018. Direct investments, which now represent three quarters of the portfolio's activities, delivered a high return, better than investment funds. However, investment funds still contributed significantly to the portfolio's results due to a sustained return.

2018 return

The portfolio performed particularly well in 2018, posting a 16.6% return, nearly twice that of its index. This generated $2.8 billion of value added on net investment results of $5.9 billion. The portfolio's two activities, direct investments and funds, both contributed to this performance. Direct investments benefited from a high return on assets, both for Québec companies and international companies. In addition, the materialization of certain investments also contributed to the return.

During the year, the Private Equity teams deployed over $9.0 billion in international markets, with major investments in well-known companies, including:

- Techem: Acquisition of a stake in this German leader in the global market for energy sub-metering services valued at around €4.6 billion;
- Alvest: A significant capital stake of this French company specialized in airport ground support equipment that supports the aeronautic sector in its technological and environmental shift, thereby reducing carbon emissions on the tarmac;

- FNZ: Acquisition of this FinTech firm with a business value of £1.65 billion, as part of a long-term partnership with Generation Investment Management, which plans to invest US$3.0 billion in the coming years;
- Power Solutions: In partnership with Brookfield, a commitment to acquire all of this entity, valued at $13.2 billion, from the American company Johnson Controls. Power Solutions specializes in manufacturing automotive batteries, including for hybrid and electric vehicles;
- Delachaux Group: Acquisition of a significant minority stake in this family-owned, French-based company active in the rail infrastructure equipment industry;
- Avison Young: A $250-million investment to back the global expansion of this Canadian commercial real estate services company.

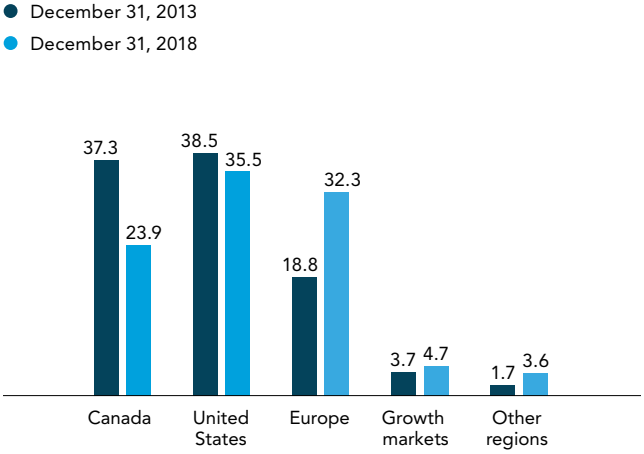
In Québec, la Caisse was very active in private equity in 2018. In line with one of the pillars of its strategy, its teams worked with many Québec companies on their growth and expansion projects, including:

- Ocean Group: $112 million invested 50-50 with Fonds de solidarité FTQ for a minority stake taken in this Québec City maritime company to expand its Canadian activities and foster its international development;
- Plusgrade: A $200-million investment in this global travel upgrade solutions leader so that it can break into new international markets and widen its range of products;
- AddÉnergie: A second investment in this leader in electric vehicle charging solutions so that it can pursue growth, particularly in the United States.

In addition, la Caisse continued to build on innovation and the next generation, another pillar of its strategy, with a particular emphasis on the new economy in 2018. To foster the digital transition of the Québec economy, la Caisse invested in technology companies such as Poka, Hopper and Breather. It also backed La Maison Simons in the implementation of its multi-service fulfillment centre, as well as Frank And Oak in the implementation of artificial intelligence into its online shopping experience.

FIGURE 16

GEOGRAPHIC EXPOSURE – PRIVATE EQUITY
(as a percentage)



PRIVATE EQUITY PORTFOLIO

COMPOSITION

- Direct interests, primarily in private companies, but also in listed companies
- Companies active in all sectors of the economy, especially defensive sectors, and quality companies with stable, predictable revenues, as well as growing companies
- Stakes in high-performing investment funds
- Assets invested in Québec represent one quarter of the portfolio

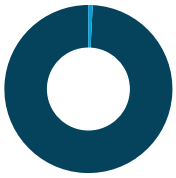
ADVANTAGES

- Expected long-term returns that exceed those of the stock markets
- Focus on quality partnership and long-term value creation, particularly through organic growth, acquisitions and operational efficiency

Other Investments

Over five years, the portfolios delivered positive results, with activities that were complementary to those of other portfolios.

$2.4 B
NET ASSETS



0.8%
OF LA CAISSE'S OVERALL PORTFOLIO

2 portfolios: Active Overlay Strategies / Asset Allocation

All the figures in this section are detailed in Table 17 (p. 52).

ACTIVE OVERLAY STRATEGIES

Five-year results

This portfolio consists of non-capitalized investment activities with an absolute-return objective. Since its inception in 2014, it has generated net investment results of $12 million. It has benefited mainly from good performance in external funds.

Results in 2018

In 2018, the portfolio incurred losses arising from the negative returns recorded by the External Funds and Tactical Management components.

ASSET ALLOCATION

Five-year results

Asset Allocation includes two types of activities: active strategies, to improve the profile of the overall portfolio, and investments, to balance the weight of less-liquid assets. The Asset Allocation portfolio includes certain positions in these activities – as the other positions are taken in various specialized portfolios.

ACTIVE OVERLAY STRATEGIES PORTFOLIO

COMPOSITION
- Non-capitalized portfolio
- Investments in external funds
- Internally managed positions on financial markets, mainly in the form of financial instruments that are liquid and transparent

ADVANTAGES
- Moderate risk-return profile
- Possibility of generating returns above those of bonds with less risk than with equity markets
- Diversification
- Low correlation with equity markets

ASSET ALLOCATION PORTFOLIO

COMPOSITION
- Non-capitalized portfolio
- Positions on financial markets, mainly in the form of financial instruments that are liquid and transparent

ADVANTAGES
- Calibration of the risk-return profile of la Caisse's overall portfolio
- Enhancement of the overall portfolio's return
- Exposure to asset classes that diversify the overall portfolio

Over five years, the portfolio generated $1.2 billion in net investment results. This performance is mainly due to asset allocation strategies on liquid markets, which mainly benefited from positions on the U.S. dollar.

2018 results

Net investment results of $203 million mainly stem from relative investment strategies between various market segments. Stock market volatility in 2018 and the currency strategy were beneficial.

RETURN BY SPECIALIZED PORTFOLIO

Table 17 presents the returns of the specialized portfolio and mandates compared to their benchmark indexes for the five-year and one-year periods ended December 31, 2018.

TABLE 17

SPECIALIZED PORTFOLIO RETURNS IN RELATION TO BENCHMARK INDEXES
(for periods ended December 31, 2018)

		5 years			1 year		
Specialized portfolios	Net assets $M	Net investment results $M	Return %	Index %	Net investment results $M	Return %	Index %
Fixed Income							
Rates	32,985	1,416	N/A	N/A	751	2.3	2.1
Credit	56,378	3,395	N/A	N/A	1,134	2.3	0.3
Short Term Investments	867	172	0.9	0.8	15	1.5	1.4
Long Term Bonds	2,863	702	6.4	6.4	(2)	(0.0)	0.0
Real Return Bonds	1,192	193	3.8	3.8	(1)	(0.1)	(0.0)
Total[1]	94,285	16,695	4.2	3.5	1,897	2.1	0.9
Real Assets							
Real Estate	38,225	13,406	9.8	10.7	2,735	7.8	12.0
Infrastructure	22,741	6,748	10.4	8.5	2,036	11.2	6.5
Total	60,966	20,154	10.0	10.0	4,771	9.0	10.1
Equities							
Global Quality mandate[1]	39,759	17,030	11.8	8.3	2,453	6.4	(0.8)
Canada mandate[1]	20,426	6,954	6.0	4.5	(1,644)	(7.2)	(8.9)
Growth Markets mandate[1]	19,315	5,258	7.7	6.3	(1,734)	(7.9)	(8.9)
Alternative Beta mandate	16,337	3,460	N/A	N/A	(23)	(0.7)	(0.1)
Equity Markets[2]	108,301	41,459	9.5	7.6	(1,028)	(0.9)	(2.5)
Private Equity[2]	42,927	17,664	12.8	8.9	5,868	16.6	8.7
Total	151,228	59,123	10.4	8.1	4,840	3.5	0.3
Other investments							
Active Overlay Strategies	586	12	N/A	N/A	(163)	N/A	N/A
Asset Allocation[3]	1,781	1,235	N/A	N/A	203	N/A	N/A
Total[4]	309,511	98,687	8.4	7.1	11,790	4.2	2.4

1. Includes the history of closed portfolios.
2. Includes the activities of the Relationship Investing mandate, of the Strategic mandate over three years and of the Global Value mandate over two years, and the five-year returns of the closed equity markets portfolios.
3. Results include the specialized portfolio and overlay operations.
4. The total includes customized overlay operations, cash activities and terminated activities.

Risk Management

In a turbulent environment, la Caisse pursued its strategy of targeting an optimal risk-return relationship.

HIGHLIGHTS

1
In 2018, market risk was stable and slightly below that of the benchmark portfolio.

2
During the year, several stress tests demonstrated the portfolio's resilience relative to the market under various scenarios.

3
Market movements at the end of the year showed that the portfolio is as resilient as expected.

CHANGES IN RISK MEASUREMENT

La Caisse attaches great importance to risk management, which is an integral part of its activities in both its portfolio management and business processes. The teams undertake many initiatives to strengthen this aspect of operations. Over the years, la Caisse has attained a high level of risk management and developed a strong risk culture.

In managing its risks, la Caisse takes into account factors such as global economic conditions, changes in financial markets, and sectoral and geographic concentrations in the portfolio. During the year, its teams monitored various risks, many of which will continue to be monitored in 2019:

- The central banks' normalization process and adjustments to monetary policies;
- A possible correction in valuations should markets turn risk-averse;
- Geopolitical tensions around the world;
- Trade tensions between the United States and China;
- A potential slowdown in the global economy;
- The Brexit negotiations and ever-present instability in Europe;
- The impact of climate change and disruptive technologies on the business environment;
- Tensions related to social inequalities around the world and the rise of populist movements;
- An ongoing competitiveness issue in Canada, the Canadian dollar, changes in the oil sector and household debt.

Market risk

Over the last several years, la Caisse has decided to reduce its risk level consistent with its assessment of risks and market valuations. From the end of 2013 to the end of 2018, the level of market risk in the overall portfolio fell, despite an increase in investments in less-liquid assets. The higher expected risk in these investments was offset by a lower weight in equity market investments, in accordance with la Caisse's strategic directions.

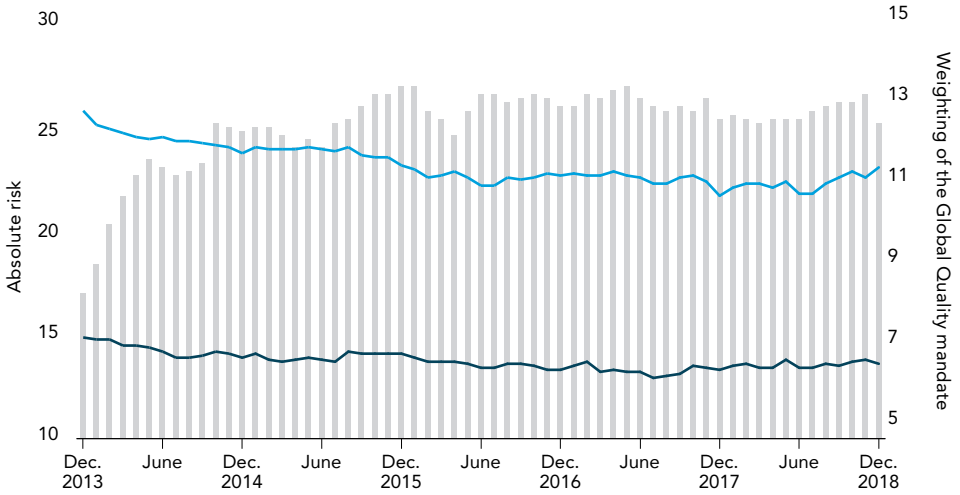
Other factors explaining this decline in market risk are:

- La Caisse's adoption of an absolute-return management approach;
- An emphasis on the quality of investments and securities, in particular the Global Quality strategy (see Figure 18), one of the pillars of absolute-return management, which proved particularly resilient during strong market movements;
- Increased exposure to foreign currencies;

FIGURE 18

IMPACT OF THE GLOBAL QUALITY MANDATE'S WEIGHTING ON RISK[1]
(as a percentage)

- Absolute risk – Equities
- Absolute risk – Caisse
- Weighting – Global Quality mandate

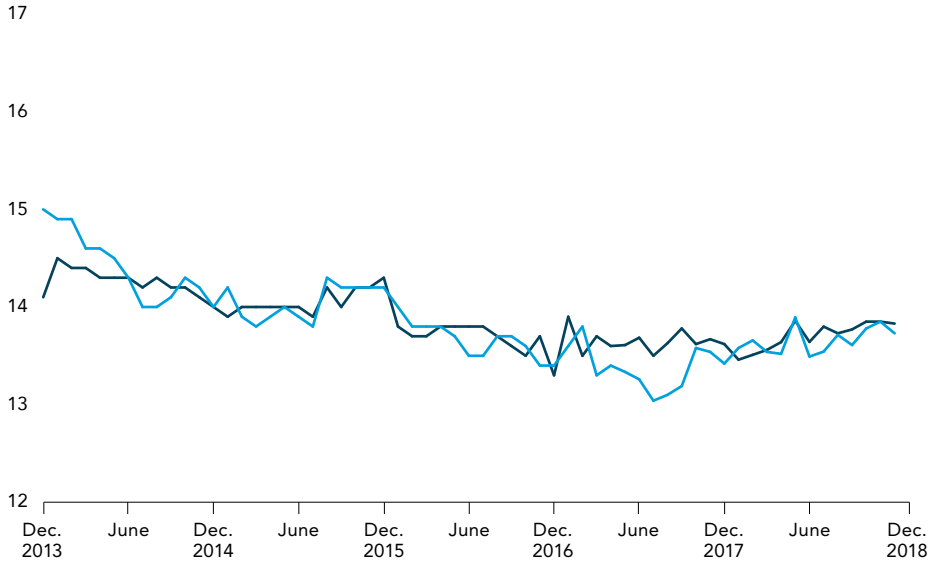


1. The risk figures preceding July 2017 were adjusted to reflect the changes in the risk calculation methodology that occurred in 2017.

FIGURE 19

CAISSE ABSOLUTE RISK AND BENCHMARK PORTFOLIO RISK[1]
(as a percentage)

- Caisse absolute risk
- Benchmark portfolio risk



1. The risk figures preceding July 2017 were adjusted to reflect the changes in the risk calculation methodology that occurred in 2017.

As shown in Figure 19, on page 54, the absolute risk of the overall portfolio was noticeably higher than that of the benchmark portfolio on December 31, 2013. Over the following five years, these levels generally moved in tandem, even though the spread between them has narrowed and widened at times. As at December 31, 2018, the absolute risk of the overall portfolio was 13.7% of net assets, compared to 13.8% for the benchmark portfolio. This level of market risk reflects the cautious approach adopted in the current economic and political environment.

Figure 21 shows how the absolute risk ratio for the overall portfolio compared to the absolute risk of its benchmark portfolio followed this five-year downward trend. By the end of 2018 the risk ratio was 0.99, unchanged from one year earlier. Note that la Caisse uses this ratio to set the absolute risk limit used to manage the market risk of its portfolio. A level of 1.00 indicates that the risk-taking to generate the value added is identical to that of the benchmark portfolio.

In 2018, market risk was at a level comparable to that of the previous year, despite certain changes in the asset classes (see Table 20). This demonstrates that, in accordance with its strategy, la Caisse deployed capital while maintaining a consistent level of overall risk. The slight increase in market risk was primarily due to the increase in absolute risk in the Equities asset class, essentially in private equity.

TABLE 20

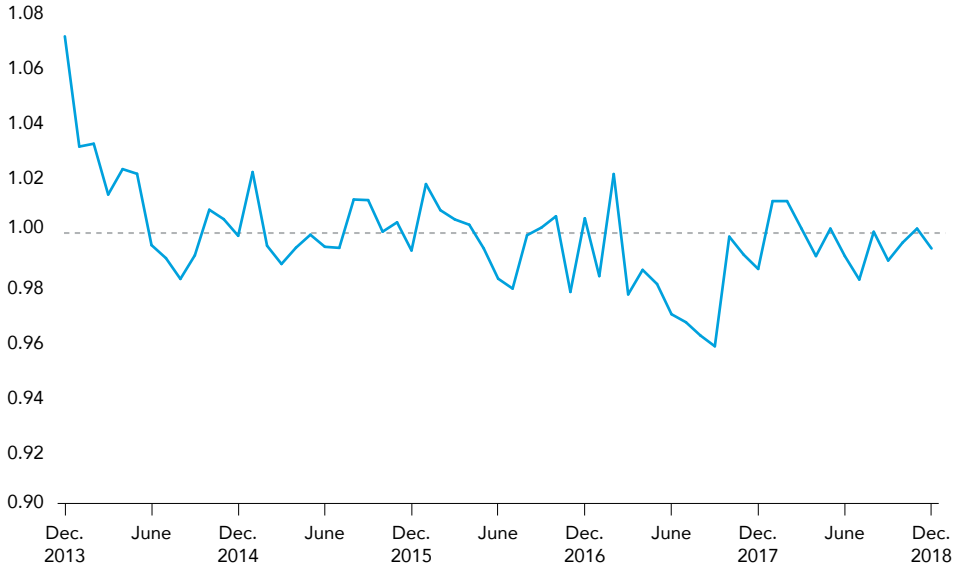
MARKET RISK – ABSOLUTE
(as at December 31 – as a percentage)

Asset class	**2018**	2017
Fixed Income	**6.0**	5.8
Real Assets	**17.0**	18.9
Equities	**23.4**	22.0
Other investments	**0.3**	0.4
Overall	**13.7**	13.4

FIGURE 21

ABSOLUTE RISK RATIO[1]

● Absolute risk ratio



1. The risk figures preceding July 2017 were adjusted to reflect the changes in the risk calculation methodology that occurred in 2017.

There was also a slight increase in the Fixed Income class, due to an increase in sovereign credit investments in growth markets. In contrast, the absolute risk of Real Assets declined significantly due to larger investments in infrastructure, which have a lower market risk than investments in real estate.

Credit risk

Credit risk increased in 2018 following the deployment of capital in various mandates of the Credit portfolio. To assess credit risk, la Caisse relies on measures of market risk and potential capital losses. The latter measure incorporates an issuer's probabilities of default, correlations and recovery assumptions.

In addition to quantitative measures, for each investment proposal, a committee consisting of members of the risk and investment teams reviews the fundamental analyses to establish an internal credit rating. On a regular basis, the committee reviews its ratings and monitors any changes, including differences with the agency ratings. During the year, the committee reviewed over 190 issuers.

Concentration risk

In 2018, the overall portfolio's level of concentration risk was unchanged. Even if la Caisse takes more concentrated positions in certain investments to seize the most attractive opportunities, it mitigates this risk through geographic and sectoral diversification.

Counterparty risk

La Caisse's counterparty risk arising from the use of over-the-counter derivatives continues to be low. La Caisse employs different mechanisms to limit this risk, including negotiating legal agreements based on standards issued by the ISDA (International Swaps and Derivatives Association), daily exchanges of collateral and exposure limits for each of its counterparties. Moreover, to keep this risk to a low level, la Caisse monitors a series of indicators on a daily basis to assess the financial health of each of its counterparties. Changes in the quality of their credit are closely analyzed.

Liquidity risk

At the end of 2018, la Caisse could count on an adequate level of liquidity, despite a decline compared to 2017. This was partially due to the use of some of the liquidity reserve for investments in less-liquid assets, as well as market movements at the end of the year. The liquidity reserve was replenished at the beginning of 2019.

Note that the reserve includes primary liquid assets, i.e. very liquid assets that can be used immediately without any loss of value, and secondary liquid assets, which are slightly less liquid but can be quickly converted into cash and are resilient. Each year, la Caisse establishes a minimum threshold of liquidity to maintain in the reserve in order to:

- Meet its potential commitments as well as those of its depositors;
- Rebalance the overall portfolio;
- Maintain the desired flexibility in the event of a crisis, including to take advantage of attractive investment opportunities.

As at December 31, 2018, la Caisse had a sufficient liquidity reserve to meet its potential commitments, even in the event of a major market correction (see Note 12 to the Consolidated Financial Statements, page 161).

REVIEW OF OVERSIGHT AND PROCESSES

In 2018, la Caisse undertook several initiatives intended to strengthen its risk management frameworks and processes. It also applied guidelines covering the approach (see Note 12 to the Consolidated Financial Statements, p. 161).

Influence of the Risk function on investment

Risk Management plays a key role in investment activities. Its influence was apparent through:

- An active presence on many committees, including the Investment-Risk Committee, the Investment and Risk Management Committee, the Operational Risk Committee and the Investment, Research and Currency Committees;
- Good governance of its risk processes;
- An influential role in the analysis and development of the strategic plan;
- The integration of business unit risk managers into each investment team.

Strategic planning of investments and monitoring of strategic risks

When the annual strategic plan is developed, the strategies proposed by the investment groups are thoroughly analyzed to clearly identify the stakes and determine the potential impacts of new initiatives on la Caisse's risk. With these analyses, la Caisse can define its strategic priorities, in this instance those for 2018-2022.

Support for the globalization of la Caisse's activities

Among its efforts during the year to support its globalization activities, la Caisse:

- Developed the capabilities of the team charged with analyzing geopolitical risk;
- Performed quantitative analyses related to the deployment of external management in growth markets.

Mitigation of operational risks

Operational risks may arise from la Caisse's transactional activities, growth and globalization, as well as from transformations undertaken within the organization to achieve strategic objectives. The Operational Risk Committee is responsible for measuring and evaluating this type of risk. A variety of work is carried out to mitigate this risk, including an update of the mapping for evaluating the impact and probability of the major operational risks. The work carried out in 2018 also included:

- A strengthened process for monitoring market events and the disposition plan for investments;
- The development of an enhanced questionnaire for due diligence reviews of external management partners.

IMPROVED RISK MANAGEMENT METHODOLOGIES AND TOOLS

In 2018, la Caisse continued to refine its quantitative analysis methodologies and tools to better monitor risks. Several teams benefited from the improvements, including:

- Fixed Income: Implementation of a factorial approach for identifying risk factors in the Rates portfolio and a new methodology for estimating potential default rates in Credit portfolio activities;
- Private Equity: Review of the methodology on modelling investment risk and identifying risk factors in the main files, for a consolidated view of the portfolio by risk factor;
- Asset Allocation: Monitoring investment activities and analysis of market risk and liquidity for the strategies developed.

Risk measurement and stress testing

As a complement to value at risk (VaR), la Caisse measures market risk using various stress tests in order to quantify the potential impacts on the overall portfolio of certain market events.

Accordingly, in 2018 la Caisse carried out several tests as part of a comprehensive exercise to understand and estimate the resilience of the overall portfolio. Based on the analysis of the biases and exposures of all the specialized portfolios, it analyzed how the portfolios would respond to various scenarios that could have an impact on the financial markets. These tests show that the overall portfolio is resilient relative to the market in most of the scenarios considered probable, as well as those observed historically.

New measure of credit risk

La Caisse introduced a new measure of credit risk to better recognize the impacts of investment concentration and diversification, including on portfolios with an important deployment of capital.

Measurement of climate risk

In 2018, la Caisse measured carbon intensity in 150 investments and investment proposals and analyzed their impact on the intensity of the overall portfolio. In addition to determining reduction targets for each asset class, it modelled expected movements in the portfolio, which allows efficient monitoring of the carbon footprint.

Compliance

HIGHLIGHTS

1
Compliance programs were applied throughout the year to ensure compliance with depositors' investment policies, the specialized portfolios' investment policies and management mandates.

2
Various activities were maintained to raise employee awareness of the Code of Ethics and Professional Conduct.

The compliance activities of la Caisse include oversight to ensure adherence to the portfolios' investment policies and to the Code of Ethics and Professional Conduct.

INVESTMENT POLICIES

Programs are in place to certify compliance with depositors' investment policies and portfolio investment policies. In 2018, certificates of compliance with these policies were issued to depositors on June 30 and December 31. In addition, programs to ensure the compliance of activities in the specialized portfolios and management mandates were maintained.

CODE OF ETHICS AND PROFESSIONAL CONDUCT

Compliance with the Code of Ethics and Professional Conduct for Officers and Employees is essential. At the beginning of each year, all employees must complete a declaration on compliance with the Code and confirm through the required documents information with respect to the holdings in their personal portfolios. They are also obliged to report any situation where they have reason to believe that there has been a breach of the Code or any other Caisse policy.

In 2018, la Caisse carried out several activities to heighten employee awareness of various aspects of the Code. Mandatory training is provided to all new employees. Furthermore, a meeting is held with each new officer to discuss various aspects of the Code of Ethics and Professional Conduct. In addition, interactive video clips with specific themes or addressing ethical questions were published on the employee intranet throughout the year to provide examples of how to handle situations involving ethics and professional conduct. The system for pre-approving personal transactions is accessible to all employees, including employees in international offices.

Lastly, in 2018 la Caisse adopted a procedure on disclosure of wrongdoings. This procedure stems from the Code of Ethics and the Act to facilitate the disclosure of wrongdoings relating to public bodies. Its purpose is to establish mechanisms for reporting such acts and measures for protecting individuals who make such reports.

The Code of Ethics and Professional Conduct for Officers and Employees is available on la Caisse's website (www.cdpq.com), in the Governance section.

ACCESS TO INFORMATION

La Caisse processes requests for access to documents in accordance with the Act respecting access to documents held by public bodies and the protection of personal information (the Access Act). In 2018, la Caisse processed 67 requests for access to documents, including 38 for la Caisse, 9 for la Caisse and CDPQ Infra, 9 for CDPQ Infra and 11 for subsidiaries of la Caisse. All of the requests were handled within the legally prescribed time limit. Of these 67 requests, 30 were accepted, 26 were accepted in part, 2 were referred to another entity, 8 were refused and 1 was withdrawn. The requests received concerned issues such as incentive compensation, the number of employees and the payroll, the number of departures, minutes of meetings, cyberattacks, the Réseau express métropolitain (REM) and several other subjects of an administrative or budgetary nature. Five requests were subject to an application for review by the Commission d'accès à l'information (CAI), including one that was withdrawn from the CAI. Responses to requests for access are available on la Caisse's website.

Lastly, in accordance with the Regulation respecting the distribution of information and the protection of personal information, la Caisse publicly posts on its website the specific information covered by this regulation: leases, training contracts, advertising and promotion contracts, mobile telecommunications contracts, training expenses, total travel expenses, and the CEO's travel expenses, official expenses and executive vehicle expenses.

CYBERSECURITY

La Caisse pays close attention to cybersecurity. It employs significant security measures by applying recognized frameworks, the aspects of which are continuously tested. Ongoing efforts are made to monitor changes in technology and be able to counter potential threats. In addition, several lines of defence, both internal and external, are established to ensure that the measures in place are effective. In 2018, several of these measures allowed la Caisse to continue containing cybersecurity-related risk and counter various threats, including identity theft, by using cutting-edge technologies, through enhanced monitoring of suppliers and external partners and the use of new detection technologies.

The management of cybersecurity risks also applies to the service providers that host la Caisse's data. All suppliers are subject to a verification process by an independent service delivery team in order to ensure that their systems meet the organization's security standards. In addition, minimal security standards are required for a supplier to be authorized.

LANGUAGE POLICY

La Caisse complies with the requirements of the Charter of the French Language and its language Policy, which stipulates French as the everyday language of work for all employees in its offices in Québec. La Caisse considers the quality and use of French in its spoken and written communications to be of paramount importance.

To that end, la Caisse provides its employees with various tools that contribute to correct French usage, as well as a number of reference works, including a lexicon that it compiled to define terms specific to its investing activities.

In 2018, articles on the proper use of expressions and idioms were published regularly on the employee intranet. The articles also encouraged employees to use the tools and references available on the website of the Office québécois de la langue française, as well as other language tools available to them.

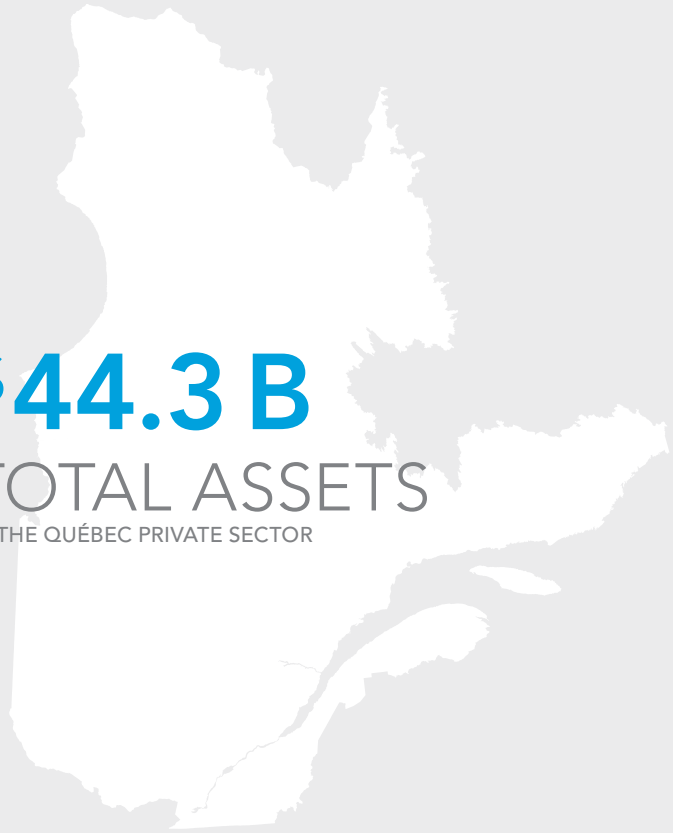
Various other initiatives were also undertaken, including a quiz and articles on the quality and use of French. In addition, the fifth annual Dictée de la Caisse was held in December 2018 as part of the initiatives to make employees more acutely aware of the quality of French in the workplace.

COMPLAINT MANAGEMENT

La Caisse has designated Me Ginette Depelteau, Senior Vice-President, Compliance and Responsible Investment, to receive complaints and analyze them with all due attention. Complaints may be addressed to her by phone (514 847-5901), fax (514 281-9334) or email (gestiondesplaintes@cdpq.com).

La Caisse in Québec

Driving Québec's economy for today and tomorrow.



$44.3 B

TOTAL ASSETS

IN THE QUÉBEC PRIVATE SECTOR

$7.3 B

NEW INVESTMENTS AND COMMITMENTS IN 2018

Close to

40%

PROPORTION OF OUR TRANSACTIONS CARRIED OUT IN THE NEW ECONOMY IN 2018

Close to

775

NUMBER OF QUÉBEC COMPANIES THAT ARE PARTNERS, INCLUDING SOME 685 SMEs

To contribute to the vitality of Québec's economy, la Caisse has targeted the private sector. We invest in growth-creating projects. We back the expansion and globalization of Québec companies. And we support innovation and the next generation. Because we believe that it is important to support today's economy while building tomorrow's, the sectors of the future were the backdrop for many of our investments in 2018.

Growth-creating projects

We design and develop major infrastructure and real estate projects – and we support the renewable energy sector. These sectors generate concrete benefits for Québec's economy.

REM

Construction began on this major public transportation project, just two years after it was announced

(Picture 1)

Place Ville Marie

Continuation of the work to revitalize the Esplanade and transform the shopping gallery

(Picture 2)

1

2

Montréal Eaton Centre

Progress on renovations for this downtown property to transform the user experience

(Picture 3)

Laurier Québec

Start of the second phase of the modernization of this major shopping centre in Québec City

(Picture 4)

3

4

Boralex

Support for the growth of this leader in renewable energy

(Picture 5)

5

Growth and globalization

We finance and support Québec companies of all sizes in their growth projects, both in Québec and internationally.

AddÉnergie

Second investment for this leader in electric vehicle charging solutions to continue its growth in the U.S. market

(Picture 1)

Plusgrade

Support for this global leader in travel upgrades to enter new markets and broaden its range of products

(Picture 2)

1

2

Ocean Group

Investment for this Québec maritime company to expand its activities in Canada and around the world

(Picture 3)

3

Transcontinental

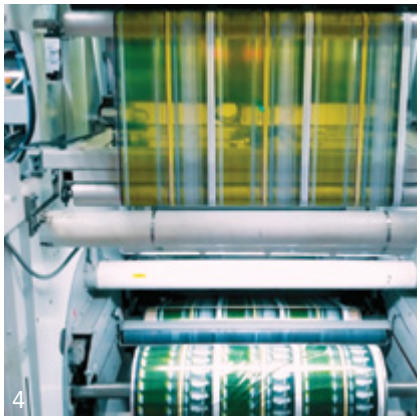
Participation in the financing to acquire Coveris Americas, a U.S. packaging company

(Picture 4)

Demers Ambulances

Support for this leading Québec company that designs, manufactures, and distributes ambulances

(Picture 5)



4

5

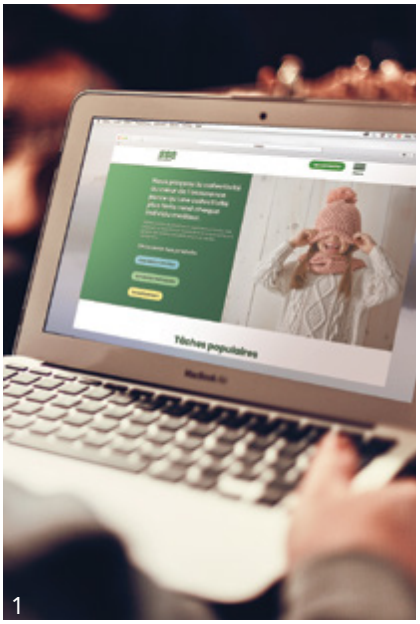
Innovation and the next generation

We contribute to the development of ecosystems, support companies that will succeed in the new economy and promote the vitality of entrepreneurship.

Digital transformation

Support for deployment of technology applications to improve operational efficiency for SSQ Insurance and BFL Canada

(Picture 1: SSQ Insurance)



1

Technology companies

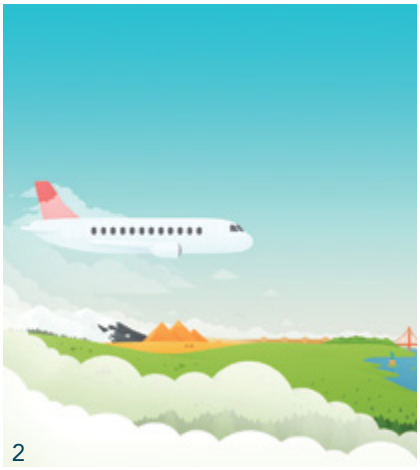
Initial support for young businesses, Poka and Breather, and second investment in Hopper and TrackTik

(Picture 2: Hopper)

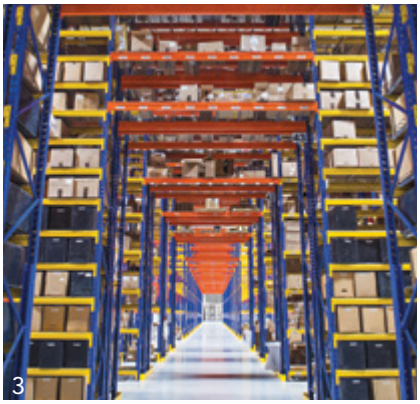
E-commerce

Investments in businesses that play a determining role in the e-commerce value chain, such as FX Innovation and Metro Supply Chain Group, and support for technology and artificial intelligence for La Maison Simons and Frank And Oak

(Picture 3: Metro Supply Chain Group)



2



3

Artificial intelligence

Launch of Espace CDPQ | Axe IA, which will house startups from innovative sectors at Mila – Québec Artificial Intelligence Institute

(Picture 4: Espace CDPQ | Axe IA)

Entrepreneurship

Implementation of Espace CDPQ branches in Québec City, Shawinigan and Sherbrooke, and creation of Cheffes de file, targeting the growth of companies owned by women

(Picture 5: Cheffes de file)

4

5

A concrete contribution to Québec's economic growth

La Caisse plays a leading role in the Québec economy. We have deep knowledge of our home market, where our activities help stimulate growth. Our impact can be seen through investments in the private sector, especially in innovative or globalizing businesses. We also contribute to growth-creating projects and provide sustained support to entrepreneurship. Thanks to the expertise and know-how of our teams, our achievements generate concrete benefits for depositors and the Québec economy alike.

Since the private sector is the main driver of Québec's economy, la Caisse has focused on making the majority of its investments in that sector over the last several years. Thus in 2018, its holdings in private Québec companies reached $44.3 billion, up $11.8 billion in five years. To maximize our impact in Québec, la Caisse has focused its investment strategy around three major pillars: implementing growth-creating projects, growth and global expansion of Québec companies and innovation and the next generation. We therefore design and develop major infrastructure and real estate projects. We actively work with Québec companies to foster their expansion projects at home and internationally. We support SMEs that will stand out in the new economy, and contribute to entrepreneurial vitality through a series of initiatives to promote entrepreneurship.

In 2018, our three-pillar approach led to $7.3 billion in new investments and commitments. This brings our total investments and commitments over the last five years to $21.2 billion.

La Caisse leverages its strategic advantages to optimize impact, including the expertise of our teams in many sectors, our business relationships in Québec and around the world, our offices in ten countries and our network of partners in Québec and internationally. Our accomplishments extend far beyond the dollars we invest.

AS AT DECEMBER 31, 2018, LA CAISSE'S ASSETS IN QUÉBEC TOTALLED $63.8 BILLION. ALMOST 70% OF THIS AMOUNT WAS INVESTED IN THE PRIVATE SECTOR, REPRESENTING $44.3 BILLION.

TABLE 22

ASSETS AND COMMITMENTS IN QUÉBEC – PRIVATE EQUITY AND INFRASTRUCTURE
(as at December 31 – in millions of dollars)

	2018			2017		
	Assets	**Undisbursed commitments**	**Assets and undisbursed commitments**	Assets	Undisbursed commitments	Assets and undisbursed commitments
Small and medium-sized businesses	**2,670**	**607**	**3,277**	1,958	686	2,644
Large businesses	**10,911**	**1,980**	**12,891**	10,231	961	11,192
Total	**13,581**	**2,587**	**16,168**	12,189	1,647	13,836

Long-term partner of Québec companies

One of la Caisse's major objectives in Québec is to foster the emergence and growth of strong Québec companies that will stand out in their industry and compete with the best in the world, carving out a place for themselves in global markets. To that end, la Caisse creates long-term partnerships with them. To foster all stages of their development, we implement customized financing solutions that meet their needs.

WORKING WITH QUÉBEC COMPANIES OF ALL SIZES

The unique know-how of la Caisse's teams is a major asset in the corporate financing universe. This strategic advantage is harnessed to support Québec companies in their growth, globalization, innovation and next-generation projects. In 2018, this was demonstrated by la Caisse's support for the expansion of several companies of various sizes, such as Ocean Group, Boralex, Transcontinental, Plusgrade and AddÉnergie. La Caisse was also active among technology companies and those using technology and innovation to grow, such as La Maison Simons, Frank And Oak, SSQ Insurance and BFL Canada. We also invested in companies that play a determining role in the e-commerce value chain, such as FX Innovation and Metro Supply Chain Group. In fact, in 2018, we focused extensively on the new economy; 40% of la Caisse's transactions in Québec were in this area.

INVESTMENT ACTIVITIES – PRIVATE EQUITY AND INFRASTRUCTURE

In 2018, la Caisse's Private Equity and Infrastructure assets totalled $13.6 billion (see Table 22, p. 66). Private Equity investments include direct investments in private companies as well as shares of publicly traded companies from initial public offerings or large transactions. Table 23 presents la Caisse's 10 main Private Equity and Infrastructure investments in Québec.

La Caisse also invests in publicly traded Québec companies with a market capitalization of less than $1.5 billion. This helps to stimulate Québec's equity market and the growth of these companies.

TABLE 23

TOP 10 QUÉBEC INVESTMENTS – PRIVATE EQUITY AND INFRASTRUCTURE PORTFOLIOS
(as at December 31, 2018)

Boralex
CDPQ Infra
Cogeco Communications
Knowlton Development Corporation (kdc/one)
Lightspeed
McInnis Cement
Osisko Gold Royalties
Plusgrade
Trencap (Énergir)
WSP Global Group

Presence in the private sector

La Caisse's presence in the private sector focuses on five areas:

- Private equity
- Equity market investments
- Loan financing
- Infrastructure investments
- Real estate investments

INVESTMENT ACTIVITIES – EQUITY MARKETS

As at December 31, 2018, la Caisse's investments in Québec publicly traded equities totalled $8.8 billion. The 10 main positions in this category are listed in Table 24.

Securities in Québec companies amounted to 37.7% of the total assets in the Canada mandate as at December 31, 2018. This is more than double the weighting of these securities in the overall S&P/TSX index, for which the proportion of Québec company securities was 16.0% during that period.

PROMISING PARTNERSHIPS TO INCREASE IMPACT IN QUÉBEC

La Caisse has formed partnerships with a variety of Québec funds over the years. This enables us to fuel the growth of numerous companies of various sizes and foster the development of specialized investment funds. These long-term partnerships seek to help a greater number of young SME technology companies successfully navigate the early stages of their development. That is why la Caisse specifically targets this sector by working with more than 10 funds that are active in the new economy. We participated in the creation of Luge Capital, a venture capital fund that targets FinTech startups and artificial intelligence solutions applied to financial services. In 2018, this new fund began its investment activities. La Caisse also invested in Québec-based White Star Capital fund, which targets globalization of technology companies.

In addition to multiplying investments, our partnerships with specialized funds provide another advantage to la Caisse: the possibility of gaining access to a pipeline of promising businesses, from which potential targets for direct investments often emerge. La Caisse's teams analyze companies that partner funds invest in and regularly track their progress, thereby identifying potential direct investments. Several successes have resulted from this strategy over the last few years. In 2018, investments were made in Poka, a training and knowledge management platform focusing on digital transformation in the manufacturing sector; and in Breather, which offers technology to provide workspaces that are adaptable to its clients' needs. To date, this approach used by la Caisse has borne fruit. In fact, efforts to identify direct investment targets have produced excellent results, as evidenced by certain targeted companies experiencing so much growth that reinvestments have already been made. Thus in 2018, a second direct investment was made in Hopper, the fast-growing travel application, and in TrackTik, owner of cloud-based software to manage security staff. Added to these was a reinvestment during 2017 in Lightspeed, a company that is now publicly traded and offers cloud-based point-of-sale solutions for independent retailers and restaurants.

TABLE 24

TOP 10 QUÉBEC POSITIONS – EQUITY MARKETS PORTFOLIO
(as at December 31, 2018)

Alimentation Couche-Tard
Canadian National Railway Company
CGI Group
Dollarama
Gildan Activewear
Industrial Alliance, Insurance and Financial Services
Power Corporation of Canada
Saputo
SNC-Lavalin Group
Stella-Jones

TABLE 25

TOP 10 QUÉBEC INVESTMENTS – REAL ESTATE PORTFOLIO
(as at December 31, 2018)

Édifice Jacques-Parizeau, Montréal
Fairmont Le Château Frontenac, Québec City
Fairmont The Queen Elizabeth, Montréal
Fairview Pointe-Claire, Pointe-Claire
Galeries d'Anjou, Montréal
Laurier Québec, Québec City
Le 1000 De La Gauchetière, Montréal
Montréal Eaton Centre, Montréal
Place Ste-Foy, Québec City
Place Ville Marie, Montréal

A leader in Québec real estate

La Caisse has two subsidiaries specializing in real estate: Ivanhoé Cambridge and Otéra Capital. Through them, we are a leader in Québec real estate. The investments and activities of these two well-established companies generate significant benefits.

As at December 31, 2018, la Caisse's real estate assets in Québec totalled $11.3 billion. They are detailed in Table 26, while the 10 major investments in this sector are listed in Table 25 on page 68.

IVANHOÉ CAMBRIDGE

Ivanhoé Cambridge, a world-class real estate company, is a major real estate owner and manager in Québec. As at December 31, 2018, it owned 38 buildings in Québec with a total value of $6.8 billion. These included eight shopping centres, nine office buildings, nine logistics and industrial buildings, three luxury hotels and two residential complexes. Its portfolio of Québec shopping centres and office buildings totals 12.0 million square feet (1.1 million square metres).

In 2018, Ivanhoé Cambridge continued construction of the Projet Nouveau Centre, with planned investments of $1 billion in Montréal's downtown core. After the re-opening of the Fairmont The Queen Elizabeth and delivery of Maison Manuvie, work progressed on Place Ville Marie and Montréal Eaton Centre. Both properties, each receiving $200 million in investments, are the subject of major work that includes:

- Revitalization of the Esplanade, transformation of the commercial gallery and the addition of a food and beverage destination at Place Ville Marie
- Revitalization of the commercial and restaurant offering, specifically with the arrival of Décathlon and the first Time Out Market in Canada, and the creation of a single shopping destination as a result of merging the Complexe Les Ailes with the Montréal Eaton Centre (under the latter's brand).

In Québec City, Ivanhoé Cambridge started the second phase of its renovation of Laurier Québec, at a cost of $60 million. The work includes the complete renovation of common areas and modernization of the parking lot. In partnership with Claridge, a second investment vehicle was also launched. With a $100 million envelope, it targets Québec's urban centres, primarily Québec and Montréal.

OTÉRA CAPITAL

Otéra Capital, one of Canada's leading mortgage lenders, finances some 227 commercial buildings in 12 regions in Québec. As at December 31, 2018 this subsidiary managed assets totalling $4.5 billion. During 2018, the company granted about 30 new loans and refinancings.

TABLE 26

REAL ESTATE ASSETS AND COMMITMENTS IN QUÉBEC
(as at December 31 – in millions of dollars)

	2018			2017		
	Assets	**Undisbursed commitments**	**Assets and undisbursed commitments**	Assets	Undisbursed commitments	Assets and undisbursed commitments
Shopping centres	**3,118**	**308**	**3,426**	3,162	231	3,393
Offices	**4,751**	**105**	**4,856**	4,675	213	4,888
Multiresidential	**994**	**487**	**1,481**	780	474	1,254
Other	**2,421**	**102**	**2,523**	2,213	63	2,276
Total	**11,284**	**1,002**	**12,286**	10,830	981	11,811

Innovating to develop public infrastructure projects

CDPQ Infra was created in 2015 as a unique model to finance and complete public infrastructure projects. This subsidiary of la Caisse is responsible for the development, construction and operation of the Réseau express métropolitain (REM), a new light rail transit system. This will be its first public transportation project.

The REM will be one of the largest automated transit networks in the world – and the largest public transportation project in the last 50 years in Québec. It will connect downtown Montréal, university hubs, the South Shore, the North Shore, the West Island and the Montréal-Trudeau Airport through a fully automated and electric light rail transit system. The route will cover 67 kilometres and use 26 stations to provide high-frequency service that will facilitate daily travel. It will operate 20 hours a day, seven days a week, and will be connected to Montréal's three main Metro lines.

CONSTRUCTION BEGINS

The year 2018 marked the official beginning of construction on the REM, with the groundbreaking ceremony held in the spring. This followed the selection of the consortia for the engineering, procurement and construction contract for the infrastructure – and for supplying the rolling stock and systems, operation and maintenance. In addition, the final route and budget of $6.3 billion were concluded. Construction is already well underway on several sites, including:

- the Édouard-Montpetit station, where the equivalent of 20 storeys will be dug in a very densely built area to construct the station, which will be the second deepest in North America.
- McGill College, where one of the largest stations in the network will be located.
- the West Island, where a former CN railway bridge was demolished to make room for an elevated structure currently under construction.
- the Deux-Montagnes line, where major construction work will result in increasing both frequency and capacity of the REM.
- the South Shore, where elevated structure pillars are now visible along Highway 10.

Two years after the project was officially announced, the REM is now becoming a reality. The first tests will be conducted at the end of 2020. Commissioning of the first branch is planned for 2021.

A growth-creating project

The economic benefits in Québec from the REM project are considerable:

- **$4 billion** of Québec content
- **34,000** jobs during construction
- **$2 billion** in salaries paid
- **1,000** permanent jobs created

In addition, the project will create a centre of expertise for operating and maintaining automated electric transit infrastructure. The REM's construction will be carbon neutral. Its operations will reduce GHG emissions by approximately 680,000 tonnes over 25 years.

An essential financing role in Québec

La Caisse plays an essential role in financing in Québec. We participate in numerous private sector growth projects that directly and positively impact the Québec economy.

Active in the private financing market in Québec for the last several years, la Caisse continued its expansion in the sector in 2018. With private businesses as one of the primary engines of Québec's economy, financing their growth projects creates a double benefit. It generates attractive long-term returns for la Caisse's depositors, while fostering economic activity in Québec.

Several companies in Québec, whether they are publicly traded or not, have benefited from financing from la Caisse over the years. As a long-standing partner, we have supported numerous projects that have helped companies expand in local as well as international markets. Some results in 2018 from our commitment to this sector include:

- An unsecured, subordinated loan of up to $300 million, alongside the Fonds de solidarité FTQ, to fuel the growth of Boralex, a leader in renewable energy production.
- A loan of up to $150 million to SSQ Insurance to continue executing its strategic plan, which is based on innovation and its Canada-wide expansion.

In addition, with the objective of proposing financing packages that are adapted to companies' projects and needs, la Caisse's fixed income teams work jointly with private equity teams. In 2018, this collaboration resulted in the addition of a financing component in certain share capital investments.

While interest rates remained low despite a slight increase, and while expected returns on bond securities are modest, la Caisse continued to reduce its exposure to bonds from developed countries. Its positions in the Québec public sector were reduced, and those in the private sector were increased. La Caisse remains a key holder of Québec government, municipal, crown corporation and para-governmental organization bonds.

As at December 31, 2018, la Caisse's holdings of private and public-sector bonds totalled $30.1 billion. This is shown in detail in Table 27.

TABLE 27

ASSETS IN QUÉBEC – CORPORATE SECURITIES AND BONDS
(as at December 31 – in billions of dollars)

	2018	2017
Private sector: corporate securities	**10.6**	9.7
Québec public sector		
Government of Québec	**13.4**	14.8
Hydro-Québec	**5.1**	5.0
Other crown corporations	**0.9**	0.9
Municipalities and para-governmental corporations	**0.1**	0.2
Subtotal	**19.5**	20.9
Total	**30.1**	30.6

Espace CDPQ: An investment and development hub for entrepreneurs

Unique in Québec, Espace CDPQ brings together partners and stakeholders around a common objective: to accelerate the growth and globalization of Québec SMEs. This investment and development hub, created by la Caisse, achieves this by combining networks, expertise and financial resources to benefit these businesses.

Established at Place Ville Marie in 2016, Espace CDPQ houses about 20 actors in SME development and financing under one roof to promote collaboration. Its financing component combines 13 complementary investment organizations. Its development component is strengthened through the presence of six organizations dedicated to developing and training growing companies. Together, the network includes more than 1,350 companies of all sizes and sectors and provides bridges to more than 170 countries. Espace CDPQ, through its activities, is also a source of potential investments for la Caisse. For more information regarding Espace CDPQ's activities and its partners, consult www.espacecdpq.com.

ACTIVITIES AND NEW INITIATIVES

During 2018, Espace CDPQ's investment partners completed more than 147 investments and reinvestments in Québec. The development and training organizations worked with more than 430 entrepreneurs and intrapreneurs through a network of more than 150 mentors and experts. During the year, Espace CDPQ partners and their network collectively organized and held more than 5,000 meetings and business activities.

Espace CDPQ also broadened its regional reach by partnering with three accelerators for young technology companies: le Camp in Québec, DigiHub in Shawinigan and Accélérateur de création d'entreprises technologiques (ACET) in Sherbrooke. These regional hubs become branches, thus ensuring a physical and virtual presence by Espace CDPQ's partner-experts. Several activities are offered. In June, for example, investment expertise clinics were held in each hub. In September, 15 promising companies from all three regions participated in a two-day entrepreneurial boot camp with experienced entrepreneurs, company management experts and Espace CDPQ investors. At the event, held at Espace CDPQ, they were able to explore new perspectives, develop relationships with investors and consider various solutions to their growth challenges. Other targeted networking activities are also offered in each region.

Lastly, la Caisse set up Espace CDPQ | Axe IA, as a result of a strategic partnership with Mila – Québec Artificial Intelligence Institute. The goal is to participate in the emergence of a new culture of collaboration between academic and business communities that specialize in artificial intelligence. On an annual basis, more than ten startups from innovative sectors will be housed in Mila's new premises, where they will have access to Mila's researchers and work. These businesses will also benefit from la Caisse's and Espace CDPQ's advice, oversight and network of experts. This initiative will help these startups to accelerate the marketing of new artificial intelligence products.

Inspire a strong entrepreneurial culture in Québec

The sustainable growth of Québec's economy depends on the emergence of a new generation of businesses. To empower the next wave of entrepreneurs, la Caisse has partnered with various organizations over the years to implement concrete initiatives to promote entrepreneurship.

The publication of the 10th Québec Entrepreneurship Index showed that Quebecers' intentions to undertake entrepreneurial activities has tripled since 2009. It was 19.5% in 2018 and has climbed to 41% among young people 18 to 34 years of age. The Fondation de l'entrepreneurship's Québec Entrepreneurship Index, which has been published by la Caisse since 2011 and is produced in partnership with the National Bank – HEC Montréal Institute for Entrepreneurship (NBIE) and Leger, evaluates major gauges of the entrepreneurial chain.

DEVENIR ENTREPRENEUR

Devenir entrepreneur – an entrepreneurship awareness initiative launched in the fall of 2015 by la Caisse, Desjardins Group and National Bank – has continued to grow. In 2018, two new campaigns were launched on various platforms throughout Québec. The "objective: growth" campaign brings together entrepreneurs from various sectors across Québec to discuss business growth. These discussions are the subject of videos offered on www.devenirentrepreneur.com, and podcasts available on mobile platforms. Several portraits of women entrepreneurs were also published on www.devenirentrepreneur.com, to drive the message that women can be successful entrepreneurs.

YOUTH INITIATIVES

The Semaine des entrepreneurs à l'école held its third edition in 2018, in partnership with OSEntreprendre. The activities took place in 17 Québec regions, with the participation of more than 300 volunteer entrepreneurs. In total, more than 20,000 young people from 300 educational institutions attended some 600 conferences about entrepreneurship. In addition, the fifth Grande journée des petits entrepreneurs inspired 5,555 young participants from across Québec to launch a company for a day. This was a resounding success for an initiative that attracted 300 participants during its first edition.

LE CERCLE DES GRANDS ENTREPRENEURS DU QUÉBEC

In 2018, la Caisse, National Bank and Desjardins Group created the Cercle des Grands entrepreneurs du Québec, to honour and showcase great entrepreneurs whose achievements and ideals have contributed to Québec's entrepreneurial vitality and economic development. The initiative also offers inspiring models to promote this career choice. This first edition honoured Alain Bouchard, Aldo Bensadoun, Lino Saputo, Lise Watier, Rémi Marcoux and Serge Godin during a tribute evening. An interactive exhibition to showcase these entrepreneurs then travelled throughout Québec, attracting more than 2,500 people.

CHEFFES DE FILE

In the fall of 2018, la Caisse announced the creation of a unique initiative to accelerate the growth of companies owned by women and increase the number of women entrepreneurs in Québec. The Cheffes de file is a community of around 60 women entrepreneurs from 11 regions across Québec, each of whom leads a solid and promising company. Through this initiative, these entrepreneurs come together to promote co-development, exchange best practices and reflect on strategic and operational matters using a collaborative platform specially designed for them.

A leader in Québec's financial industry

Through the very nature and scope of its operations, la Caisse plays a leading role in Québec's financial industry. It is particularly attentive to the development of a pool of qualified experts in this field while supporting the next generation in other key sectors.

Over the years, la Caisse has developed partnerships with large universities in Québec to meet the needs of the financial sector. These collaborations involve funding for research chairs and the creation of training programs. The following are examples of our collaboration with the university community:

- Académie de la relève entrepreneuriale CDPQ – Université Laval;
- Campaign to launch a dozen new institutes and research centres – HEC, Polytechnique and Université de Montréal;
- Centre of Excellence – Carrefour d'entrepreneuriat et d'innovation – Université du Québec à Trois-Rivières;
- The Caisse de dépôt et placement du Québec Portfolio Management Chair at École des sciences de la gestion at Université du Québec à Montréal (ESG UQAM);
- The Caisse de dépôt et placement du Québec Research Chair in Actuarial Management of Asset Risks at Université Laval;
- McGill International Portfolio Challenge – McGill University;
- Creative Destruction Lab – Montréal for scientific endeavours with strong growth potential in the startup stage – HEC Montréal;
- Investment funds – Fondation de l'Université du Québec à Rimouski;
- The CDPQ-HEC Montréal Going Global Program;
- Sustainable Investment Professional Certification Program at the John Molson School of Business at Concordia University;
- Entrepreneurship in culture, media and entertainment program – HEC Montréal;
- Research on responsible investment at Concordia University;
- Research on responsible investment at Université de Sherbrooke;
- Research on responsible investment at Polytechnique Montréal;
- Trading floor – ESG UQAM.

Each year la Caisse also employs numerous students as part of its internship program in finance and other key sectors. In 2018, we hired 159 students and interns for periods ranging from four to eight months.

Also, to support the next generation of journalists in Québec, la Caisse partnered with the Fédération professionnelle des journalistes du Québec to create the Fonds CDPQ pour la relève journalistique. This fund will provide ten young journalists or students each year with a $10,000 bursary – enabling them to develop experience in professional media by taking a paid internship, a portion of which will be spent in the economic and financial sectors.

A LARGE NETWORK OF SUPPLIERS

La Caisse and its subsidiaries use the services of many Québec companies while conducting their activities. This includes the support of more than 2,000 suppliers that have a business establishment in Québec. In 2018, la Caisse and its subsidiaries in Québec maintained their spending at the same levels as in 2017, for a total amount of more than $900 million.

As stipulated in its Policy on Contracts for the Acquisition or Leasing of Goods and Services, la Caisse favours Québec suppliers, provided they satisfy its cost and quality criteria.

Reports of the Board of Directors and Board Committees

Report
of the Board of Directors

HIGHLIGHTS

1 Reviewed and confirmed la Caisse's strategic directions.

2 Approved investment proposals under the Board's authority.

3 Regularly monitored progress on the construction of the Réseau express métropolitain (REM).

THE BOARD OF DIRECTORS

MANDATE

The mandate of the Board of Directors includes ensuring that the organization takes the necessary measures to attain the objectives stated in its mission, and that la Caisse is managed in compliance with the provisions of its incorporating act and regulations.

For a full description of the mandate of the Board of Directors, consult the Governance section of la Caisse's website (www.cdpq.com).

COMPOSITION (as at December 31, 2018)

As at December 31, 2018, the Board consisted of 13 members out of a maximum of 15. During the year, the Government of Québec confirmed the appointment of Sylvain Brosseau, President and Chief Executive Officer of Walter Global Asset Management, as an independent member, replacing Bertrand Cesvet, whose mandate ended on April 8, 2018.

DIRECTOR COMPENSATION

The compensation of la Caisse's directors is determined by an order-in-council of the Government of Québec. Their compensation for 2018 is provided in Table 29 on page 77. The directors are also entitled to be reimbursed for their travel and living expenses.

COMPENSATION OF THE CHAIRMAN OF THE BOARD

The annual compensation of the Chairman of the Board is set at $195,000 by an order-in-council of the Government of Québec. The Chairman of the Board is also entitled to be reimbursed for representation expenses related to the duties of his position, to a maximum of $15,000 per year.

TABLE 28

DIRECTOR ATTENDANCE AT BOARD AND COMMITTEE MEETINGS IN 2018[1]

Directors	Board of Directors		Audit Committee		Investment and Risk Management Committee		Human Resources Committee		Governance and Ethics Committee	
	6 reg.	9 spec.	6 reg.	2 spec.	6 reg.	5 spec.	7 reg.	1 spec.	5 reg.	1 spec.
Elisabetta Bigsby	6	5	–	–	–	–	7	1	–	–
Ivana Bonnet-Zivcevic	6	9	–	–	–	–	7	1	–	–
Sylvain Brosseau	3/3	4/4	–	–	1/1	–	2/2	–	–	–
Bertrand Cesvet	1/2	3/3	–	–	–	–	3/3	1	–	–
Patricia Curadeau-Grou	5	7/8	–	–	6	4	–	–	–	–
Michel Després	5	9	–	–	–	–	–	–	–	–
Gilles Godbout	6	9	6	2	6	5	–	–	–	–
François Joly	6	9	6	2	6	5	–	–	–	–
Jean La Couture	6	8/8	–	–	6	5	–	–	–	–
Diane Lemieux	6	7	–	–	–	–	–	–	–	–
Wendy Murdock	6	7	–	–	6	4	–	–	5	1
François R. Roy	6	9	6	2	–	–	–	–	5	1
Michael Sabia	6	8	–	–	–	–	–	–	–	–
Robert Tessier	6	9	–	–	–	–	7	1	5	1

1. Directors justify their absences from regular meetings of a Committee or the Board to la Caisse's Secretariat. During 2018, directors were not able to attend certain meetings, due mainly to health reasons or to obligations related to family or work commitments or due to our potential conflict of interest management rules.

TABLE 29

COMPENSATION PAID TO INDEPENDENT DIRECTORS UNDER ORDER-IN-COUNCIL[1]

(in dollars)

Directors	Annual compensation	Compensation as Committee Chair	Attendance fees	Total compensation
Elisabetta Bigsby	19,173	5,992	17,049	42,214
Ivana Bonnet-Zivcevic	20,457	–	22,413	42,870
Sylvain Brosseau	9,529	–	8,127	17,656
Bertrand Cesvet	5,146	–	7,098	12,244
Patricia Curadeau-Grou	19,173	–	20,679	39,852
Gilles Godbout	19,173	–	21,114	40,287
François Joly[2]	19,173	5,992	37,728	62,893
Jean La Couture	19,173	5,992	22,485	47,650
Wendy Murdock	19,173	–	25,610	44,783
François R. Roy	19,173	5,992	25,610	50,775
Total	169,343	23,968	207,913	**401,224**

1. In accordance with the terms of the Order-in-Council:
   a. The compensation includes an increase.
   b. The attendance fee for each special Board or Committee meeting of short duration, held by conference call, is half of the attendance fee allowed for a regular meeting.
   c. Members who are retired from the public sector receive total reduced compensation.
2. This director received attendance fees for attending la Caisse's Selection Committee and the Audit Committee meetings of la Caisse's real estate subsidiaries.

ACTIVITY REPORT

Strategic directions

In 2018, la Caisse's strategic directions were consistent with those of previous years and remained focused on the long-term positioning of the overall portfolio, in particular by increasing investments in less-liquid assets and credit, continuing to globalize and maximizing its impact in Québec. La Caisse also seeks to develop new value-creating levers, including through deeper integration of trends shaping the economy, such as climate change and disruptive technologies.

In 2018, the Board:

- Regularly monitored the results and risks associated with the strategies, at each step in their deployment;
- Alongside senior management, reviewed various economic and financial scenarios that could have an impact on how la Caisse's strategy evolves;
- Reviewed and approved, in line with the previous plan, the strategic priorities for 2018 of each investment group, including the real estate subsidiaries and CDPQ Infra, and of each administrative group.

The Board also adopted la Caisse's business plan and annual budget and received regular progress reports from senior management.

Financial results, internal controls and management systems

With assistance from the Audit Committee, the Board fulfilled its responsibilities with respect to financial results and internal controls, notably by:

- Reviewing the quarterly financial statements and approving the consolidated financial statements as at June 30 and December 31;
- Evaluating the integrity of all controls applied to data used to prepare the financial statements and related notes;
- Reviewing the returns of the investment units and approving the news releases announcing the annual financial results and the semi-annual update;
- Reviewing and approving la Caisse's Annual Report;
- Recommending to the Government the appointment of EY as co-auditor of the books and accounts of la Caisse for a five-year mandate beginning in 2019 and approving the appointment of EY as auditor of the books and accounts of certain subsidiaries of la Caisse for the same period;
- Approving the review of the External Auditor Independence Policy and the Internal Audit Charter;
- Monitoring progress in technology projects to upgrade financial information systems and their security;
- Reviewing and approving delegations of authority.

See the Report of the Audit Committee on page 80 for more information on the responsibilities discharged by the Committee and the Board.

Investment and risk management

Assisted by the Investment and Risk Management Committee, the Board ensured that an effective and rigorous risk management framework and the related processes were applied throughout the year. As such, the Board:

- Approved, on the Committee's recommendation, investment proposals under its authority, taking into account, among other things, the impact of each one on the level and concentration of risk of the specialized portfolio in question and of la Caisse's overall portfolio;
- Approved changes to the investment policies of certain specialized portfolios;
- Approved changes to the Integrated Risk Management Policy;
- Monitored the foreign currency management and hedging plan;
- Approved limits on market risk and the objectives for la Caisse's overall portfolio and for each of the specialized portfolios and major mandates, as well as the limits placed on the use of derivative financial instruments and the limits on overall concentration;
- Approved liquidity risk oversight and ensured that la Caisse's overall strategy for managing this risk was followed.

Moreover, the Board approved an investment in the CDPQ Infra subsidiary in order to construct the Réseau express métropolitain (REM).

For all the activities of the Board and the Investment and Risk Management Committee, see the Report of the Investment and Risk Management Committee on page 101.

Corporate governance

The Board met in the absence of members of senior management and held discussions with the President and Chief Executive Officer in the absence of other members of senior management. It also received an activity report from each committee at each meeting, so that it could review and express an opinion on their recommendations. In addition, on the recommendation of the Governance and Ethics Committee, the Board:

- Evaluated its own operations and that of its committees as well as the performance of each chair;
- Reviewed the composition of its committees;
- Approved the expertise and experience profile of each of its independent members;
- Reviewed the orientation and continuing education program for Board members;
- Reviewed the Policy on Harassment and Misconduct;
- Reviewed the Code of Ethics and Professional Conduct applicable to officers and employees of la Caisse.

See the Report of the Governance and Ethics Committee on page 83 for more information on the responsibilities discharged by the Committee and the Board regarding governance and ethics.

Supervision of senior management and human resources management

With assistance from the Human Resources Committee, the Board approved the President and Chief Executive Officer's detailed objectives for 2018 and reviewed his performance based on objectives set at the beginning of the year. The Board also approved the performance evaluation and total compensation conditions for senior executives.

Following the recommendation of the Human Resources Committee, the Board approved changes affecting the organization's leaders. Macky Tall was appointed to the position of Head of Liquid Markets and President and Chief Executive Officer of CDPQ Infra. Maxime Aucoin was promoted to the position of Executive Vice-President, Investment Strategies and Innovation and was made responsible for the new Innovation team. Ani Castonguay was promoted to the position of Executive Vice-President, Public Affairs. Furthermore, in addition to supervising the external management activities in the Liquid Assets asset classes, Mario Therrien was given responsibility for developing strategic partnerships in developed markets. Lastly, Claude Bergeron was given responsibility for all activities related to depositors, in addition to his risk management responsibilities.

The Committee also reviewed the appointment of Emmanuel Jaclot to the position of Executive Vice-President, Infrastructure and the appointment of Alexandre Synnett to the position of Executive Vice-President, Digital Technology and Operations, under the leadership of Maarika Paul, Executive Vice-President and Chief Financial and Operations Officer. This appointment followed the departure of Pierre Miron, who held the position of Executive Vice-President, Digital Technology and Operations.

See the Report of the Human Resources Committee on page 85 for more information on the responsibilities discharged by the Committee and the Board.

Report
of the Audit Committee

HIGHLIGHTS

1
Reviewed and monitored preparation of the financial statements.

2
Recommended, following a call for tenders, the appointment of the firm EY as co-auditor of the books and accounts of la Caisse for a five-year mandate beginning in 2019.

3
Monitored and analyzed the effects of all activities implemented to ensure optimal use of resources.

THE AUDIT COMMITTEE

MANDATE

The Audit Committee sees that the financial statements accurately reflect la Caisse's financial position. It also ensures, among other things, that la Caisse has adequate and effective internal control mechanisms and a risk management process.

For a complete description of the Committee's mandate, consult the Governance section of la Caisse's website (www.cdpq.com).

COMPOSITION (as at December 31, 2018)

The composition of the Committee was reviewed in 2018.

The Committee consisted of three independent members, including professionals with accounting or financial expertise as well as the experience and knowledge required to read and understand financial statements and to fulfill their roles properly.

- Chair: François Joly (guest member at meetings of the Investment and Risk Management Committee)
- Members: Gilles Godbout and François R. Roy

The Chairman of the Board attends the Committee meetings.

ACTIVITY REPORT

Number of meetings in 2018: 8

Financial reporting

In 2018, the Committee fulfilled its financial reporting responsibilities, which included the following:

- Reviewed various aspects of the financial statements with the Finance group and the co-auditors, the Auditor General of Québec and EY, including:
  - The process used to prepare financial statements;
  - The valuation of investments;
  - Treasury items, including liquidity, leverage and financing;
  - The confirmation that an audit of returns had been performed by an external firm to ensure that their calculation and presentation comply with industry standards.
- Reviewed the quarterly results, budget monitoring reports and year-end budget estimates.

- Reviewed the report on the financial certification process that enables the President and Chief Executive Officer and the Executive Vice-President and Chief Financial and Operations Officer to certify publicly that the disclosure controls and procedures and the internal financial reporting controls are adequate and effective.
- Recommended that the Board adopt the financial statements as at June 30 and December 31.
- Reviewed preparatory work on the Annual Report and the news releases announcing la Caisse's financial results.
- Arranged for the Chair of la Caisse's Audit Committee to attend meetings of the real estate subsidiaries' audit committees and reviewed the committees' annual activity reports.
- Discussed the audit report with the co-auditors following their year-end audit.
- Discussed with the co-auditors their plan for auditing la Caisse's financial statements and their internal quality control procedures.
- Reviewed and recommended to the Board an update to the External Auditor Independence Policy, monitored its application and approved EY's fees.
- Held regular discussions with the Executive Vice-President and Chief Financial and Operations Officer without the presence of other members of senior management.
- Met regularly with the co-auditors to discuss various aspects of their mandate without the presence of senior management.

In 2018, following a call for tenders, the Committee recommended the appointment of the firm EY as co-auditor of the books and accounts of la Caisse for a five-year mandate beginning in 2019. The Committee also recommended to the Board the appointment of EY as auditor of the books and accounts of certain subsidiaries of la Caisse, also for a five-year mandate.

Internal Audit

In 2018, the Committee carried out the following activities with the Internal Audit group:

- Reviewed and approved the 2018-2020 Internal Audit Plan.
- Revised and recommended to the Board an update to the Internal Audit Charter.
- Reviewed Internal Audit's progress reports prepared under the Internal Audit Plan to address such matters as internal control mechanisms, risk management processes and optimal use of resources.
- Monitored the implementation of Internal Audit's recommendations by Caisse senior management.
- Monitored activities carried out by the internal audit units of the real estate subsidiaries.
- Reviewed the results of the institution's continuous audit program.
- Validated that the Internal Audit team was able to act independently from Caisse senior management.
- Held periodic discussions with the Vice-President, Internal Audit, without the presence of senior management.

Internal controls and plan for the optimal use of resources

The Committee reviewed many aspects of internal controls and the optimal use of resources in 2018. It carried out the following activities:

- Reviewed the plan to ensure optimal use of resources and monitored and analyzed the effects of all the activities implemented under the plan.
- Reviewed the results from work to assess the design and effectiveness of internal financial reporting controls and disclosure controls and procedures, including those of the real estate subsidiaries and CDPQ Infra.
- Monitored technological projects to update financial reporting systems.
- Monitored international tax management activities.
- Reviewed the results of the evaluation carried out by members addressing the effectiveness of Committee operations.
- Reviewed and recommended to the Board changes in delegations of authority.

Risk management

The Investment and Risk Management Committee helped the Audit Committee fulfill its duty to implement a risk management process. The Committee therefore carried out the following activities to monitor investment and risk management work:

- Discussed with the Executive Vice-President, Legal Affairs and Secretariat:
  - Reports on compliance with the Act respecting the Caisse, depositors' investment policies and the specialized portfolios' investment policies;
  - Reports on legal proceedings involving la Caisse or its real estate subsidiaries.
- Received copies of the Investment and Risk Management Committee's minutes of meetings.
- Arranged for the Chair of the Audit Committee to attend the meetings of the Investment and Risk Management Committee.

USE OF EXTERNAL EXPERTS

The Audit Committee did not use the services of external experts in 2018. It nevertheless endorsed senior management's use of external firms for an independent review of the fair value of certain investments.

Report
of the Governance and Ethics Committee

HIGHLIGHTS

1 Reviewed the performance evaluation process used for the Board.

2 Reviewed, in co-operation with the Human Resources Committee, the skills and experience profiles of independent directors.

GOVERNANCE AND ETHICS COMMITTEE

MANDATE

The Committee ensures that la Caisse adheres to the highest standards of governance and ethics. For a full description of the Governance and Ethics Committee's mandate, consult the Governance section of la Caisse's website (www.cdpq.com).

COMPOSITION (as at December 31, 2018)

The composition of the Committee was reviewed in 2018.

It consisted of three independent members:

- Chair: François R. Roy
- Members: Wendy Murdock and Robert Tessier

ACTIVITY REPORT

Number of meetings in 2018: 6

Composition of the Board and its committees

- Reviewed the composition of the Board and recommended the appointment of an independent member.
- Reviewed the composition of its committees and made a recommendation to the Board.

Activities of the Board and its committees

- Reviewed the performance evaluation process used for the Board, its chairman, the committees and their chairs, including directors' self-assessments; analyzed the results and made recommendations to improve certain processes, as necessary.
- Reviewed an orientation program for new directors designed to ensure the harmonious and swift integration of new members onto the Board of Directors.
- Reviewed the continuing education program for directors.
- Reviewed, in co-operation with the Human Resources Committee, the skills and experience profiles of independent directors and made recommendations to the Board.
- Reviewed the mandates of the Board of Directors and its committees.
- Obtained assurance that the Board had all the information and time required to analyze issues affecting la Caisse.
- Maintained a program involving presentations and discussions outside the formal framework of Board meetings, to allow directors to discuss matters among themselves and with senior management.
- Verified throughout the year that discussion sessions are held in each committee and by the Board without the presence of senior management.

Rules of ethics and professional conduct

Regarding rules of ethics and professional conduct, the Committee's activities included the following:

- Reviewed the Policy on Harassment and Misconduct and recommended it to the Board.
- Reviewed the Code of Ethics and Professional Conduct applicable to officers and employees of la Caisse and reviewed the report on how the rules on ethics and professional conduct were being applied at la Caisse and studied the procedure for disclosing wrongdoings.
- Reviewed the Code of Ethics and Conduct for Directors.
- Reviewed the rules of ethics applied by la Caisse to manage legal constraints related to its shareholding in public companies.
- Reviewed the rules on declarations of interests, verified that the declarations complied with the provisions in effect, and transmitted the declarations to the authorities designated under the Act respecting the Caisse.
- Reviewed reports on transactions involving securities of companies that have ties with Caisse directors.

Caisse activities

- Reviewed the report on donations and sponsorships provided by la Caisse during the year and reviewed the annual budget for such activities.
- Reviewed the process for appointing members to the Boards of Directors of certain private and public companies in which la Caisse invests.
- Studied the report on responsible investment activities.
- Studied the report on designating members to the Boards of Directors of companies in which la Caisse invests.

USE OF EXTERNAL EXPERTS

The Governance and Ethics Committee did not use the services of external experts in 2018.

Report
of the Human Resources Committee

HIGHLIGHTS

1
Review of the changes to la Caisse's teams to favourably position the institution in a rapidly changing and increasingly competitive market.

2
Review of la Caisse's performance management program to strengthen team alignment with the objectives of la Caisse's strategic plan, including a review of the incentive compensation program, which now includes a climate factor.

3
Review of the leadership and next generation development program including promotion of promising young talent.

HUMAN RESOURCES COMMITTEE

MANDATE

The mandate of the Human Resources Committee is to review the orientations and strategies used by la Caisse to manage its human resources, including performance evaluation, succession planning and executive compensation, as well as its general human resources practices. For a full description of the mandate of the Human Resources Committee, please consult the Governance section of la Caisse's website (www.cdpq.com).

COMPOSITION (as at December 31, 2018)

The Committee is composed of four independent members:

- Chair: Elisabetta Bigsby
- Members: Robert Tessier, Ivana Bonnet-Zivcevic and Sylvain Brosseau

ACTIVITY REPORT

Number of meetings in 2018: 8

President and Chief Executive Officer

The Committee reviewed Mr. Sabia's objectives for 2018 as President and Chief Executive Officer and recommended that the Board of Directors approve them. Furthermore, the Committee reviewed the performance evaluation and total compensation conditions for the President and Chief Executive Officer and recommended them to the Board of Directors for approval.

Senior executives

La Caisse operates in an environment that requires developing and maximizing talent to build the next generation of leaders in the organization and foster new ways of doing business. To withstand growing market turbulence and increasing competition, the Committee examined and recommended to the Board of Directors certain changes, with three objectives, which were:

- Continuing to strengthen collaboration among teams;
- Emphasizing innovation;
- Being alert to the best opportunities and acting with agility to seize or create them.

These changes specifically included appointments to new positions, promotions and added responsibilities. Thus, Macky Tall was appointed Head of Liquid Markets and President and Chief Executive Officer, CDPQ Infra. Maxime Aucoin was promoted to Executive Vice-President, Investment Strategy and Innovation and was entrusted with responsibility for our new Innovation Team. Ani Castonguay was promoted to Executive Vice-President, Public Affairs. Moreover, in addition to supervising external management activities within the liquid asset classes, Mario Therrien is now responsible for developing strategic partnerships in developed markets. Lastly, Claude Bergeron became responsible for all depositor-related activities, in addition to his risk management responsibilities.

The Committee also reviewed the appointment of Emmanuel Jaclot to Executive Vice-President, Infrastructure as well as the appointment of Alexandre Synnett to Executive Vice-President, Digital Technology and Operations, reporting to Maarika Paul, Executive Vice-President and Chief Financial and Operations Officer. This appointment was made following the departure of Pierre Miron, who held the position of Executive Vice-President, Information Technology and Operations.

In addition, the Committee reviewed the performance evaluation and total compensation for senior executives and recommended both to the Board for approval.

Key strategies and policies for integrated talent management

During 2018, the Committee discussed several key strategies and policies for integrated talent management. To that end, among other things, the Committee:

- Reviewed the performance management program for the various teams as well as incentive compensation, more specifically to continue to strengthen alignment of performance and compensation with la Caisse's strategy;
- Integrated a climate factor in the incentive compensation evaluation process;
- Supported deployment of a leadership program for la Caisse's current and future leaders;
- Examined risk mitigation measures regarding talent management as well as talent management indicators, including indicators of gender diversity within la Caisse and, more specifically, within investment teams.

Committee operations

The Committee reviewed the results of the evaluation carried out by its members, addressing the effectiveness of the Committee's operations.

Use of external experts

In implementing the incentive compensation program, the Committee and the Board used the services of Hugessen Consulting, an independent consulting firm recognized for its expertise in the compensation of pension fund personnel. The Committee takes Hugessen Consulting's recommendations into account but makes its own decisions, which may be based on information other than the firm's recommendations.

COMPENSATION POLICY

Committee's work on compensation

During 2018, the Committee, with advice from Hugessen Consulting, ensured that the Compensation Policy adopted in 2010 met its strategic objectives of paying for long-term performance, offering competitive compensation and linking the interests of management and depositors. The Committee reviewed how la Caisse's Compensation Policy was applied; it analyzed the proposed performance incentive compensation and proposals for implementation of co-investment and ensured that the proposals were aligned with Compensation Policy and market practices.

Accordingly, the Committee notably analyzed the amount of incentive compensation to be awarded under the incentive compensation program and recommended it to the Board for approval.

As previously indicated, in 2018, the Committee undertook, with a view to sound governance, a review of incentive compensation. This exercise consisted of reviewing each of its components in light of la Caisse's strategy and culture, taking market practices and trends into consideration. The Committee concluded, with corroboration by its consultant, Hugessen Consulting, that the incentive compensation meets the Compensation Policy's objectives, which are to pay for performance, offer competitive compensation and link the interests of management and

depositors. In addition, with a view to continuous improvement and alignment with the evolution of la Caisse's culture and strategic plan, certain modifications will be made to incentive compensation starting with the 2019 fiscal year:

- An increase in the weighting of the component linked to la Caisse's overall return to further encourage collaboration among sectors and the link with depositors' interests.
- Increased preponderance of the Individual Contribution component to recognize both the achievement of individual objectives that support strategic objectives and targeted behaviours in line with la Caisse's culture.

Moreover, the Committee received an update on compensation market trends with regard to salary reviews. It also discussed the salary conditions of la Caisse's employees for 2019 and recommended them to the Board for approval.

Framework

La Caisse's Compensation Policy was adopted in accordance with Schedule A of the regulation governing the internal management of la Caisse (the Internal Bylaw). This schedule:

- Defines the maximum levels of total employee compensation and the reference markets;
- States that the data reflecting the reference-market profile must be compiled by a recognized independent firm through an annual survey and must be administered and analyzed according to a methodology and rules generally accepted in the field;
- Stipulates that la Caisse's payroll must not exceed 100% of the salary-scale midpoint.

Reference markets and compensation levels[1]

For the position of President and Chief Executive Officer, the reference market consists of a sample of the seven largest Canadian pension funds, as listed in Table 34 on page 94. For this position, total compensation must be between the median and third quartile (75th percentile) of the reference market, depending on whether la Caisse's performance has been average or superior.

For investment-related positions, the Canadian institutional investment market serves as the reference. A representative sample must include institutions, insurance companies, trust companies, pension funds, investment advisors, brokerage firms and fund managers or their counterparts in similar industries. The current sample comprises the 37 organizations listed in Table 36 on page 95. For these positions, total compensation must fall below the upper decile (90th percentile) of the reference market. For the executive vice-presidents in investment roles, a reduced sample of that described above is used. It groups together 15 firms whose assets under management are greater than $20 billion. The list is provided in Table 35 on page 94.

For non-investment positions, the Québec market serves as the reference, and must notably include public-sector jobs. It therefore contains a representative sample of large public- and private-sector Québec firms and financial-sector companies. The current sample comprises the 49 organizations listed in Table 37 on page 95. For these positions, total compensation must be within the third quartile (75th percentile) of the reference market.

The reference markets for positions located outside Canada were established according to principles similar to those listed previously.

1. For compensation purposes, the first quartile ranges from the 1st to the 25th percentile, the second quartile from the 26th to the 50th percentile, the third quartile from the 51st to the 75th percentile and the fourth quartile from the 76th to the 100th percentile.

In 2018, la Caisse retained the services of Willis Towers Watson for benchmarking its reference markets and engaged McLagan's services regarding positions based outside Canada.

Strategic objectives of the Compensation Policy

La Caisse must rely on highly skilled employees to fulfill its mission, which is to receive moneys on deposit as provided by the Act and manage them with a view to achieving an optimal return on capital within the framework of depositors' investment policies, while at the same time contributing to Québec's economic development.

The total Compensation Policy therefore has the following three objectives:

1. **Pay for performance:** incentive compensation aligned with the returns delivered to depositors. This goal has four key components:
   - Long-term focus: to compensate consistent performance over several years.
   - Risk-return balance: encourage measured risk-taking conducive to sustainable, long-term returns for depositors, while taking into account their risk tolerance.
   - Overall evaluation: to strike a balance between individual contribution, portfolio performance or achievement of business plans, and Caisse performance.
   - Emphasis on la Caisse's overall perspective: to place greater emphasis on employees' contributions to la Caisse's strategic priorities and overall performance, with a greater weighting on leadership and targeted behaviours.
2. **Offer competitive compensation:** to attract, motivate and retain employees with experience and expertise that allow la Caisse to achieve its strategic objectives, within the guidelines in the Internal Bylaw, as described above.
3. **Link the interests of management and depositors:** to ensure that their individual and team efforts are conducive to la Caisse's long-term success.

La Caisse's incentive Compensation Policy complies with the Principles for Sound Compensation Practices issued by the Financial Stability Forum (FSF) and endorsed by the G20 nations: effective compensation governance; alignment of compensation with long-term, measured risk-taking; and regular review of compensation practices.

Components of total compensation

La Caisse's employees receive total compensation based on four components:

1. Base salary
2. Incentive compensation
3. Pension plan
4. Benefits

FIGURE 30

PERFORMANCE INCENTIVE COMPONENTS

BASED ON ACHIEVEMENT OF INDIVIDUAL OBJECTIVES	→	Individual contribution
BASED ON ACHIEVEMENT OF BUSINESS OBJECTIVES OR RETURNS ON THE SPECIALIZED PORTFOLIOS OF EACH UNIT	→	Portfolio return or business plan achievement
BASED ON ACHIEVEMENT OF LA CAISSE'S RETURN OBJECTIVES	→	Caisse overall return

Base salary

Under the Internal Bylaw, the average base salary must not exceed the salary-scale midpoint. Within these parameters, annual base salaries are set according to the salary conditions prevailing on the reference markets.

Each year, the Human Resources Committee submits the payroll budget to the Board for approval.

For 2018, the Board of Directors approved the following recommendations made by la Caisse's senior management:

- maintain 2018 salary scales close to the median of the reference markets, as measured by recognized external firms;
- grant a merit increase budget, which is under the median of the market increase forecasts.

Incentive compensation

In the investment industry, incentive compensation is an essential part of the total compensation package for employees working in the sector because it aligns financial incentives with clients' performance objectives.

Incentive compensation at la Caisse serves to recognize performance, attainment of objectives and contribution to the achievement of strategic orientations. Incentive compensation is an important part of total compensation, so it directly influences the total compensation level and its position relative to the reference market.

Performance is measured over a period of five years. This five-year horizon reinforces a sustained performance and is consistent with the long-term investment strategy.

This incentive compensation program recognizes consistent performance with incentive compensation and requires eligible employees to defer a portion of this incentive compensation into a co-investment account over a three-year period (see page 91). This mechanism continues to link the interests of management to those of depositors by varying these amounts according to the absolute return generated for depositors.

For the relevant employees in the International Private Equity team in international subsidiaries, a part of the incentive compensation is awarded as performance units instead of being entirely awarded as annual incentive compensation. This supports the deployment of the direct International Private Equity strategy, which has resulted in a significant increase in the proportion of direct investments completed by the internal teams. This mechanism aims to recognize the various compensation structures present in the private equity sector and in countries where la Caisse is present internationally. This allows placing increased emphasis on the quality of the transactions completed by internal private equity teams, year after year, in establishing incentive compensation. It also provides la Caisse with the opportunity to internalize expertise developed in direct investment rather than pay higher fees to external funds. In addition, it fosters attracting, retaining and motivating sought-after talent.

Components of performance incentive compensation

Performance incentive compensation is never guaranteed; it always depends on the evaluation of performance criteria as established by the incentive compensation program. Accordingly, employees receive performance incentive compensation based on the three components outlined in Figure 30 on page 88.

TABLE 31

POSITIONING OF TOTAL COMPENSATION BY POSITION TYPE

Position type	Maximum total compensation under the Bylaw[1]	Average positioning of the total compensation awarded in 2018 relative to the reference markets under the Bylaw
Investment positions	90th percentile	Between the 21st and 66th percentile and, on average, at the 46th percentile
Non-investment positions	75th percentile	

1. Maximum total compensation refers to percentile positions found in Schedule A of the Internal Bylaw.

Regarding the Return component, namely the return on the specialized portfolios, the objective of all portfolios is to outperform their benchmark indexes. The three less-liquid portfolios, namely Real Estate, Infrastructure and Private Equity, as well as the Equity Markets portfolio, also have an absolute-return target.

Moreover, a component linked to the carbon footprint intensity reduction target has been added for the first time in 2018 to support la Caisse's strategy to address climate change.

Results since 2014

Over the last five years, la Caisse has had major accomplishments, a good number of which have been presented in previous sections of this report. The Human Resources Committee wishes to highlight some of these achievements.

- Over five years, la Caisse has generated an annualized return of 8.4% for its depositors and net investment results of $98.7 billion. This performance exceeded that of its benchmark, resulting in added value of $16.7 billion.
- In 2018, in uncertain times for investors, la Caisse generated net investment results of $11.8 billion, with a return of 4.2%, compared to 2.4% for its benchmark. The added value of $5.3 billion generated demonstrates the effectiveness of the strategy implemented to build a robust and resilient portfolio, for the benefit of all Quebecers. Specifically, performance by the Equity Markets portfolio proved the appropriateness of the quality-based orientation when selecting securities.
- In Québec, since 2014, la Caisse has completed investments and commitments totalling $21.2 billion, including $7.3 billion in 2018. It has greatly supported the private sector, which today represents 70% of its assets in Québec, totalling $44.3 billion out of a total of $63.8 billion. To maximize its impact on both the economy and companies, la Caisse continued to implement its strategy's three pillars – growth-creating projects, growth and globalization, and innovation and the next generation – with an increasing accent on development of Québec's new economy.
- In addition to its absolute-return management approach, la Caisse has deployed considerable capital to increase its real estate, infrastructure, private equity and credit assets over the last few years. This strategy has been beneficial because these investments have provided solid returns, year after year. The Infrastructure and Private Equity portfolios performed particularly well in 2018, with high returns, sharply above their benchmark, generating high added value.
- To seize the best business opportunities, la Caisse has established partnerships with leading players around the world. This has allowed it to build innovative investment platforms and to conclude key transactions in several countries. For the last five years, la Caisse has thus increased its presence in international markets, notably in growth markets, by approximately $116 billion.
- In conjunction with its strategy to fight climate change, la Caisse has made solid investments that contribute to the transition to a low-carbon economy and enabled it to exceed its initial objective of increasing low-carbon assets in the very first year. Sustained efforts have also been made to reduce the carbon intensity of its overall portfolio in order to achieve the objectives it has set.

Performance incentive compensation for 2018

Taking into account performance incentive compensation both awarded and deferred, employees' total compensation in 2018 was slightly below the median of the reference markets for an 8.4% performance over five years.

More specifically, a study by Willis Towers Watson showed that the employees' total compensation ranked between the 21st and 66th percentiles of the reference markets (where the 100th percentile represents the highest compensation in the market), depending on the position, the specific performance of the portfolios and the compensation awarded for these positions (see Table 31, page 89).

The opinion presented by Hugessen Consulting to la Caisse's Board of Directors stated:

"We reviewed la Caisse's returns and benchmark indexes for 2018, as well as the factors that contributed to its return, and we are satisfied with them. We can confirm that the value-added calculations, the 2018 return multiples, the 2014-2018 average return multiples and the 2018 incentive compensation multiples are consistent with la Caisse's incentive compensation program. In our opinion, the total amount of incentive compensation awarded under the program in 2018 is reasonable in the prevailing market conditions and given la Caisse's performance in 2014, 2015, 2016, 2017 and 2018."

Co-investment: deferred performance incentive compensation

The purpose of co-investment is to better align the interests of those employees with the most influence on la Caisse's financial and organizational performance with the interests of depositors over the long term. The value of the deferred and co-invested performance incentive varies – upward or downward – along with la Caisse's average absolute overall return during the incentive deferral period.

At the end of each three-year period, as required by the Income Tax Act, the deferred amount, plus or minus the average return credited for the period, will be paid to each participant as a deferred incentive payment with restrictions. Figure 32 illustrates this mechanism.

Senior executives have three years to contribute at least the equivalent of their base salary to the co-investment account.

For the President and Chief Executive Officer, as well as senior executives, the minimum threshold of the total incentive compensation that must be deferred in a co-investment account is 55%. For all vice-presidents and senior vice-presidents, as well as for intermediate and senior investment employees, the minimum threshold is 35%. Lastly, for managers and high-level professionals, the minimum threshold is 25%.

La Caisse offers such employees the option of deferring and co-investing an additional portion of their incentive compensation into the co-investment account. This voluntary participation increased the deferred and co-invested amounts in 2018 by more than 10%.

Performance units: long-term program applicable to international subsidiaries only

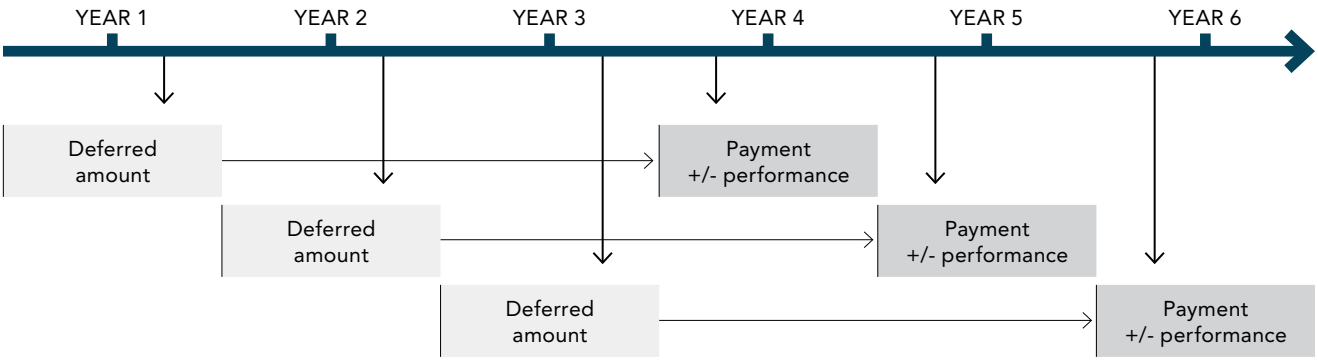
For private equity employees in international offices who hold eligible positions, a portion of their incentive compensation is made up of long-term performance units, instead of being awarded only through performance incentive compensation. To be equitable and take into account the performance units that are granted, the potential incentive compensation for eligible employees is therefore lower than that of other investment employees.

The purpose of the performance units is to support the investment strategy in the direct international private equity sector over a long-term horizon. This component is in line with the practices in this industry and reflects la Caisse's strategy to increase the proportion of direct investments in its Private Equity portfolio. It allows for increased emphasis on the quality of the transactions completed by internal private equity teams, year after year, in establishing incentive compensation. It also provides la Caisse with the opportunity to internalize expertise developed in direct investment rather than pay higher fees to external funds.

The value of the performance units awarded will rise and fall according to the absolute return of the designated portfolio during a five-year performance period.

FIGURE 32

DEFERRED AND CO-INVESTED PERFORMANCE INCENTIVES



At the end of this period, the units acquired will be settled based on the achievement of performance objectives established at the time they were granted and converted into performance factors that have a threshold and a maximum cap. When the performance over five years is less than the threshold, no amounts are payable.

Pension plan

Depending on their positions, all employees based in Canada are members and contribute to one of two defined-benefit pension plans: the Government and Public Employees Retirement Plan (RREGOP) or the Pension Plan of Management Personnel (PPMP). In addition, managers and professionals in strategic positions participate in the Régime additionnel de retraite (RAR) and senior executives participate in the Supplemental Pension Plan for Designated Officers (SPPDO). Under these two plans, they are entitled, as of the normal age of retirement, to receive a total annual pension equal to 2% of their eligible earnings for each year or fractional year of plan membership, taking into account the annual tax limits imposed by the Canada Revenue Agency for each year they were not RAR or SPPDO members.

Some senior executives will have additional years of services recognized under the SPPDO, depending on the circumstances of their promotion or hiring.

Benefits

Employees enjoy a range of competitive benefits, including group insurance (such as medical, dental and life insurance). Moreover, senior executives benefit from specific benefits paid as an allowance. La Caisse also requires senior executives to undergo annual health checkups.

Review of the President and Chief Executive Officer's performance and total compensation

Performance review

At the beginning of 2018, the Committee recommended to the Board for review and approval a series of non-financial individual objectives proposed by the President and Chief Executive Officer.

A series of major business objectives aimed to achieve targets aligned with la Caisse's strategy and business plan.

- A first major objective was to help transform the organization and implement the organizational changes necessary to optimize delivery of the strategy adopted, while creating two new teams. The first team is dedicated to the development of strategic partnerships and the resulting investment opportunities, and the second team is responsible for identifying and generating new investment opportunities, thus becoming the global innovation driver within la Caisse.
- A second objective was to ensure that the investment strategy was adapted to an increasingly competitive market environment, while deploying the strategy to fight climate change.
- A third objective consisted of maximizing la Caisse's impact in Québec by supporting solid and promising Québec companies, notably in the new economy, by undertaking growth-creating projects to energize Québec's economy.
- A fourth objective consisted of pursuing la Caisse's globalization by continuing to deploy its assets internationally in an efficient manner.
- A fifth objective consisted of investing in the development of talent by focusing on organizational culture and promoting development of the next generation at all levels of the organization.

In its evaluation of these individual objectives, the Board determined that the President and Chief Executive Officer had surpassed the objectives that he had been given at the beginning of the year and that his performance during 2018 greatly exceeded their expectations of him.

Review of total compensation

The compensation and the other employment conditions of the President and Chief Executive Officer are based on parameters set by the government after consultation with the Board of Directors.

In accordance with his request, Mr. Sabia has received no salary increase since he was appointed in 2009. In 2018, Mr. Sabia's base salary remained unchanged at $500,000.

The President and Chief Executive Officer's annual incentive compensation was determined on the basis of the same three components as in 2017, presented in Figure 33.

Like all other members of senior management covered by the incentive compensation program, the President and Chief Executive Officer is required to defer a minimum of 55% of his incentive compensation in a co-investment account.

This year, the component linked to la Caisse's overall return corresponds to the return over the five-year period from 2014 to 2018. The annualized return for this period is 8.4%, with $16.7 billion of value added in relation to the benchmark portfolio.

This return represents a solid performance over five years.

As for the component based on the organization's objectives, in the past five years under Mr. Sabia's leadership, la Caisse:

- Built a robust and resilient portfolio that performs well in turbulent markets while mitigating risks, as confirmed in 2018;
- Pursued the investment strategy that focuses on globalization, the creation of long-term partnerships, absolute-return management, less-liquid assets and credit activities;
- Increased its support of Québec companies in their growth and international expansion and investment in Québec's new economy with major transactions completed in new economy sectors;
- Commenced work on all branches of the Réseau express métropolitain (REM);
- Continued deployment of the investment strategy to address climate change with the completion of several significant transactions in the renewable energy and sustainable industry sectors in Québec and around the world.

In conclusion, Michael Sabia has exercised strong leadership during a year where market uncertainly steadily increased. The President and Chief Executive Officer mobilized teams that stayed the course on la Caisse's strategy to generate solid results in the long term. The Committee and the Board believe that Mr. Sabia has continued to deliver remarkable performance and has greatly surpassed the objectives that were set for him.

The Board of Directors awarded Mr. Sabia $3,300,000 of incentive compensation and he elected to defer an amount of $1,980,000 into the co-investment account. In 2021, Mr. Sabia will be eligible to receive the deferred incentive compensation related to this amount, increased or decreased according to la Caisse's average absolute return over the three-year period, between 2019 and 2021.

In 2018, Mr. Sabia received his deferred incentive compensation amount for 2015. The amount of this deferred incentive compensation totalled $2,044,640 and included the return credited since 2015.

The other employment conditions to which Mr. Sabia is entitled are aligned with la Caisse's policies and comply with the parameters set out in the Internal Bylaw. He received $40,000 in annual perquisites and is a member of la Caisse's Employee Group Insurance Plan.

FIGURE 33

PERFORMANCE INCENTIVE COMPONENTS OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

CAISSE OVERALL RETURN	→	Based on the level of attainment of la Caisse's return objectives
ACHIEVEMENT OF THE ORGANIZATION'S OBJECTIVES	→	Based on the level of attainment of the organization's objectives
INDIVIDUAL CONTRIBUTION	→	Based on the level of attainment of individual objectives

When he was appointed in 2009, Mr. Sabia waived membership in any pension plan. He also waived any severance pay, regardless of cause. Even so, given that membership in the basic pension plan is mandatory under the provisions of the Pension Plan of Management Personnel (PPMP, under Retraite Québec rules), Mr. Sabia is obliged to be a member despite his waiver. In 2018, contributions to the mandatory basic plan represented an annual cost to la Caisse of $18,874.

Compensation of the President and Chief Executive Officer and the five most highly compensated executives for 2016-2018

La Caisse's Board of Directors recognizes the importance of qualified leadership and firmly believes that the policies and programs it has endorsed make it possible to:

- Offer competitive compensation in a market where competition for talent is intense and where la Caisse must compete globally to generate the expected returns;
- Achieve the strategic objectives that enable la Caisse to fulfill its mission.

Pursuant to the Act respecting the Caisse de dépôt et placement du Québec, la Caisse discloses, for itself and its wholly owned subsidiaries, the compensation of the President and Chief Executive Officer as well as that of the five most highly compensated executives reporting directly to him (see Table 38, p. 96).

TABLE 34

REFERENCE MARKET – PRESIDENT AND CHIEF EXECUTIVE OFFICER

- Alberta Investment Management Corporation (AIMCo)
- British Columbia Investment Management Corporation (BCI)
- CPP Investment Board
- Healthcare of Ontario Pension Plan (HOOPP)
- Ontario Municipal Employees Retirement System (OMERS)
- Ontario Teachers' Pension Plan (OTPP)
- Public Sector Pension Investment Board (PSP Investments)

TABLE 35

REFERENCE MARKET – INVESTMENT EXECUTIVE VICE-PRESIDENT POSITIONS

- Addenda Capital
- Alberta Investment Management Corporation (AIMCo)
- British Columbia Investment Management Corporation (BCI)
- Canada Post Pension Plan
- Connor, Clark & Lunn Financial Group
- CPP Investment Board
- Desjardins Global Asset Management
- Healthcare of Ontario Pension Plan (HOOPP)
- Hydro-Québec Pension Plan
- Mawer Investment Management
- Ontario Municipal Employees Retirement System (OMERS)
- Ontario Teachers' Pension Plan (OTPP)
- Public Sector Pension Investment Board (PSP Investments)
- Sun Life Financial
- Workplace Safety and Insurance Board (Ontario)

TABLE 36

REFERENCE MARKET – INVESTMENT POSITIONS

- Addenda Capital
- Air Canada Pension Plan
- Alberta Investment Management Corporation (AIMCo)
- Alberta Teachers' Retirement Fund Board
- ATB Financial
- Axium Infrastructure
- Bimcor
- British Columbia Investment Management Corporation (BCI)
- Canada Post Pension Plan
- Canadian Broadcasting Corporation Pension Plan
- Canadian Western Bank
- CN Investment Division
- Connor, Clark & Lunn Financial Group
- CPP Investment Board
- CWB Wealth Management
- Desjardins Global Asset Management
- Healthcare of Ontario Pension Plan (HOOPP)
- HSBC Bank
- Hydro-Québec Pension Plan
- Insurance Corporation of British Columbia
- Intact Investment Management
- Investment Management Corporation of Ontario
- Mawer Investment Management
- MD Financial Management
- Ontario Municipal Employees Retirement System (OMERS)
- Ontario Teachers' Pension Plan (OTPP)
- OPSEU Pension Trust
- Public Sector Pension Investment Board (PSP Investments)
- Richardson GMP
- Sun Life Financial
- TELUS Pension Plan
- The Canadian Medical Protective Association
- The Civil Service Superannuation Board (Manitoba)
- The Great-West Life Assurance Company
- University of Toronto Asset Management Corporation
- Vestcor
- Workers' Compensation Board of Alberta

TABLE 37

REFERENCE MARKET – NON-INVESTMENT POSITIONS

- AbbVie Canada
- Addenda Capital
- Agropur Dairy Cooperative
- Aimia
- Air Canada
- Alcoa Canada
- Bank of Montreal
- Bell Canada
- Bombardier
- Bombardier Aerospace
- Bombardier Transportation
- Broadridge Financial Solutions
- Cadillac Fairview Corporation
- Canadian National Railway Company
- CGI Group
- Cirque du Soleil
- CN Investment Division
- COGECO
- Desjardins Group
- Énergir
- Fonds de Solidarité FTQ
- General Electric Canada
- Holt Renfrew
- Hydro-Québec
- IBM Canada
- Intact Financial Corporation
- Intact Investment Management
- Keurig Canada
- Kruger
- Laurentian Bank
- Loto-Québec
- Manulife Financial
- MasterCard Canada
- Merck Canada
- Molson Coors Canada
- Northbridge Financial Corporation
- Pfizer Canada
- Power Corporation of Canada
- Public Sector Pension Investment Board (PSP Investments)
- RGA Canada
- Rio Tinto Alcan Canada
- Royal Bank of Canada
- Saputo
- SNC-Lavalin
- SSQ Financial Group
- TELUS
- TMX Group
- UAP
- VIA Rail Canada

TABLE 38

SUMMARY OF THE COMPENSATION OF THE PRESIDENT AND CEO AND THE FIVE MOST HIGHLY COMPENSATED EXECUTIVES FOR 2016-2018

This table summarizes total compensation as awarded. Specifically, it sets out the incentive compensation awarded for the year, divided between the proportion paid for the year and the amount co-invested (deferred), as well as the value of pension plan participation, if applicable. Total compensation awarded provides a better understanding of the alignment with la Caisse's performance. Compensation for 2017 and 2016, as applicable, is presented on the same basis.

Name and main position	Year	Base salary A	Incentive compensation paid for the year B	Co-investment amount for the year[1] C	Incentive compensation awarded for the year D=B+C	Pension value[2] E	Other compensation[3] F	Total compensation awarded for the year G=A+D+E+F
Michael Sabia	2018	$ 500,000	$ 1,320,000	$ 1,980,000	$ 3,300,000	$ 20,000	$ 48,100	$ 3,868,100
President and Chief Executive Officer	2017	$ 500,000	$ 1,160,000	$ 1,740,000	$ 2,900,000	$ 20,000	$ 48,500	$ 3,468,500
	2016	$ 500,000	$ 1,160,000	$ 1,740,000	$ 2,900,000	$ 20,000	$ 48,900	$ 3,468,900
Macky Tall	2018	$ 485,000	$ 1,113,700	$ 811,300	$ 1,925,000	$ 92,200	$ 42,000	$ 2,544,200
Head of Liquid Markets and President and Chief Executive Officer, CDPQ Infra	2017	$ 445,000	$ 978,700	$ 646,300	$ 1,625,000	$ 84,600	$ 42,300	$ 2,196,900
	2016	$ 420,000	$ 940,000	$ 760,000	$ 1,700,000	$ 63,000	$ 41,700	$ 2,224,700
Stephane Etroy[4]	2018	£ 440,000	£ 591,300	£ 722,700	£ 1,314,000	£ 10,000	£ 391,700	£ 2,155,700
Executive Vice-President, Private Equity	2017	£ 419,000	£ 565,740	£ 691,400	£ 1,257,140	£ 9,500	£ 335,700	£ 2,021,340
	2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Emmanuel Jaclot[5]	2018	€ 248,000	€ 504,900	€ 617,100	€ 1,122,000	€ 10,000	€ 5,600	€ 1,385,600
Executive Vice-President, Infrastructure	2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anita M. George[6]	2018	INR 40,301,000	INR 25,871,400	INR 31,620,600	INR 57,492,000	N/A	INR 795,100	INR 98,588,100
Executive Vice-President, Strategic Partnerships – Growth Markets	2017	INR 39,116,000	INR 24,211,000	INR 29,591,300	INR 53,802,300	N/A	INR 795,100	INR 93,713,400
	2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Claude Bergeron	2018	$ 431,000	$ 400,000	$ 600,000	$ 1,000,000	$ 138,000	$ 41,900	$ 1,610,900
Chief Risk Officer and Head of Depositor Relations	2017	$ 400,000	$ 352,000	$ 528,000	$ 880,000	$ 128,000	$ 42,300	$ 1,450,300
	2016	$ 400,000	$ 405,000	$ 495,000	$ 900,000	$ 112,000	$ 38,800	$ 1,450,800

1. As mentioned on page 91 of this Annual Report, under the incentive compensation program, executives must defer a minimum of 55% of their awarded incentive compensation into a co-investment account.
2. The pension value is based on a calculation that allocates the total pension value over the period corresponding to the executive's career. This value is calculated by Willis Towers Watson.
3. Amounts indicated include employer contributions to group insurance premiums, perquisites and the health care account. This category may also include other allocated amounts, depending on the executive.
4. For Stephane Etroy, "Other compensation" includes the value of performance units awarded (£308,000 in 2018 and £252,000 in 2017), as well as an allocation of £77,500 per year. In addition to the total compensation awarded, there are temporary allowance installments (£410,000 in 2018 and £290,000 in 2017) until December 2020. This executive's compensation is presented in pounds sterling.
5. For Emmanuel Jaclot, in addition to total compensation awarded, he receives a temporary allowance of €280,000 in annual installments until May 2023. This executive's compensation is presented in euros.
6. The compensation of this executive is presented in Indian rupees.

TABLE 39

SUMMARY OF THE DEFERRED AND CO-INVESTED COMPENSATION OF THE PRESIDENT AND CEO AND OF THE FIVE MOST HIGHLY COMPENSATED EXECUTIVES FOR 2015-2018

Name and main position	Fiscal year	Deferred and co-invested compensation[1]	Cumulative return at the time of payment	Previously co-invested compensation disbursed in 2018[2]
Michael Sabia President and Chief Executive Officer	2018	$ 1,980,000		
	2017	$ 1,740,000		
	2016	$ 1,740,000		
	2015	$ 1,683,000	$ 361,640	$ 2,044,640
Macky Tall Head of Liquid Markets and President and Chief Executive Officer, CDPQ Infra	2018	$ 811,300		
	2017	$ 646,300		
	2016	$ 760,000		
	2015	$ 415,000	$ 89,175	$ 504,175
Stephane Etroy Executive Vice-President, Private Equity	2018	£ 722,700		
	2017	£ 691,400		
	2016	N/A		
	2015	£ 87,500	£ 18,802	£ 106,302
Emmanuel Jaclot Executive Vice-President, Infrastructure	2018	€ 617,100		
	2017	N/A		
	2016	N/A		
	2015	N/A	N/A	N/A
Anita M. George Executive Vice-President, Strategic Partnerships – Growth Markets	2018	INR 31,620,600		
	2017	INR 29,591,300		
	2016	N/A		
	2015	N/A	N/A	N/A
Claude Bergeron Chief Risk Officer and Head of Depositor Relations	2018	$ 600,000		
	2017	$ 528,000		
	2016	$ 495,000		
	2015	$ 372,000	$ 79,935	$ 451,935

1. The amounts appearing in the table refer to the portion of the incentive compensation from previous years and the current year, which is deferred over a three-year period. As required by the Income Tax Act, these amounts must be disbursed after three years.
2. Disbursed co-investments correspond to the sum of the deferred compensation and the return earned during the three-year period. The returns earned correspond to the weighted average return on la Caisse's depositors' funds expressed as a percentage, as published by la Caisse for each of its fiscal years and each of its six-month periods, compounded over a three-year period.

TABLE 40

PENSION SUMMARY OF THE PRESIDENT AND CEO AND THE FIVE MOST HIGHLY COMPENSATED EXECUTIVES[1]

This table summarizes the values recognized for financial statement purposes for the President and CEO and the five most highly compensated executives who participate in a defined benefit pension plan[1].

Name and main position	Years of credited service[2]	Annual benefits payable[3] ($) At year-end	Annual benefits payable[3] ($) At age 65	Accrued obligation at start of year[4] ($)	Change due to compensatory items[5] ($)	Change due to non-compensatory items[6] ($)	Accrued obligation at year-end[4] ($)
Michael Sabia[7] President and Chief Executive Officer	9.8	28,900	28,900	0	0	0	0
Macky Tall Head of Liquid Markets and President and Chief Executive Officer, CDPQ Infra	14.5	106,300	253,000	960,700	283,100	(98,500)	1,145,300
Claude Bergeron Chief Risk Officer and Head of Depositor Relations	38.2	336,300	387,000	2,814,200	344,400	(343,800)	2,814,800

1. The table above presents the changes in value of the pension plan benefits for senior executives, in compliance with accounting rules. These values are presented for information purposes as the value reflected in the compensation summary is determined following current benchmarking practices. The following executives do not participate in a defined benefit pension plan: Stephane Etroy, Anita M. George and Emmanuel Jaclot.
2. This is the number of years of credited service in the basic plan.
3. Annual benefits equal the amount of pension payable under the basic plan and the supplemental plan at year-end or at age 65.
4. The obligations do not include those of the basic plan because employer and employee contributions are remitted to Retraite Québec, which assumes the liability for the benefits. La Caisse's contribution was $18,874 per executive in 2018.
5. The change due to compensatory items includes the annual cost of pension benefits, base salary changes in relation to the salary increase assumption used, plan changes or the award of additional years of service.
6. The change due to non-compensatory items includes amounts attributable to the interest accrued on the obligation at the beginning of the year, actuarial gains and losses associated with non-compensatory items and changes in actuarial assumptions.
7. When Mr. Sabia was appointed in 2009, he waived membership in any pension plan. Under Retraite Québec rules, however, membership in the Pension Plan of Management Personnel is mandatory, as described at www.retraitequebec.gouv.qc.ca/en/.

TABLE 41

SUMMARY OF SEVERANCE PAY FOR THE PRESIDENT AND CEO AND THE FIVE MOST HIGHLY COMPENSATED EXECUTIVES

Name and main position	Precipitating event	Theoretical amount payable
Michael Sabia[1] President and Chief Executive Officer	Contract termination	$ 0
Macky Tall[2] Head of Liquid Markets and President and Chief Executive Officer, CDPQ Infra	Non-voluntary termination	$ 1,250,000
Stephane Etroy[3] Executive Vice-President and Head of Private Equity	Non-voluntary termination	£ 785,000
Emmanuel Jaclot[4] Executive Vice-President, Infrastructure	Non-voluntary termination	€ 638,000
Anita M. George[5] Executive Vice-President, Strategic Partnerships – Growth Markets	Non-voluntary termination	N/A
Claude Bergeron[6] Chief Risk Officer and Head of Depositor Relations	Non-voluntary termination	$ 998,000

1. When Mr. Sabia was appointed in 2009, he waived any severance plan, regardless of cause.
2. In the event of dismissal without just and sufficient cause, this executive's employment contract provides for severance equal to his annual base salary, increased by an amount equal to his annual target incentive compensation and, if applicable for the current year, the amount of his target incentive and the average of the target incentive for the last three years corresponding to his responsibilities as President and Chief Executive Officer of CDPQ Infra, prorated to the months worked during the months preceding the termination of his employment.
3. In the event of dismissal without just and sufficient cause, this executive's employment contract provides for severance equal to 18 months of his annual base salary, allocation and cost of benefits and, if applicable for the current year, the benefit includes the incentive compensation corresponding to the average of his incentive compensation for the previous four years, prorated to the months worked during the months preceding the termination of his employment.
4. In the event of dismissal without just and sufficient cause, this executive's employment contract provides for severance equal to 18 months of his annual base salary and, if applicable for the current year, the incentive compensation corresponding to the average of the incentive compensation of the last four years, prorated to the months worked during the months preceding the termination of his employment.
5. This executive's employment contract does not provide special conditions related to the termination of her employment.
6. In the event of dismissal without just and sufficient cause, this executive's employment contract provides for severance equal to his annual base salary, increased by an amount equal to his annual incentive compensation and the annual amount related to his perquisites.

TABLE 42

REFERENCE MARKETS AND CAISSE TOTAL COMPENSATION FOR 2018 FOR THE PRESIDENT AND CEO AND THE FIVE MOST HIGHLY COMPENSATED EXECUTIVES[1]

Main position	Maximum total compensation based on reference market[2]	Total compensation awarded in 2018[3]
President and Chief Executive Officer	$ 5,818,000	$ 3,868,100
Head of Liquid Markets and President and Chief Executive Officer, CDPQ Infra	$ 4,442,000	$ 2,544,200
Executive Vice-President and Head of Private Equity[4]	£ 5,361,000	£ 2,155,700
Executive Vice-President, Infrastructure[4]	€ 4,043,000	€ 1,385,600
Executive Vice-President, Strategic Partnerships – Growth Markets[5]	N/A	INR 98,588,100
Chief Risk Officer and Head of Depositor Relations	$ 2,009,000	$ 1,610,900

1. Willis Towers Watson, *Compensation of the President and Chief Executive Officer Study and Global Market Compensation Study*, Caisse de dépôt et placement du Québec, 2018.
2. As stipulated in the Internal Bylaw, potential total compensation at the 75th percentile of the respective reference markets was used for the President and Chief Executive Officer and non-investment positions. The 90th percentile of the reference market was used for investment positions.
3. These amounts reflect the total compensation awarded in 2018 (Table 38, column G). This compensation was awarded for an 8.4% five-year annualized net return (2014 to 2018).
4. With limited market data, the maximum total compensation based on the reference market does not include the pension component or any form of "carried-interest" incentive compensation program.
5. Due to the nature of this position, market data are not available.

Report
of the Investment and Risk Management Committee

HIGHLIGHTS

1
Reviewed and recommended to the Board changes to the Integrated Risk Management Policy.

2
Reviewed investment policies for certain specialized portfolios and recommended changes to the Board.

THE INVESTMENT AND RISK MANAGEMENT COMMITTEE

The Board of Directors established the Investment and Risk Management Committee to help the Audit Committee fulfill its duty to implement a risk management process.

MANDATE

The Committee's mandate is to ensure that risk management policies are in place with the objective of achieving an optimal risk-return relationship. For a complete description of the Committee's mandate, consult the Governance section of la Caisse's website (www.cdpq.com).

COMPOSITION (as at December 31, 2018)

The Committee's composition was reviewed in 2018.

It consisted of five independent members:

- Chair: Jean La Couture
- Members: Sylvain Brosseau, Patricia Curadeau-Grou, Gilles Godbout and Wendy Murdock
- Guest member: François Joly, Chair of the Audit Committee

The Chairman of the Board attends the Committee meetings.

ACTIVITY REPORT

Number of meetings in 2018: 11

The Committee introduced various mechanisms to provide the Audit Committee and the Board with the necessary assurance regarding the implementation of a risk management process. The Committee:

- Provided a report on its activities to the Board after each meeting;
- Made copies of its minutes available to the Audit Committee and the Board;
- Invited the Chair of the Audit Committee to attend each meeting.

Risk management guidelines and policies

In 2018, the Committee fulfilled its responsibilities in ways that included the following:

- Reviewed reports on specialized portfolio reporting.
- Reviewed the investment policies of certain specialized portfolios and recommended changes to the Board.

- Revised and recommended to the Board market risk limits and objectives for la Caisse's overall portfolio and for each of the specialized portfolios, as well as major mandates and concentration limits for la Caisse's overall portfolio.
- Reviewed and recommended to the Board changes to the Integrated Risk Management Policy, to reflect changes to methodology and to the limits of certain specialized portfolios.
- Reviewed indexes and frameworks for the Real Estate, Equity Markets and Credit specialized portfolios.
- Revised the Currency Management Policy.
- Reviewed the oversight and use of derivative financial instruments.
- Revised and recommended to the Board an increase in the minimum liquidity reserves.
- Reviewed and discussed the report of the Operational Risk Internal Committee.
- Reviewed, at each Committee meeting, risk-return reports for la Caisse as a whole, including the overall portfolio's positioning with respect to risk levels, the benchmark portfolio and strategic orientations.
- Reviewed the Risk Group's business plan.

Investment proposals

- Reviewed and recommended investment proposals under the Board's authority, considering the analysis submitted by the team responsible for the transaction, the project's risk analysis and, more specifically, its impact on the risk level and concentration of the specialized portfolio concerned and la Caisse's overall portfolio, as well as the investment's compliance with the risk oversight policies and guidelines.
- Discussed the risk-return relationship for each investment proposal submitted to the Committee.
- Received follow-up reports on investment proposals authorized by the Board as well as investments that were authorized by la Caisse's senior management but did not come under the Board's purview.

Depositors

- Analyzed the certificates of compliance with the depositors' investment policies and the specialized portfolios' investment policies.

USE OF THE SERVICES OF EXTERNAL EXPERTS

The Investment and Risk Management Committee did not use the services of external experts in 2018.

Board of Directors and Executive Committee

Organizational Structure

La Caisse's Board of Directors consists of the Chairman, the President and Chief Executive Officer, depositors' representatives and independent members. The Act respecting the Caisse stipulates that at least two thirds of the directors, including the Chairman, must be independent.

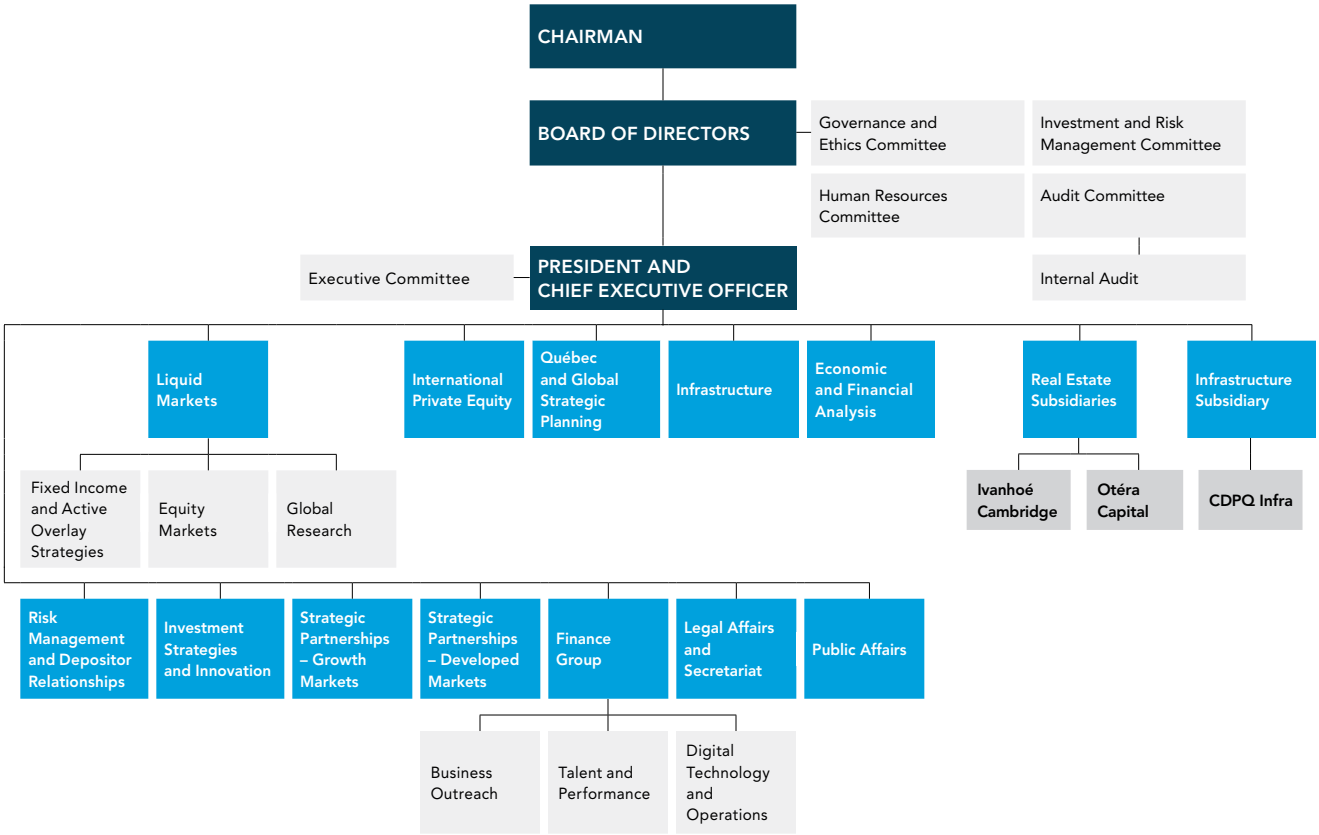
The Executive Committee is composed of the President and Chief Executive Officer and senior officers from la Caisse's various units. As at December 31, 2018, la Caisse employed 1,178 employees in all of its offices. Of this number, 1,045 employees were located in its offices in Québec.

To support its globalization strategy and generate promising investment opportunities, la Caisse also opened offices in several countries over the past few years. As at December 31, 2018, 133 employees worked in these international offices.

La Caisse also has real estate subsidiaries, Ivanhoé Cambridge and Otéra Capital, that had over 1,400 employees at the end of 2018, and an infrastructure subsidiary, CDPQ Infra, which acts as owner-operator of infrastructure projects and had 49 employees at the end of 2018. These subsidiaries are overseen by their own Boards of Directors (see Figures 44 and 45, p. 105).

FIGURE 43

ORGANIZATIONAL STRUCTURE
(as at December 31, 2018)



REAL ESTATE AND INFRASTRUCTURE SUBSIDIARIES

Real estate investments, which take the form of equities and debt, involve primarily office buildings, shopping centres and residential, industrial and logistics properties in key cities worldwide. The holdings are divided into two sectors: Real Estate and Real Estate Debt. The Real Estate sector consists of the assets of Ivanhoé Cambridge, a global real estate industry leader. The Real Estate Debt sector consists of the holdings of Otéra Capital, one of the largest commercial real estate financing companies in Canada.

Figure 44 presents the organizational structure of the real estate operations. More information on the real estate subsidiaries can be found at www.ivanhoecambridge.com and www.oteracapital.com.

The infrastructure subsidiary established in 2015, CDPQ Infra, aims to effectively and efficiently carry out major public infrastructure projects. Figure 45 presents the organizational structure of CDPQ Infra. More information on CDPQ Infra's operations can be found at www.cdpqinfra.com.

FIGURE 44

ORGANIZATIONAL STRUCTURE – REAL ESTATE SUBSIDIARIES
(as at December 31, 2018)

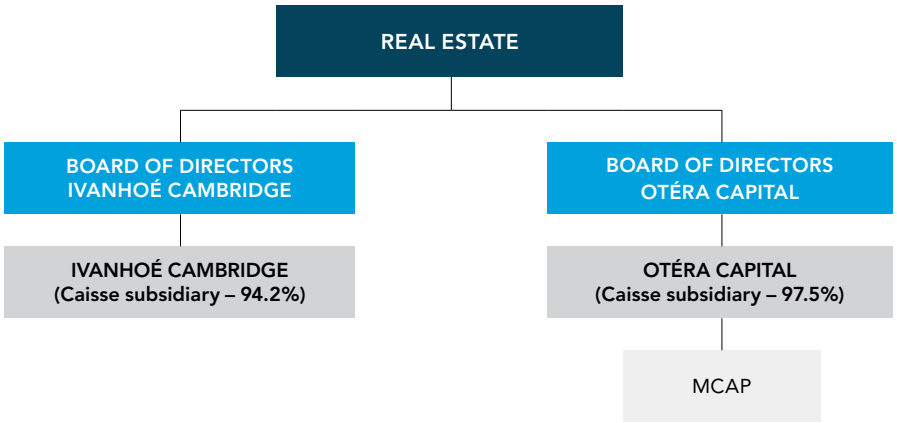
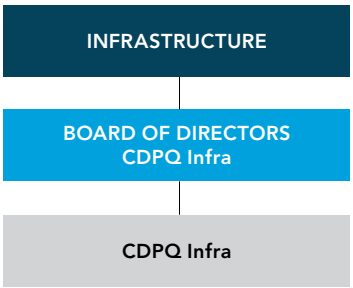


FIGURE 45

ORGANIZATIONAL STRUCTURE – INFRASTRUCTURE SUBSIDIARY
(as at December 31, 2018)



Board of Directors[1]

ROBERT TESSIER
Chairman of the Board
Caisse de dépôt et placement du Québec

Committees: Governance and Ethics /
Human Resources
Member since March 2009

ELISABETTA BIGSBY
Corporate Director

Committee: Human Resources (Chair)
Member since November 2009

IVANA BONNET-ZIVCEVIC
President and Chief Executive Officer
Crédit Agricole CIB in Italie

Committee: Human Resources
Member since December 2017

SYLVAIN BROSSEAU
President and Chief Executive Officer
Walter Global Asset Management

Committees: Investment and Risk Management
Human Resources
Member since July 2018

PATRICIA CURADEAU-GROU
Corporate Director

Committee: Investment and Risk Management
Member since October 2013

MICHEL DESPRÉS
President and Chief Executive Officer
Retraite Québec
Member since March 2016

GILLES GODBOUT
Corporate Director

Committees: Audit /
Investment and Risk Management
Member since January 2013

FRANÇOIS JOLY
Corporate Director

Committees: Audit (Chair) /
Investment and Risk Management (Guest Member)
Member since March 2013

JEAN LA COUTURE
President, Huis Clos Ltée,
Conflict and Litigation Advisors

Committee: Investment
and Risk Management (Chair)
Member since January 2013

DIANE LEMIEUX
President and Chief Executive Officer
Commission de la construction du Québec
Member since December 2014

WENDY MURDOCK
Corporate Director

Committees: Investment and Risk Management
Governance and Ethics
Member since March 2016

FRANÇOIS R. ROY
Corporate Director

Committees: Audit /
Governance and Ethics (Chair)
Member since December 2009

MICHAEL SABIA
President and Chief Executive Officer
Caisse de dépôt et placement du Québec
Member since March 2009

1. Bertrand Cesvet sat on the Board of Directors until April 2018.

The biographies of the members of the Board of Directors can be found on la Caisse's website at www.cdpq.com.

Executive Committee[1,2]

MAXIME AUCOIN
Executive Vice-President,
Investment Strategies and Innovation

CLAUDE BERGERON
Chief Risk Officer
and Head of Depositor Relations

ANI CASTONGUAY
Executive Vice-President,
Public Affairs

MARTIN COITEUX[1]
Chief Economist

MARC CORMIER
Executive Vice-President,
Fixed Income and
Active Overlay Strategies

CHARLES ÉMOND[2]
Executive Vice-President,
Québec and Global Strategic Planning

STEPHANE ETROY
Executive Vice-President
and Head of Private Equity
CDPQ London

ANITA M. GEORGE
Executive Vice-President,
Strategic Partnerships –
Growth Markets
CDPQ India

EMMANUEL JACLOT
Executive Vice-President,
Infrastructure
CDPQ London

MAARIKA PAUL
Executive Vice-President
and Chief Financial and
Operations Officer

MICHAEL SABIA
President and Chief Executive Officer

OONA STOCK
Executive Vice-President,
Talent and Performance

ALEXANDRE SYNNETT
Executive Vice-President,
Digital Technology and Operations

MACKY TALL
Head of Liquid Markets and
President and Chief Executive Officer,
CDPQ Infra

MARIO THERRIEN
Senior Vice-President,
Strategic Partnerships –
Developed Markets

KIM THOMASSIN
Executive Vice-President,
Legal Affairs and Secretariat

1. Martin Coiteux joined la Caisse in January 2019.
2. Charles Émond joined la Caisse in February 2019.

The biographies of the members of the Executive Committee can be found on la Caisse's website at www.cdpq.com.

Sustainable Development Report

Sustainable
Development Report

2016-2018 ACTION PLAN

In 2016, la Caisse published the third edition of its Sustainable Development Action Plan, comprising 26 actions over a three-year period.

These actions addressed five of the government's eight major sustainable development priorities. Our 2016-2018 Sustainable Development Action Plan can be consulted at www.cdpq.com.

In 2018, la Caisse accomplished numerous activities that resulted in positive and sustainable social and environmental changes. This report presents a summary of these actions. Actions taken in the plan's first two years are also identified. Detailed information on completed measures can be found in previous Caisse reports.

Objective
Strengthen eco-responsible practices

ACTION 1

Measure / Take stock of procurement practices

Indicator / Take stock of procurement practices before December 31, 2017

This measure was completed in 2016.

Measure / Propose measures to improve procurement practices, as required

Indicator / At least one agreement signed with social economy businesses before December 31, 2017

This measure was completed in 2017.

ACTION 2

Measure / Set objectives for increasing the waste diversion rate at Canadian managed properties

Indicator / Obtain a waste diversion rate of at least 60% by 2020

The overall waste reclamation rate at Ivanhoé Cambridge has reached 58.8%.

Indicator / Obtain a waste diversion rate at Édifice Jacques-Parizeau that is better than the average for properties managed by Ivanhoé Cambridge

The overall waste reclamation rate at Édifice Jacques-Parizeau has reached 67.9%.

Measure / Set objectives for reducing the material resources used at managed properties

Indicator / Develop a reduction objective by December 31, 2016

This measure was completed in 2016.

ACTION 3

Measure / Continue implementing the Information Management and Security program for la Caisse as a whole

Indicator / Program deployed in 100% of units before December 31, 2018

This measure was completed in 2017.

Measure / Continue reducing the mass of paper documents

Indicator / Destroy at least 600 boxes per year

1,810 boxes were destroyed in 2018.

Indicator / Maintain a ratio of boxes received to boxes destroyed of less than one

With 520 new boxes sent to the warehouse, the ratio was achieved.

Measure / Train new employees on good document management practices

Indicator / At least six information sessions organized for new employees each year

All new employees must attend a mandatory session on document management practices at la Caisse. A total of seven sessions were held in 2018.

LEGEND

- Indicator achieved
- Indicator in progress
- Indicator not achieved
- Indicator postponed

ACTION 4

Measure / Take stock of how employees travel for their professional trips, in and outside the city of Montréal

Indicator / Take stock before December 31, 2018

In 2018, work was completed on a status report on work-related air travel by employees.

La Caisse conducted an employee survey on sustainable mobility.

Measure / Develop a communication plan targeting employees' work-related and personal travel habits

Indicator / Execute a communications plan on work-related personal travel before December 31, 2017

This measure was completed in 2017.

ACTION 5

Measure / Conduct a review of the occupation strategy for Édifice Jacques-Parizeau

Indicator / Complete the pilot renovation project before December 31, 2017

This measure was completed in 2017.

Measure / Foster eco-responsible practices when developing and redeveloping commercial buildings

Indicator / Achieve an environmental certification renewal rate of at least 90% per year

In 2018, there were no environmental certification renewals for properties managed by Ivanhoé Cambridge.

Indicator / Achieve an environmental certification rate for managed properties of at least 70% per year

In 2018, 89% of properties managed by Ivanhoé Cambridge held environmental certifications.

ACTION 6

Measure / Integrate specific environmental and sustainable development criteria for products into calls for tenders

Indicator / 100% of tenders require a description of sustainable development initiatives

This measure was introduced in 2016 and the indicators have consistently been at 100%.

Measure / Encourage the use of cloud services in order to provide IT services in a shared environment

Indicator / Increase the percentage of cloud applications deployed by 2% from the 2016 numbers

This measure was completed in 2017.

Measure / Optimize employee work stations in favour of mobile and more efficient IT equipment, and continue its deployment

Indicator / At least 95% of the targeted work stations replaced by mobile IT equipment by December 31, 2017

In 2018, over 95% of the targeted work stations have been replaced with mobile IT equipment.

Measure / Ensure that an eco-responsible process is implemented for dealing with IT equipment that has reached its end of life

Indicator / Each year, 100% of outdated computer equipment is sent to social economy businesses

All IT equipment identified as outdated in 2018 was given to non-profit organizations.

ACTION 7

Measure / Provide training to designated employees on how to manage events sustainably

Indicator / Training taken

This measure was completed in 2016.

Measure / Take stock of la Caisse's current practices and see where they can be improved

Indicator / Stock taken

Stock was taken of ecoresponsible practices in the organization of major events at la Caisse, and an analysis was performed of the use of single-use water bottles.

Measure / Develop an action plan for implementing best practices

Indicator / An action plan has been developed

A checklist was developed for the organization of events and responsible practices. It will be distributed in 2019.

Objective

Strengthen consideration of sustainable development principles

ACTION 8

Measure / Prepare and distribute informative articles and documents on specific issues related to responsible investment

Indicator / Publish at least two informative articles or documents on issues related to responsible investment for 2017 and 2018

La Caisse has developed and distributed, internally or externally, documents on several issues, such as its statement on international tax and its investment strategy to address climate change. It also joined the Expert Panel on Sustainable Finance, which produced a report on the subject.

Measure / Organize internal activities on various subjects related to responsible investment

Indicator / Organize at least two activities by December 31, 2018

Several presentations have been made at la Caisse each year on various themes in responsible investment.

ACTION 9

Measure / Continue and improve the internship program to develop a new generation of professionals

Indicator / Hire at least seven interns per session

La Caisse hired 108 interns in 2018, representing a significant increase in the number of internships offered (77 interns in 2017).

Indicator / Introduce at least two measures to improve the internship program by December 2018

This measure was completed in 2017.

Measure / Continue hiring students each summer, offering them quality jobs in a large organization

Indicator / Hire at least 30 students each summer

51 students were hired in the summer of 2018.

Indicator / Reach at least 80% "Satisfactory" or "Very satisfactory" ratings in the satisfaction survey

100% of the students and 98% of the team leaders reported that they were satisfied or very satisfied with the experience.

ACTION 10

Measure / Based on the gender diversity profile developed for each department, develop measures to enhance the representation of women, as required

Indicator / Introduce at least two concrete actions to foster diversity, for each targeted team, by December 31, 2017

This measure was completed in 2016.

Measure / Propose, support and promote women candidates and employees at la Caisse to enhance their visibility provincially, nationally and internationally

Indicator / Introduce at least two initiatives per year spotlighting women at la Caisse

Many initiatives are carried out each year to promote women's leadership. In 2018, la Caisse continued its mentoring program, which is supported by executive committee members, with 15 women identified in the organization. Furthermore, it formed a cohort of 14 women to participate in L'Effet A's Défi 100 jours program.

Objective

Continue developing knowledge and skills on sustainable development

ACTION 11

Measure / Prepare and distribute informative articles on sustainable development

Indicator / At least two informative articles per year on sustainable development

Several informative articles were released, in particular on the contribution investors can make to the fight against climate change and on their global development initiatives, following meetings of the G7.

Measure / Organize internal activities on various subjects related to sustainable development

Indicator / At least one internal activity organized on different subjects related to sustainable development for 2017 and 2018

Lunchtime conferences were held on the subject of sustainable growth.

Objective

Strengthen access to and participation in cultural life as a lever of social, economic and territorial development

ACTION 12

Measure / Organize guided visits of the art collection for employees and members of the greater community

Indicator / Organize at least three guided visits per year

In 2018, 18 guided visits were organized for external groups and Caisse employees.

Measure / Invite artists for lunchtime conferences

Indicator / At least one artist invited per year

Zita Cobb, Founder and Chief Executive Officer of Shorefast, gave a conference on her growth-creating artistic project on Fogo Island.

Measure / Protect and restore works in la Caisse's art collection

Indicator / Establish an action plan as a follow-up to the report on conservation of la Caisse's photograph collection

This measure was completed in 2017.

ACTION 13

Measure / Participate in the internationalization of la Caisse's art collection

Indicator / Exhibit works by Québec artists in at least 50% of the international offices

Almost all of la Caisse's international offices now exhibit contemporary Québec art.

ACTION 14

Measure / Develop employees' critical thinking about art through workshops that encourage dialogue and interaction

Indicator / At least one workshop given by December 31, 2017

This measure was completed in 2017.

Measure / Encourage la Caisse's employees to become involved in the promotion of Québec art and culture

Indicator / At least three meetings of the art committee per year

The art committee held four meetings in 2018. Seven employees (excluding the curator) and an external consultant attend the meetings of the art committee.

ACTION 15

Measure / Integrate cultural considerations into decisions on leasehold improvements and property modernizations and restorations

Indicator / At least three initiatives promoting culture to the general public by December 31, 2018

Several initiatives were undertaken in 2018: the Unis Vert l'Art exhibition at the Fairmont The Queen Elizabeth hotel (artworks made from hotel artefacts), integration of an immense glass structure into the renovation of Place Ville Marie's Esplanade and the opening of the Esplanade onto McGill College Avenue.

Measure / Develop partnerships with various organizations in order to protect and showcase our cultural heritage

Indicator / At least two collaborative projects per year

Three-year partnerships were entered into with the McCord Museum and the Pointe-à-Callière Museum, as well as with Héritage Montréal and Unis Vert l'Art.

Objective

Cooperate on sustainable development nationally and internationally, in particular within the Francophonie

ACTION 16

Measure / Regularly scan the environment for undertakings in which la Caisse could participate

Indicator / Perform a scan each quarter

Scans were performed on a quarterly basis, as well as on other occasions, on the Principles for Responsible Investment website and on the websites of securities authorities and various international groups (FSB, OECD, SEC, etc.).

Measure / Identify relevant initiatives for la Caisse and participate in them

Indicator / Participate in at least 10 initiatives by December 31, 2018

Each year la Caisse participates in many positioning activities related to responsible investment issues. In 2018, it participated in:

- A pilot task force of the **United Nations Environment Programme – Finance Initiative** (UNEP FI) on analyses of climate change scenarios;
- A global collaborative commitment activity on climate change with large greenhouse gas emitters – **Climate Action 100+**;
- The implementation of a collaborative project to make advances on some of the G7's objectives on diversity, infrastructure and climate change – the **Investor Leadership Network**;
- The signing, with international peers, of a commitment to take action to reduce GHG emissions in la Caisse's portfolio and disclose such action – **Investor Agenda**.

ACTION 17

Measure / Renew commitments to various associations: Canada Green Building Council, France Green Building

Indicator / Renew 100% of the memberships

The partnership with the Canada Green Building Council – Québec Chapter was renewed.

Measure / Participate in the sustainable development committees of professional associations (BOMA, ICSC, REALPAC)

Indicator / Participate in at least 75% of the sustainable development committees of the professional associations in which Ivanhoé Cambridge is a member

Participation in the REALPAC, ICSC, CPEQ (collectif RSE), GRESB, BOMA committees.

Objective

Support the development of green and responsible business practices and models

ACTION 18

Measure / Continue the responsible investment approach in Private Equity

Indicator / Presentation on responsible investment given to Private Equity groups

This measure was completed in 2017.

Indicator / Support the development of an ecosystem that supports businesses in the social economy

A three-year agreement was signed with SVX to support the emergence and growth of entrepreneurial projects in social and environmental innovation.

ACTION 19

Measure / Implement the Green Space Leader program

Indicator / At least five more participants in 2017

A total of two chains were identified as Green Space Leaders. Since implementing this program has presented several challenges, no further deployment is planned. Other approaches to mobilizing tenants and customers to take action on the environment are being analyzed.

Measure / Develop and implement "green leases"

Indicator / Implementation of a "green lease" by December 31, 2018

"Green leases" are available for shopping centres and office buildings managed by Ivanhoé Cambridge. Our "green lease" for shopping centres was recognized by the Institute for Market Transformation in 2018.

Objective

Foster investment and financial support to ease the transition to a green and responsible economy

ACTION 20

Measure / Actively participate in responsible investment events

Indicator / Participate in at least nine events on responsible investment by December 31, 2018

Each year, Caisse employees participate in numerous events. In 2018, this included:

- A panel at the PRI Climate Forum in Toronto and in Montréal – May and June 2018;
- Interview with a past Secretary-General of the United Nations, conducted by Michael Sabia as part of the Conference of Montréal – June 2018;
- Participation in the Global Climate Action Summit and PRI in Person in San Francisco – September 2018;
- A panel at the Colloque sur l'investissement responsable PRI-Québec City 2018 – November 2018;
- Participation in RI Americas in New York – December 2018.

Measure / Continue developing responsible investment requirements for external managers

Indicator / Review external managers' ESG integration requirements by December 31, 2018

All potential external managers and those with contracts up for renewal completed la Caisse's questionnaire on integrating ESG factors. Conversations were then organized with some of them to discuss their results.

An evaluation of external managers' responsible investment practices was conducted. Furthermore, la Caisse used these interviews to talk about its strategy on climate change.

Objective

Efficiently manage natural resources in a concerted manner to support economic vitality and maintain biodiversity

ACTION 21

Measure / Improve how water is managed in buildings managed by Ivanhoé Cambridge

Indicator / Improve the quality of water meters by December 31, 2017

In 2018, an inventory was made of properties whose water meters need to be upgraded. Targets will then be established based on comparable properties.

Indicator / Share policies on managing water, energy and air with business partners by December 31, 2018

The partners managing Ivanhoé Cambridge properties received a report card on their buildings, identifying which indicators need improvement and stating current policy.

Objective

Conserve and promote biodiversity, ecosystems and ecological services by improving the interventions and practices of society

ACTION 22

Measure / Participate in greening and biodiversity initiatives on the Island of Montréal

Indicator / At least four greening projects by December 31, 2018

A total of six greening initiatives were undertaken by la Caisse and Ivanhoé Cambridge as part of this action plan. Two actions were taken in 2018 in collaboration with Moment donné.

Moreover, as part of la Caisse's participation in the 375,000 Trees project alongside Earth Day, over 87,000 trees were planted to offset GHG emissions related to construction of the REM.

Objective

Help recognize, develop and maintain skills, particularly among the most vulnerable

ACTION 23

Measure / Continue social reintegration initiatives

Indicator / Support at least five organizations with missions to foster social reintegration

Support provided to 30 organizations that help the homeless.

Objective

Support and promote the activities of community organizations and social economy enterprises that make a contribution to social inclusion and reduce inequalities

ACTION 24

Measure / Recognize employees' involvement through visibility on the internal newsletter or through a donation to the organization of up to $1,000

Indicator / At least 40 donations by la Caisse linked to employee involvement

In 2018, organizations in which 46 employees were involved each received donations of up to $1,000 as part of the Community program.

Indicator / Philanthropy communications plan developed and executed by December 31, 2017

This measure was completed in 2017.

Measure / Encourage employees to share their expertise with organizations through the Bénévoles d'affaires platform

Indicator / At least 15 more employees paired with non-profit organizations by 2018

In 2018 there were five successful pairings and eight new registered employees, for a total of 17 pairings since 2016.

A new project was begun to encourage young employees to embrace community involvement. The objective of the Impact 20-35 community is to create links between young people at la Caisse and non-profit organizations. Bénévoles d'affaires is taking part in the project.

Indicator / At least one article published on the intranet each year, beginning in 2017

A communication campaign was developed to mobilize young Caisse employees around the Impact 20-35 project.

Measure / Create opportunities for collective commitment in support of causes by encouraging employees who organize team volunteer activities

Indicator / Establish a committee for the Centraide campaign by December 31, 2017

In 2018, a renewed committee of 16 people representing all la Caisse's teams was formed in order to stimulate employee involvement in the Centraide campaign. Their efforts paid off handsomely, since over 561 employees contributed to the campaign, compared to 530 last year.

Indicator / Receive the committee's recommendations by December 31, 2017

A report was produced on the actions and results of the 2018 Centraide campaign. Recommendations were made for the next campaign.

ACTION 25

Measure / Implement a volunteer program in partnership with NPOs

Indicator / Propose a volunteer program through donation and sponsorship partnerships by December 31, 2017

This measure was completed in 2017.

Objective

Optimize the production of renewable forms of energy for the benefit of all Quebecers

ACTION 26

Measure / Assess the feasibility of solar panel projects at our commercial properties.

Indicator / Feasibility study completed

This measure was completed in 2016. Subsequent work was underway in 2018 to propose a strategy for renewable energy.

Financial Report

Change in Assets

NET ASSETS ATTRIBUTABLE TO DEPOSITORS

Net assets attributable to depositors grew from $200.1 billion as at December 31, 2013 to $309.5 billion as at December 31, 2018, an increase of $109.4 billion over five years. This growth was primarily due to net investment results of $98.7 billion, in addition to depositors' net contributions of $10.7 billion (see Table 49, p. 121).

During 2018, net assets attributable to depositors increased by $11.0 billion to $309.5 billion, compared to $298.5 billion as at December 31, 2017. This increase was due to $11.8 billion of net investment results, which was offset by $0.8 billion in depositors' net withdrawals.

TOTAL ASSETS

As at December 31, 2018, total assets reached $350.0 billion, compared to $337.2 billion at the end of 2017 (see Table 46). This $12.8-billion increase was due to the reinvestment of investment income and net gains realized on financial instruments at fair value. The liabilities to total assets ratio is stable, having increased to 12% as at December 31, 2018, compared to 11% as at December 31, 2017. La Caisse's liabilities consist primarily of securities sold under repurchase agreements, securities sold short and the financing programs issued by its subsidiary, CDP Financial, which are used to finance investments.

ASSETS UNDER MANAGEMENT AND ASSETS UNDER ADMINISTRATION

La Caisse and its subsidiaries administer and manage assets entrusted to them by clients and on their behalf. These assets are not included in la Caisse's Consolidated Statement of Financial Position. La Caisse and its subsidiaries receive fees in return for such portfolio management services and administrative services, which include the administration of real estate properties and transferred mortgages.

As at December 31, 2018, la Caisse's assets under management and administered assets totalled $90.4 billion, up $4.4 billion from one year earlier (see Table 47).

This growth came primarily from the portfolio administered by MCAP, a subsidiary of Otéra Capital. This company administers more than $68.2 billion of Canadian residential, commercial and construction mortgages.

TABLE 46

FINANCIAL INFORMATION – FINANCIAL POSITION
(as at December 31 – in millions of dollars)

	2018	2017
ASSETS		
Investments	**342,004**	331,050
Other assets	**7,999**	6,100
Total assets	**350,003**	337,150
LIABILITIES		
Investment liabilities	**38,207**	35,845
Other liabilities	**2,285**	2,793
Total liabilities	**40,492**	38,638
Net assets	**309,511**	298,512

TABLE 47

FINANCIAL INFORMATION – TOTAL ASSETS UNDER MANAGEMENT
(as at December 31 – in millions of dollars)

	2018	2017
Total assets	**350,003**	337,150
Assets under management	**19,589**	20,349
Assets under administration	**70,814**	65,636
Assets under management and assets under administration	**90,403**	85,985
Total assets under management	**440,406**	423,135

NET INVESTMENT RESULTS

Over five years, net investment results amounted to $98.7 billion. The Equities asset class contributed the most, generating results of $59.1 billion, including $41.5 billion from Equity Markets and $17.7 billion from Private Equity. In addition, Real Assets contributed $20.2 billion and Fixed Income contributed $16.7 billion.

In 2018, net investment results of $11.8 billion (see Table 48) came mainly from the Real Assets and Equities, at $4.8 billion each, and Fixed Income, at $1.9 billion.

NET WITHDRAWALS BY DEPOSITORS

Total net withdrawals by depositors as at December 31, 2018 were $0.8 billion, mainly due to net withdrawals of $3.0 billion made by the Government of Québec's Generations Fund.

TABLE 48

FINANCIAL INFORMATION – NET INVESTMENT RESULTS
(for periods ended December 31 – in millions of dollars)

	2018	2017
Net investment income	**9,336**	8,926
Operating expenses	**(585)**	(536)
Net income	**8,751**	8,390
Net gains on financial instruments at fair value	**3,039**	16,206
Net investment results	**11,790**	24,596

TABLE 49

FINANCIAL INFORMATION – SUMMARY OF CHANGES IN NET ASSETS
(for the period from 2014 to 2018 – in billions of dollars)

	2018	2017	2016	2015	2014	**5 years**
Net assets, beginning of year	**298.5**	270.7	248.0	225.9	200.1	**200.1**
Net investment results	**11.8**	24.6	18.4	20.1	23.8	**98.7**
Net contributions (net withdrawals) by depositors	**(0.8)**	3.2	4.3	2.0	2.0	**10.7**
Net assets, end of year	**309.5**	298.5	270.7	248.0	225.9	**309.5**

Analysis of Operating Expenses and External Management Fees

Operating expenses represent portfolio management and administration costs. External management fees are amounts paid to institutional fund managers, active in the stock markets, to manage securities belonging to la Caisse.

For 2018, operating expenses totalled $585 million, compared to $536 million in 2017. The increase — less than in previous years — once again stems from the continued execution of an investment strategy focused on globalization, less-liquid assets and credit activities, which requires adding new expertise.

Over the last five years, the hiring of talent in global markets and targeted sectors made a significant contribution to the $16.7 billion of value added generated during the period, as well as to the $5.3 billion of value added generated in 2018. The Private Equity and Infrastructure portfolios performed particularly well in absolute terms and relative to their benchmark indexes, both in 2018 and over five years. The Credit portfolio also posted noteworthy performance in 2018. In addition, several key transactions completed by la Caisse in 2018 were made possible through the collaboration of teams in its international offices, in particular Techem and FNZ in Europe, Azure Power Global and CLP India in India, and an infrastructure investment platform in Colombia.

External management fees totalled $95 million, up $9 million from 2017, mainly due to an increase in the value of the investments managed externally in certain markets.

Operating expenses and external management fees amounted to $680 million in 2018, compared to $622 million in 2017. This amount represents 22 cents per $100 of average net assets (see Figure 50).

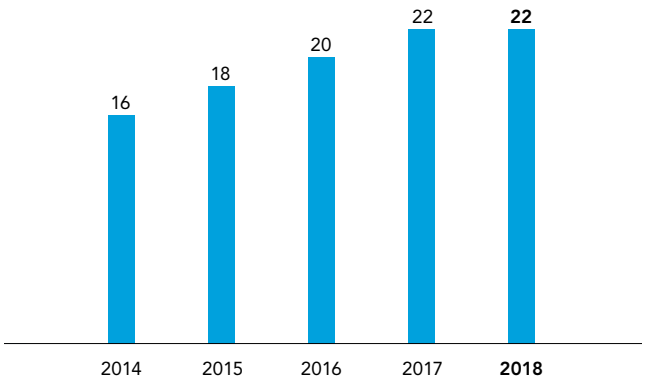
Following four years of growth, operating expenses and external management fees, at 22 cents per $100 of average net assets, were relatively unchanged from the previous year and compare favourably with the industry. Over the last five years, operating expenses and external management fees grew at an average annual rate of 1 cent per $100 of average net assets, in line with the execution of the strategies indicated above and the increase in externally managed securities.

OPERATIONAL EFFICIENCY

La Caisse periodically reviews its procedures to maintain tight control over its operating expenses. It aims to maintain operating expenses at a level that, taking into account its investment mix, is comparable to that of institutional fund managers of the same size with similar operations. La Caisse has been benchmarking its costs by asset class for many years.

FIGURE 50

OPERATING EXPENSES AND EXTERNAL MANAGEMENT FEES EXPRESSED PER $100 OF DEPOSITORS' AVERAGE NET ASSETS
(for periods ended December 31 – in cents)



CDP Financial

CDP Financial is a wholly owned subsidiary of la Caisse. Its transactions are designed to optimize the cost of financing the operations of la Caisse and its subsidiaries, to diversify their sources of financing and to match financed assets in terms of currencies and interest rates. To achieve its objectives, it has various financing programs on the local and international institutional markets it uses for short-, medium- and long-term borrowing.

SHORT-TERM BORROWING

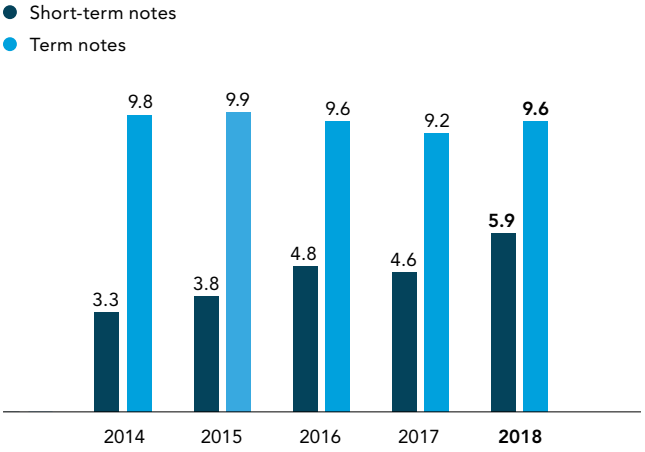
As at December 31, 2018, short-term financing totalled $5.9 billion, with $1 billion denominated in Canadian dollars and $3.6 billion denominated in U.S. dollars. In 2018, the average maturity of the borrowings denominated in Canadian dollars was 62 days, and transactions totalled $6.0 billion. The average maturity for borrowings denominated in U.S. dollars was 58 days, with transactions totalling $20.6 billion.

TERM BORROWING

As at December 31, 2018, the fair value of CDP Financial's outstanding term notes totalled $9.6 billion, compared to $9.2 billion at the end of 2017 (see Figure 51). The $0.4-billion increase from 2017 is in large part due to the appreciation of the U.S. dollar relative to the Canadian dollar.

FIGURE 51

BREAKDOWN OF LIABILITIES – CDP FINANCIAL
(fair market value as at December 31 – in billions of dollars)



CREDIT FACILITY

During the year ended December 31, 2018, CDP Financial renewed a credit facility with an authorized maximum amount of US$4 billion with a banking syndicate formed of 10 financial institutions. This credit facility is fully guaranteed, unconditionally and irrevocably, by la Caisse. No amount was drawn on this credit facility during the year.

BREAKDOWN BY CURRENCY

As at December 31, 2018, the financing can be broken down as follows: Debt instruments denominated in U.S. dollars represent 79%, while 13% are denominated in Canadian dollars and 8% are denominated in euros.

CREDIT RATING AGENCIES REAFFIRM LA CAISSE'S FINANCIAL STRENGTH

Dominion Bond Rating Services (DBRS), Moody's Investors Service (Moody's) and Standard & Poor's (S&P) reaffirmed their investment-grade credit ratings with a stable outlook in 2018. In addition, Fitch Ratings Inc. (Fitch) issued an initial credit rating for CDP Financial and la Caisse in early 2019. The highest rating, AAA, was granted, with a stable outlook (see Table 52). The credit ratings of CDP Financial and la Caisse were published in July, August and September 2018, and in February 2019.

TABLE 52

CREDIT RATINGS

	Short-term	Long-term
DBRS	R-1 (high)	AAA
Fitch	F1+	AAA
Moody's	Prime-1 (Aaa)	Aaa
S&P	A-1 + A-1 (HIGH)	AAA

Significant Accounting Principles

La Caisse's consolidated financial statements include the accounts of the General Fund, of the individual funds, and of the specialized portfolios as well as the accounts of its subsidiaries that exclusively offer services related to financing, administrative and management activities. Net assets attributable to depositors presented in the Consolidated Statement of Financial Position reflect the combined net value of the accounts of each of the depositors of la Caisse. Note 2 to the Audited Consolidated Financial Statements as at December 31, 2018 describes the significant accounting policies used by la Caisse.

FINANCIAL REPORTING

The consolidated financial statements of la Caisse are presented in accordance with the prevailing accounting standards, namely International Financial Reporting Standards (IFRS), as stipulated in the Act respecting the Caisse de dépôt et placement du Québec.

EXTERNAL AUDIT

In accordance with the Act respecting the Caisse, the co-auditors audited all of la Caisse's accounting records and issued an unqualified auditors' report for each of the 69 financial statements.

Significant IFRS accounting standards applicable to the consolidated financial statements of la Caisse

Investment entities

Under IFRS 10, Consolidated Financial Statements, the subsidiaries that constitute an investment for an investment entity must be presented and measured at fair value. Accordingly, la Caisse, qualified as an investment entity, does not consolidate its subsidiaries, particularly its real estate, real estate debt, private equity, infrastructure and fixed income subsidiaries. Valuation of these investments is based on a corporate valuation technique in accordance with IFRS.

Fair value measurement

IFRS 13, Fair Value Measurement, provides a single source of guidelines for all fair value measurements. Fair value is defined as the price that would be received on the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The main techniques for measuring investments, including measuring la Caisse's non-consolidated subsidiaries, are described in Note 7 to the Consolidated Financial Statements on page 149.

Financial measures

As part of issuing certain information included in the Annual Report, la Caisse uses and presents both measures in accordance with IFRS and other financial measures inconsistent with IFRS. La Caisse is of the opinion that these measures provide relevant information, complementary to the analysis of its financial reporting (see General Notes 3 and 6 on p. 185).

Adoption of new IFRS

As of January 1, 2018, la Caisse has applied IFRS 9, Financial Instruments, which covers the classification and measurement of financial assets and liabilities and the impairment of financial assets and hedge accounting.

The impact is limited to a new classification of financial instruments, to additional disclosure and to a change in the accounting methodology for interest income and expenses. Financial instruments continue to be measured at fair value through profit or loss.

New IFRS standards as of January 1, 2019

IFRS 16 – Leases, establishes a single lease accounting model for lessees. Under this model, lessees recognize most leases on the Consolidated Statement of Financial Position.

In 2018, la Caisse analyzed the impact of adopting IFRS 16. Adopting the standard will increase assets and liabilities by around $310 million on the date the standard enters into force. La Caisse will adjust the disclosures made in financial statements and the related control processes, as required.

Fair Value Measurement

FAIR VALUE MEASUREMENT POLICY

Investment valuation is a process whereby a fair value is assigned to each of la Caisse's investments with a view to preparing the consolidated financial statements. Measurement of investments at fair value is performed periodically in accordance with la Caisse's Investment Valuation Policy, which is approved by the Board of Directors. This comprehensive policy is further supported by the valuation directive and protocols that indicate the valuation methodology to be applied for each type of investment. The policy and directive also establish governance for the valuation and reporting process. Application of the policy is the responsibility of the Valuation Committee, which reports to the Executive Committee and is supported by a valuation team. The Valuation Committee approves compliance with the policy and the fair value of la Caisse's investments semi-annually. Accordingly, the Valuation Committee recommends these fair values to the Audit Committee. The policy complies with the standards and practices of Canadian and international valuation bodies and demonstrates a rigorous governance framework for financial instrument valuation processes.

Under the policy, when fair value is determined by external valuators or third parties, the Valuation Committee, with the support of the Valuation team, verifies the qualifications, experience and independence of these parties. It also reviews the valuation techniques, the significant inputs used in calculating fair value, and the results and conclusions to ensure that they are in compliance with recognized valuation standards.

In addition, to ensure the reasonableness of the fair value determined, la Caisse performs back-testing, compares the established fair value with values of comparable transactions and uses external valuators.

Co-auditors have access to all valuation files as part of the audit of the year-end consolidated financial statements.

CONCEPTUAL FRAMEWORK

IFRS define fair value and provide guidelines on measurement and disclosures related to fair value. Entities are required to maximize the use of relevant observable inputs and minimize the use of unobservable inputs when measuring fair value. Fair value must be established by assuming that the investments are available for sale, that is, that the fair value of investments corresponds to an exit price at the date of the financial statements. The purpose of the accounting standards is to define a single conceptual framework that can be used in all situations requiring fair value measurement.

La Caisse considers that IFRS constitute a coherent framework for fair value measurement. Nevertheless, these restrictive standards do not take into account the fact that, in accordance with the very long-term investment horizon adopted by its main depositors, la Caisse has the means and intends to hold certain investments until their optimal value is attained.

As such, the fair value established as at December 31, 2018 for investments in liquid and less-liquid markets reflects the general volatility of the financial markets, and this may differ from the economic value of long-term investments.

Note 7 to the Consolidated Financial Statements, on page 149, describes the fair value measurement techniques.

Consolidated Financial Statements

Management's Responsibility for Consolidated Financial Reporting

The preparation and presentation of the consolidated financial statements of la Caisse de dépôt et placement du Québec ("la Caisse") are the responsibility of management. The consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB) and incorporated into the CPA Canada Handbook. We ensure that the financial information in the Annual Report is consistent with the information in the consolidated financial statements.

The consolidated financial statements include amounts that are based on management's best estimates and judgment, with due regard for their relative importance. Moreover, when preparing the financial information, management has made decisions regarding the information to be presented as well as estimates and assumptions that affect the information presented. Future results may differ considerably from our current estimates, as changes to financial markets or other events could have an impact on the fair value of the investments.

In our responsibility for the reliability of financial information, we rely on disclosure controls and procedures and internal controls over financial reporting. In particular, these controls include a clear definition of responsibilities, delegation of powers, allocation of duties, ethical standards, employee hiring and training criteria as well as policies, guidelines and procedures designed to ensure that transactions are duly authorized, assets are properly measured and safeguarded, and proper records are maintained.

Moreover, la Caisse's internal audit group audits the internal controls on a regular basis. These controls and audits are designed to provide reasonable assurance regarding the reliability of the accounting records used to prepare the consolidated financial statements and to ensure that assets are not used or disposed of in any unauthorized manner, that liabilities are recorded, and that we meet all the legal requirements to which la Caisse is subject, including the *Act respecting the Caisse de dépôt et placement du Québec*.

Each year, we certify that the design of the internal control over financial information is sufficient and that the design and operation of the financial information disclosure controls and procedures are effective. We report any significant irregularity to the Audit Committee of the Board of Directors of la Caisse, as necessary.

The Auditor General of Québec and Ernst & Young LLP (the "co-auditors") have audited the consolidated financial statements of la Caisse as at December 31, 2018 and 2017 and for the years then ended and their report covers the nature and scope of the audit and expresses their opinion. The co-auditors have unrestricted access to the Audit Committee to discuss any matter related to their audit.

The Board of Directors and its committees supervise the manner in which management fulfills its responsibility for the establishment and presentation of financial information, maintenance of appropriate internal controls, compliance with the requirements of laws and regulations, management of and control over the main risks, and evaluation of major transactions. Moreover, it approves the consolidated financial statements and the Annual Report.

The Board of Directors approved the consolidated financial statements as at December 31, 2018 and 2017 and for the years then ended. It is assisted in its responsibilities by the Audit Committee, of which all members are independent directors. This Committee meets with management and the co-auditors, examines the consolidated financial statements, and recommends the approval thereof to the Board of Directors.

MICHAEL SABIA

President and Chief Executive Officer

Montréal, February 19, 2019

MAARIKA PAUL, FCPA, FCA, CBV, ICD.D

Executive Vice-President and
Chief Financial and Operations Officer

Independent Auditors' Report

To the National Assembly

Report on the audit of the consolidated financial statements

Opinion
We have audited the consolidated financial statements of la Caisse de dépôt et placement du Québec and its subsidiaries (the "Group"), which comprise the Consolidated Statements of Financial Position as at December 31, 2018 and 2017 and the Consolidated Statements of Comprehensive Income, the Consolidated Statements of Changes in Net Assets Attributable to Depositors and the Consolidated Statements of Cash Flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2018 and 2017 and its consolidated financial performance and its consolidated cash flows for the years then ended, in accordance with International Financial Reporting Standards (IFRS).

Basis for opinion
We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of this auditors' report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information included in the Group's 2018 Annual Report:
Management is responsible for the other information. The other information comprises the information, other than the consolidated financial statements and our auditor's report thereon, in the Annual Report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

The Annual Report is expected to be made available to us after the date of the auditor's report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of management and those charged with governance for the consolidated financial statements
Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. Future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit of the Group. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements
As required by the *Auditor General Act* (CQLR, chapter V-5.01), we report that, in our opinion, these accounting standards have been applied for the current fiscal year on a basis consistent with that of the preceding year, except for the accounting policy changes related to financial instruments explained in Note 2.

Auditor General of Québec,

Guylaine Leclerc, FCPA auditor, FCA

Canada, Montréal, February 19, 2019

Ernst & Young LLP

[1] CPA auditor, CA, public accountancy permit no. A112431

Canada, Montréal, February 19, 2019

Consolidated Statements of Financial Position

(in millions of Canadian dollars)	**December 31, 2018**	December 31, 2017
ASSETS		
Cash	**675**	947
Amounts receivable from transactions being settled	**4,587**	2,447
Advances to depositors	**903**	1,056
Investment income, accrued and receivable	**1,352**	1,395
Other assets	**482**	255
Investments *(Note 4)*	**342,004**	331,050
Total assets	**350,003**	337,150
LIABILITIES		
Amounts payable on transactions being settled	**1,113**	2,102
Other financial liabilities	**1,172**	691
Investment liabilities *(Note 4)*	**38,207**	35,845
Total liabilities excluding net assets attributable to depositors	**40,492**	38,638
Net assets attributable to depositors	**309,511**	298,512

The accompanying notes are an integral part of the consolidated financial statements.

On behalf of the Board of Directors,

MICHAEL SABIA

FRANÇOIS JOLY

Consolidated Statements of Comprehensive Income

For the years ended December 31

(in millions of Canadian dollars)	**2018**	2017
Investment income *(Note 9)*	**10,222**	9,576
Investment expense *(Note 9)*	**(886)**	(650)
Net investment income *(Note 9)*	**9,336**	8,926
Operating expenses *(Note 11)*	**(585)**	(536)
Net income	**8,751**	8,390
Net gains on financial instruments at fair value *(Note 10)*	**3,039**	16,206
Investment result before distributions to depositors *(Note 10)*	**11,790**	24,596
Distributions to depositors	**(12,222)**	(9,844)
Net income and comprehensive income attributable to depositors	**(432)**	14,752

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Changes in Net Assets Attributable to Depositors

For the years ended December 31

(in millions of Canadian dollars)	Demand deposits	Term deposits	Distributions payable to depositors	Participation deposits	Net assets attributable to depositors
Balance as at December 31, 2016	728	6	1,373	268,639	270,746
Attributions and distributions					
Net income and comprehensive income attributable to depositors	–	–	–	14,752	14,752
Distributions to depositors	9,242	–	602	–	9,844
Participation deposits					
Issuance of participation deposit units	(19,484)	–	–	19,484	–
Cancellation of participation deposit units	6,432	–	–	(6,432)	–
Net deposits					
Net contributions	3,170	–	–	–	3,170
BALANCE AS AT DECEMBER 31, 2017	88	6	1,975	296,443	298,512
Attributions and distributions					
Net income and comprehensive income attributable to depositors	**–**	**–**	**–**	**(432)**	**(432)**
Distributions to depositors	**11,691**	**–**	**531**	**–**	**12,222**
Participation deposits					
Issuance of participation deposit units	**(14,566)**	**–**	**–**	**14,566**	**–**
Cancellation of participation deposit units	**4,290**	**–**	**–**	**(4,290)**	**–**
Net deposits					
Net withdrawals	**(791)**	**–**	**–**	**–**	**(791)**
BALANCE AS AT DECEMBER 31, 2018	**712**	**6**	**2,506**	**306,287**	**309,511**

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Cash Flows

For the years ended December 31

(in millions of Canadian dollars)	2018	2017
Cash flows from operating activities		
Net income and comprehensive income attributable to depositors	**(432)**	14,752
Adjustments for:		
Unrealized net (gains) losses on commercial paper, term notes and loans payable	**591**	(483)
Distributions to depositors	**12,222**	9,844
Net changes in operating assets and liabilities		
Amounts receivable from transactions being settled	**(2,140)**	1,451
Advances to depositors	**153**	12
Investment income, accrued and receivable	**43**	(222)
Other assets	**(227)**	(61)
Investments	**(10,594)**	(23,415)
Amounts payable on transactions being settled	**(989)**	415
Other financial liabilities	**481**	155
Investment liabilities	**671**	(6,587)
	(221)	(4,139)
Cash flows from financing activities		
Net change in commercial paper payable	**2,386**	270
Issuance of commercial paper payable	**5,443**	7,663
Repayment of commercial paper payable	**(6,649)**	(8,084)
Net change in loans payable	**(80)**	176
Net contributions (net withdrawals)	**(791)**	3,170
	309	3,195
Net increase (decrease) in cash and cash equivalents	**88**	(944)
Cash and cash equivalents at the beginning of the year	**947**	1,891
Cash and cash equivalents at the end of the year	**1,035**	947
Cash and cash equivalents comprise:		
Cash	**675**	947
Securities purchased under reverse repurchase agreements	**360**	–
	1,035	947
Supplemental information on cash flows from operating activities		
Interest and dividends received	**10,115**	9,787
Interest paid	**(800)**	(539)

The accompanying notes are an integral part of the consolidated financial statements.

Notes to the Consolidated Financial Statements

(Tabular amounts are presented in millions of Canadian dollars, unless otherwise indicated.)

01
CONSTITUTION AND NATURE OF OPERATIONS

La Caisse de dépôt et placement du Québec ("la Caisse"), a legal person established in the public interest within the meaning of the *Civil Code of Québec*, is governed by the *Act respecting the Caisse de dépôt et placement du Québec* (CQLR, chapter C-2) (the "Act").

La Caisse is domiciled in Québec, Canada. Its head office is located at 65 Sainte-Anne, Québec City, Canada and its main office is located at 1000 Place Jean-Paul-Riopelle, Montréal, Canada.

La Caisse's mission is to receive moneys on deposit as provided by the Act and to manage them with a view to achieving an optimal return on depositors' capital within the framework of the depositor investment policies while also contributing to Québec's economic development.

CONSOLIDATED FINANCIAL STATEMENTS

These consolidated financial statements have been prepared for the purposes of presenting la Caisse's financial position, financial performance and cash flows. La Caisse's consolidated financial statements include the accounts of the General Fund, of the individual funds, and of the specialized portfolios as well as the accounts of its subsidiaries that exclusively offer services related to financing, administrative and management activities. In preparing the consolidated financial statements, all intercompany transactions and balances have been eliminated.

The investing activities of the depositors in la Caisse's various specialized portfolios are concluded through the participation deposit units of individual funds.

GENERAL FUND

The General Fund comprises cash and cash equivalent activities that include the management of demand deposits, term deposits, and the financing activities of la Caisse.

INDIVIDUAL FUNDS

The individual funds consist mainly of diversified investments in specialized portfolios. Each individual fund is dedicated to a single depositor who invests in the participation deposits of individual funds.

The individual funds of depositors are as follows:

Fund 300: Québec Pension Plan Fund, administered by Retraite Québec

Fund 301: Government and Public Employees Retirement Plan, administered by Retraite Québec

Fund 302: Pension Plan of Management Personnel, administered by Retraite Québec

Fund 303: Pension Plan for Federal Employees Transferred to Employment with the Gouvernement du Québec (formerly Special Plans), administered by Retraite Québec

Fund 305: Pension Plan of Elected Municipal Officers (PPEMO), administered by Retraite Québec

Fund 306: Régime complémentaire de rentes des techniciens ambulanciers/paramédics et des services préhospitaliers d'urgence – Volet à prestations déterminées, administered by the Comité de retraite

Fund 307: Fonds d'assurance automobile du Québec, administered by the Société de l'assurance automobile du Québec

Fund 310: Régime de retraite des chauffeurs d'autobus de la Société de transport de Laval, administered by the Comité de retraite (created January 1, 2017)

Fund 311: Supplemental Pension Plan for Employees of the Québec Construction Industry – General Account, administered by the Commission de la construction du Québec

Fund 312: Supplemental Pension Plan for Employees of the Québec Construction Industry – Retirees Account, administered by the Commission de la construction du Québec

Fund 313: Supplemental Pension Plan for Employees of the Québec Construction Industry – Supplementary Account, administered by the Commission de la construction du Québec

Fund 314: Deposit Insurance Fund, administered by the Autorité des marchés financiers

CONSTITUTION AND NATURE OF OPERATIONS (continued)

Fund 315: Dedicated account, administered by La Financière agricole du Québec

Fund 316: Retirement Plans Sinking Fund – RREGOP (RPSF-RREGOP), administered by the ministère des Finances, Government of Québec

Fund 317: Retirement Plans Sinking Fund – PPMP (RPSF-PPMP), administered by the ministère des Finances, Government of Québec

Fund 318: Retirement Plans Sinking Fund – Others (RPSF-Others), administered by the ministère des Finances, Government of Québec

Fund 326: Crop Insurance Fund, administered by La Financière agricole du Québec

Fund 328: Survivor's Pension Plan, administered by the Secrétariat du Conseil du trésor

Fund 329: Fonds d'assurance-garantie, administered by la Régie des marchés agricoles et alimentaires du Québec

Fund 330: Fonds de la santé et de la sécurité du travail, administered by the Commission des normes, de l'équité, de la santé et de la sécurité du travail

Fund 331: Régime de retraite des employés du Réseau de Transport de la Capitale, administered by the Comité de retraite (created January 1, 2017)

Fund 332: Fonds des cautionnements des agents de voyages – cautionnements individuels, administered by the Office de la protection du consommateur

Fund 333: Compensation Fund for Customers of Travel Agents, administered by the Office de la protection du consommateur

Fund 335: Régime complémentaire de rentes des techniciens ambulanciers/paramédics et des services préhospitaliers d'urgence – Fonds 2020, administered by the Comité de retraite

Fund 336: Régime complémentaire de rentes des techniciens ambulanciers/paramédics et des services préhospitaliers d'urgence – Fonds 2030, administered by the Comité de retraite

Fund 337: Régime complémentaire de rentes des techniciens ambulanciers/paramédics et des services préhospitaliers d'urgence – Fonds 2040, administered by the Comité de retraite

Fund 338: Régime complémentaire de rentes des techniciens ambulanciers/paramédics et des services préhospitaliers d'urgence – Fonds 2050, administered by the Comité de retraite

Fund 339: Fonds d'indemnisation des services financiers, administered by the Autorité des marchés financiers

Fund 340: Régimes de retraite de la Ville de Terrebonne, administered by the Comité de retraite conjoint des Régimes de retraite de la Ville de Terrebonne

Fund 342: Régime de retraite de l'Université du Québec, administered by the Comité de retraite du Régime de retraite de l'Université du Québec

Fund 343: Parental Insurance Fund administered by the Conseil de gestion de l'assurance parentale (inactive since June 1, 2017)

Fund 344: Réserve administered by La Financière agricole du Québec

Fund 347: Régime de retraite du personnel des CPE et des garderies privées conventionnées du Québec, administered by the Investment Committee

Fund 351: Generations Fund, administered by the ministère des Finances, Government of Québec

Fund 353: Superannuation Plan for the Members of the Sûreté du Québec – Participants' Fund (SPMSQ-part.), administered by Retraite Québec

Fund 354: Superannuation Plan for the Members of the Sûreté du Québec – Employers' Fund (SPMSQ-empl.), administered by the ministère des Finances, Government of Québec

Fund 361: Pension Plan of the non-teaching Staff of the Commission des écoles catholiques de Montréal, administered by the Secrétariat du Conseil du trésor

Fund 362: Régime de retraite pour certains employés de la Commission scolaire de la Capitale, administered by the Secrétariat du Conseil du trésor

Fund 363: Régime de retraite des employés de la Ville de Laval, administered by the Comité de retraite

Fund 367: Territorial Information Fund, administered by the ministère des Finances, Government of Québec

Fund 368: Education and Good Governance Fund – Capitalized Fund (EGGF-CF), administered by the Autorité des marchés financiers

Fund 369: Accumulated Sick Leave Fund, administered by the ministère des Finances, Government of Québec

CONSTITUTION AND NATURE OF OPERATIONS (continued)

Fund 371: Accumulated Sick Leave Fund – ARQ, administered by the Agence du revenu du Québec

Fund 372: Fonds commun de placement des régimes de retraite de l'Université Laval, administered by the Comités de retraite

Fund 373: Retirement Plan for Active Members of the Centre hospitalier Côte-des-Neiges, administered by Retraite Québec

Fund 374: Fiducie globale Ville de Magog, administered by the Comité de retraite mixte

Fund 376: Régime de retraite des employées et employés de la Ville de Sherbrooke, administered by the Comité de retraite des employées et employés de la Ville de Sherbrooke

Fund 378: Pension Plan of Peace Officers in Correctional Services – Employees' Contribution Fund administered by Retraite Québec

Fund 383: Régime complémentaire de retraite des employés réguliers de la Société de transport de Sherbrooke, administered by the Comité de retraite

Fund 384: Régime de retraite des cadres de la Ville de Québec, administered by the Bureau de la retraite

Fund 385: Régime de retraite des employés manuels de la Ville de Québec, administered by the Bureau de la retraite

Fund 386: Régime de retraite des fonctionnaires de la Ville de Québec, administered by the Bureau de la retraite

Fund 387: Régime de retraite du personnel professionnel de la Ville de Québec, administered by the Bureau de la retraite

Fund 388: Régime de retraite des policiers et policières de la Ville de Québec, administered by the Bureau de la retraite

Fund 389: Régime de retraite des pompiers de la Ville de Québec, administered by the Bureau de la retraite

Fund 393: Régime de retraite de la Corporation de l'École Polytechnique, administered by the Comité de retraite

Fund 395: Retirement Plan for the Mayors and Councillors of Municipalities, administered by Retraite Québec

SPECIALIZED PORTFOLIOS

The specialized portfolios consist of common funds in which the individual funds may invest in the form of participation deposits. La Caisse's specialized portfolios are as follows:

- Short Term Investments (740)
- Rates (765)
- Credit (766)
- Long Term Bonds (764)
- Real Return Bonds (762)
- Infrastructure (782)
- Real Estate (710)
- Equity Markets (737)
- Private Equity (780)
- Asset Allocation (771)
- Active Overlay Strategies (773)

02
SIGNIFICANT ACCOUNTING POLICIES

STATEMENT OF COMPLIANCE

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB). The accounting policies described below have been applied consistently to all reporting periods presented, with the exception of matters pertaining to the adoption of IFRS 9.

ADOPTION OF NEW IFRS

In July 2014, the IASB issued the final version of IFRS 9 – *Financial Instruments,* which replaced IAS 39 – *Financial Instruments: Recognition and Measurement.* The new standard addresses the classification and measurement of financial assets and financial liabilities as well as the impairment of financial assets and hedge accounting. As of January 1, 2018, the date of initial application, la Caisse has applied IFRS 9 retrospectively without restating comparative information for the financial instruments recognized, as permitted by the standard.

Under IAS 39, all of la Caisse's financial instruments had been designated at fair value through profit or loss (FVTPL) and measured at fair value, except for derivative financial instruments and securities sold short, which had to be classified as held for trading and measured at fair value.

The adoption of IFRS 9 has the following impacts:

- The financial assets and liabilities of la Caisse are managed and their performance is evaluated on a fair value basis. Consequently, as of the IFRS 9 adoption date, all of la Caisse's financial assets must be classified at FVTPL and measured at fair value. The financial liabilities of la Caisse will continue to be designated at FVTPL and measured at fair value, while derivative financial instruments and securities sold short must continue to be classified at FVTPL and measured at fair value. The FVTPL measurement of la Caisse's financial assets and financial liabilities have therefore not changed following the adoption of IFRS 9.
- When the change in the fair value of financial liabilities designated at FVTPL is attributable to a change in la Caisse's own credit risk, it is presented separately in the Consolidated Statements of Comprehensive Income unless doing so creates or enlarges an accounting mismatch, when appropriate.
- Under IAS 39, interest income and interest expense had been recognized using the effective interest method, which included amortization of the premium or discount. Following the adoption of IFRS 9, interest income and interest expense are recognized using the prescribed coupon rate method, which excludes amortization of the premium or discount. This change in method had no impact on the opening balances in the consolidated financial statements.

The adoption of IFRS 9 did not have any other impacts.

PRESENTATION AND MEASUREMENT BASIS

La Caisse measures all of its financial instruments, including investments in unconsolidated subsidiaries, joint ventures, associates and structured entities at FVTPL. Subsidiaries that solely provide services related to financing, administrative and management activities are consolidated in accordance with the guidance set out in IFRS 10 – *Consolidated Financial Statements*.

The Consolidated Statements of Financial Position are presented based on liquidity.

APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS

The Board of Directors approved la Caisse's consolidated financial statements and the publication thereof on February 19, 2019.

FUNCTIONAL AND PRESENTATION CURRENCY

La Caisse's consolidated financial statements are presented in Canadian dollars, which is the functional currency.

FOREIGN CURRENCY TRANSLATION

Financial assets and liabilities denominated in a foreign currency are translated into Canadian dollars at the exchange rate in effect at the reporting date. Foreign currency transactions are translated into Canadian dollars at the exchange rate in effect at the transaction date.

Translation differences on investments and investment liabilities at fair value and on other monetary financial assets and liabilities are presented under "Net gains on financial instruments at fair value" in the Consolidated Statements of Comprehensive Income.

USE OF JUDGMENTS AND ESTIMATES

In preparing la Caisse's consolidated financial statements in accordance with IFRS, management must make judgments, estimates and assumptions that affect the application of the significant accounting policies described below and the amounts reported in the Consolidated Statements of Financial Position and the Consolidated Statements of Comprehensive Income.

JUDGMENT

Qualification as an investment entity
Judgment is required when qualifying la Caisse as an investment entity. La Caisse meets the three mandatory criteria of the IFRS 10 definition: 1) Obtain funds from one or more depositors; 2) Commit to its depositors that its business purpose is to invest funds solely for returns from capital appreciation, investment income, or both; and 3) Measure and evaluate the performance of its investments on a fair value basis.

IFRS 10 also suggests four typical characteristics be considered in assessing whether an entity qualifies as an investment entity: 1) Have more than one investment; 2) Have more than one depositor; 3) Have investors that are not related parties; and 4) Have ownership interests in the form of equity or similar interests. La Caisse does not satisfy the third typical characteristic of an investment entity because la Caisse and the depositors are related. However, la Caisse nonetheless qualifies as an investment entity, as management believes that having depositors related to the investment entity does not compromise la Caisse's mission of investing for returns from capital appreciation, investment income, or both, for its depositors.

Fair value hierarchy of financial instruments
Management must use judgment in determining the significance of each input used when establishing the classification into the fair value hierarchy, as explained in Note 7.

Interests in entities
Management must use judgment in determining whether la Caisse has control, joint control or significant influence over certain entities, as explained in Note 17, and over the holding of interests in structured entities. Judgment on the relationship between la Caisse and any entity in which la Caisse holds an interest is exercised upon initial investment and must be reassessed when facts and circumstances indicate that there are one or more changes to the elements of control.

La Caisse holds interests in a structured entity when voting or similar rights are not the dominant factor in deciding who controls the entity.

La Caisse controls a subsidiary, including a structured entity, only if the IFRS 10 criteria are met: 1) It has decision-making authority regarding the entity's relevant activities; 2) It has exposure or rights to variable returns from its involvement with the entity; and 3) It has the ability to use its power to affect the amount of the returns. When management determines decision-making authority, several factors are taken into account, including the existence and effect of actual and potential voting rights held by la Caisse that are exercisable, the holding of instruments that are convertible into voting shares, the existence of contractual agreements through which the relevant activities of the entity can be directed, as well as other circumstances that affect decision-making.

La Caisse has significant influence over an associate when it has the power to participate in the financial and operating policy decisions of the entity. It is deemed to have significant influence when it holds 20% or more of the voting rights of an entity but does not have control or joint control. La Caisse has joint control over a joint venture when there is a contractual or implicit arrangement whereby decisions about relevant activities require the unanimous consent of the parties sharing control and when these parties have rights to the net assets of the arrangement.

ESTIMATES AND ASSUMPTIONS

The main estimates and assumptions, which are presented in Note 7, involve the fair value measurement of investments and investment liabilities classified in Level 3 of the fair value hierarchy. Actual values may differ from the estimated values.

FINANCIAL INSTRUMENTS

La Caisse's financial instruments include cash, amounts receivable from transactions being settled, advances to depositors, accrued and receivable investment income, investments, amounts payable on transactions being settled, other financial liabilities, investment liabilities and net assets attributable to depositors.

CLASSIFICATION AND MEASUREMENT

Financial instruments are categorized based on their nature and characteristics. Classification is determined upon initial recognition, which is the date on which la Caisse is subject to the contractual provisions of the instrument. La Caisse's financial assets and liabilities are managed and their performance is evaluated on a fair value basis. Consequently, all of la Caisse's financial assets must be classified at FVTPL while its financial liabilities are designated at FVTPL. Derivative financial instruments and securities sold short must be classified at FVTPL.

Corporate debt commitments are classified at FVTPL when one of the following criteria is met: 1) The commitments are designated as financial liabilities at FVTPL or la Caisse has a practice of selling the loans resulting from its commitments; or 2) The corporate debt commitments can be settled net in cash.

Financial instruments are initially and subsequently recognized at fair value. All changes in the fair value of financial instruments are presented under "Net gains on financial instruments at fair value" in the Consolidated Statements of Comprehensive Income. When the change in the fair value of financial liabilities designated at FVTPL is attributable to changes in la Caisse's own credit risk, it is presented separately in the Consolidated Statements of Comprehensive Income unless doing so creates or enlarges an accounting mismatch, when appropriate. Income and expenses are presented under "Net investment income" in the Consolidated Statements of Comprehensive Income.

FAIR VALUE MEASUREMENT

Fair value is defined as the price that would be received on the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is determined for each financial instrument, which could be a stand-alone asset or liability (e.g., a share or bond) or a group of assets and liabilities (e.g., an ownership interest in a subsidiary or associate). Upon initial recognition, the best evidence of the fair value of a financial instrument is the transaction price, which is the fair value of the consideration received or given. Subsequently, the fair value of a financial instrument is determined using the fair value hierarchy described in Note 7.

La Caisse applies appropriate valuation techniques based on a financial instrument's characteristics, the availability of inputs, and the assumptions that would be used by market participants, focusing on maximizing the use of relevant observable inputs while minimizing the use of unobservable inputs. The valuation techniques are applied consistently. Fair value information is provided in Note 7.

Cash
Cash is the cash deposited with recognized financial institutions and bears interest at market rates.

Investments
Investments include cash equivalents, fixed-income securities, variable-income securities, interests in unconsolidated subsidiaries and derivative financial instruments.

Cash equivalents include securities purchased under reverse repurchase agreements. These securities meet the definition of cash equivalents because they are used for cash management purposes, are readily convertible into a known amount of cash, have negligible risk of fair value changes and have initial maturities of three months or less. These financial instruments bear interest at market rates.

Fixed-income securities include short-term investments, securities purchased under reverse repurchase agreements, corporate debt and bonds. Purchases and sales of fixed-income securities are recorded at the transaction date, except for purchases and sales of corporate debt, which are recorded at the settlement date.

Variable-income securities comprise equities and convertible securities of public companies, private companies (including investment funds, private investment funds and infrastructure funds), and hedge funds. Purchases and sales of equities, convertible securities and hedge funds are recorded at the transaction date, whereas purchases and sales of private investment funds and infrastructure funds are recorded at the settlement date.

Interests in unconsolidated subsidiaries represent la Caisse's investment in controlled entities that are not consolidated under IFRS 10. La Caisse's investment in these entities may be in the form of equity instruments or debt instruments.

Investment liabilities
Investment liabilities include securities sold under repurchase agreements, securities sold short, commercial paper payable, loans payable, term notes payable and derivative financial instruments.

Securities sold short are commitments made by la Caisse to purchase securities from third parties to cover its positions. La Caisse may short-sell equities and bonds.

Derivative financial instruments
In managing its investments, la Caisse conducts transactions involving various derivative financial instruments for discretionary purposes or to manage the risks associated with exchange rate, interest rate and market fluctuations. Derivative financial instruments whose fair value is favourable are presented under "Investments" in the Consolidated Statements of Financial Position, while those whose fair value is unfavourable are presented under "Investment liabilities" in the Consolidated Statements of Financial Position.

Transactions being settled
Transactions with counterparties for the sale or purchase of securities that have not yet been settled at the reporting date are presented respectively under "Amounts receivable from transactions being settled" and "Amounts payable on transactions being settled" in the Consolidated Statements of Financial Position.

DERECOGNITION OF FINANCIAL ASSETS AND LIABILITIES

La Caisse derecognizes financial assets when all of the contractual rights to the assets have expired or when the contractual rights to receive the cash flows from the financial assets have been transferred and when la Caisse has transferred substantially all of the risks and rewards of the financial asset such that it no longer retains control over the asset. If la Caisse considers that it retains substantially all of the risks and rewards of a transferred financial asset, that asset is not derecognized from the Consolidated Statements of Financial Position and, if appropriate, a corresponding financial liability is recorded. Financial assets that have been transferred but not derecognized are presented in Note 14. Financial liabilities are derecognized when the related obligation is discharged, cancelled or expired.

Securities purchased under reverse repurchase agreements and sold under repurchase agreements
La Caisse enters into transactions to purchase and sell securities, i.e., short-term investments and bonds, that it agrees to resell to or repurchase from the counterparty at a future date.

The purchased securities are not recognized in the Consolidated Statements of Financial Position because the counterparty retains the risks and rewards of the securities. The cash amounts disbursed are derecognized, and a corresponding asset is recorded in investments under "Securities purchased under reverse repurchase agreements".

The sold securities are not derecognized from the Consolidated Statements of Financial Position because la Caisse retains the risks and rewards of the securities. The cash amounts received are recognized, and a corresponding liability is recorded in investment liabilities under "Securities sold under repurchase agreements".

Lending and borrowing of securities
La Caisse conducts securities lending and borrowing transactions involving equities. These transactions are generally guaranteed by the securities received from the counterparties or pledged by la Caisse, respectively. Loaned securities are not derecognized from, and borrowed securities are not recognized in, the Consolidated Statements of Financial Position because la Caisse or the counterparty, respectively, retains the risks and rewards of the securities. Income and expenses resulting from securities lending and borrowing transactions are presented under "Investment income" and "Investment expense," respectively, in the Consolidated Statements of Comprehensive Income.

SIGNIFICANT ACCOUNTING POLICIES (continued)

NET ASSETS ATTRIBUTABLE TO DEPOSITORS

Net assets attributable to depositors consist of demand deposits, term deposits, distributions payable to depositors and participation deposits.

Demand deposits and term deposits
Demand deposits bear interest at a variable rate and are repayable on demand. Term deposits bear interest at a fixed or variable rate and are repayable at maturity. Demand deposits and term deposits represent la Caisse's indebtedness towards the depositors in accordance with the *Regulation respecting the terms and conditions of deposits, funds and portfolios of the Caisse de dépôt et placement du Québec* (Regulation).

Distributions payable to depositors
Under the Regulation, distributions payable to depositors represent the net income or net loss arising from the specialized portfolios as well as the net realized gains or losses upon cancellation of the participation units of specialized portfolios held by the individual funds that are recorded at the end of the month and are paid into the demand deposit accounts of depositors at the beginning of the following month. Distributions may also be made through the issuance of participation deposit units of individual funds.

Participation deposits
Participation deposits are expressed in participation units for each individual fund. Each participation unit gives the holder an interest in the fund's net assets. The per-unit value of the net assets is determined by dividing the individual fund's net assets by the number of outstanding units. Depositors can purchase or cancel participation deposit units at that value at the beginning of each month. The difference between the proceeds of cancellation and the carrying value at issuance is recovered in the depositor's demand deposit account. In addition, holders of participation deposit units are entitled to receive distributions. Participation deposit units are financial instruments defined as depositor's equity in the Regulation and are subordinate to all other categories of financial liabilities.

NET INCOME

DIVIDEND AND INTEREST INCOME AND EXPENSE

Dividend income is recognized when la Caisse obtains the right to the dividend, generally on the ex-dividend date. Distributions from funds are recognized as income on the settlement date. Dividend expense from equities sold short is recorded when the shareholders obtain the right to the dividend. Dividend income and expenses are presented under "Investment income" and "Investment expense" respectively in the Consolidated Statements of Comprehensive Income.

Interest income and expenses are recognized as amounts are earned or incurred using the prescribed coupon rate method. Interest income includes the difference between the purchase price and the resale price in the case of securities purchased under reverse repurchase agreements. Interest income and expenses are presented under "Investment income" and "Investment expense" respectively in the Consolidated Statements of Comprehensive Income.

EXTERNAL MANAGEMENT FEES

External management fees are amounts paid to external financial institutions, mainly institutional fund managers active in international stock markets, for the management of securities owned by la Caisse. The base fees and performance-related fees of external managers are presented under "Investment expense" and "Net gains on financial instruments at fair value" respectively in the Consolidated Statements of Comprehensive Income.

INCOME TAX

Under federal and provincial income tax legislation, la Caisse is exempt from income tax in Canada. Income from foreign affiliates is subject to withholding taxes in certain countries. Withholding taxes are presented under "Net investment income" in the Consolidated Statements of Comprehensive Income.

OPERATING EXPENSES

Operating expenses consist of all the expenses incurred to manage and administer la Caisse's investments and are presented separately in the Consolidated Statements of Comprehensive Income.

NET GAINS ON FINANCIAL INSTRUMENTS AT FAIR VALUE

Gains and losses realized on investments and investment liabilities represent the difference between settlement value and value at initial recognition and are calculated on a first-in, first-out basis. Gains and losses realized on derivative financial instruments represent payments and receipts. Unrealized gains and losses on financial instruments include net changes in fair value for the year as well as the reversal of prior-year unrealized gains and losses that were realized during the year. Realized and unrealized gains and losses are presented under "Net gains on financial instruments at fair value" in the Consolidated Statements of Comprehensive Income.

Transaction costs directly attributable to the acquisition, sale and issuance of a financial instrument are presented under "Net gains on financial instruments at fair value" in the Consolidated Statements of Comprehensive Income. Transaction costs include commissions, stock exchange fees as well as professional and legal fees related to investing and financing activities.

DISTRIBUTIONS TO DEPOSITORS

Under the Regulation, distributions to depositors consist of the annual net income or loss from the specialized portfolios as well as the net gains or losses realized on the cancellation of participation units of the specialized portfolios held by the individual funds. Distributions to depositors are recorded as finance costs and presented separately in the Consolidated Statements of Comprehensive Income.

03
NEW IFRS STANDARDS

ISSUED BUT NOT YET IN EFFECT

IFRS 16 – Leases: Effective Date – January 1, 2019
In January 2016, the IASB issued a new standard, IFRS 16 – *Leases*, which will replace the current standard and interpretations on lease accounting. IFRS 16 establishes a single lease accounting model for lessees. Under this model, lessees recognize most leases on their consolidated statements of financial position. This new standard is to be applied retrospectively as of its effective date. As a result of adopting this standard, assets and liabilities will increase by $310 million at the effective date.

No other newly issued or amended standard not yet in effect for the year is expected to have an impact on the consolidated financial statements.

04
INVESTMENTS AND INVESTMENT LIABILITIES

A) INVESTMENTS

The following table presents the fair values of the investments. The geographic allocation is determined according to the country of the issuer's principal place of business. The allocation of interests in unconsolidated subsidiaries is determined according to the country of the underlying investments, while the allocation of derivative financial instruments is determined according to the currency in which the instrument will be settled:

	December 31, 2018			December 31, 2017		
	Canada	**Foreign**	**Fair value[2]**	Canada	Foreign	Fair value[2]
Investments						
Cash equivalents						
Securities purchased under reverse repurchase agreements	**360**	**–**	**360**	–	–	–
Total cash equivalents	**360**	**–**	**360**	–	–	–
Fixed-income securities						
Short-term investments	**116**	**106**	**222**	118	158	276
Securities purchased under reverse repurchase agreements	**4,540**	**3,735**	**8,275**	4,583	5,705	10,288
Corporate debt[1]	**793**	**1,356**	**2,149**	1,129	1,457	2,586
Bonds						
Governments	**33,840**	**9,299**	**43,139**	49,490	6,058	55,548
Government corporations and other public administrations	**5,940**	**393**	**6,333**	5,996	440	6,436
Corporate sector[1]	**9,944**	**9,042**	**18,986**	11,786	5,384	17,170
Bond funds	**–**	**1,552**	**1,552**	–	1,551	1,551
Total fixed-income securities	**55,173**	**25,483**	**80,656**	73,102	20,753	93,855
Variable-income securities						
Equities and convertible securities						
Public companies	**26,042**	**80,230**	**106,272**	32,020	83,434	115,454
Private companies	**3,600**	**13,498**	**17,098**	3,332	11,863	15,195
Hedge funds	**–**	**2,247**	**2,247**	–	2,322	2,322
Total variable-income securities	**29,642**	**95,975**	**125,617**	35,352	97,619	132,971
Interests in unconsolidated subsidiaries						
Investments in real estate holdings	**18,343**	**32,228**	**50,571**	17,518	26,210	43,728
Investments in real estate debt	**13,395**	**–**	**13,395**	11,991	–	11,991
Private equity investments	**2,989**	**23,286**	**26,275**	3,951	15,794	19,745
Infrastructure investments	**2,991**	**16,586**	**19,577**	1,138	10,301	11,439
Investments in fixed-income securities	**4,019**	**11,924**	**15,943**	3,405	6,696	10,101
Investments in hedge funds	**108**	**5,501**	**5,609**	109	3,889	3,998
Stock market investments	**1,041**	**1,753**	**2,794**	937	1,582	2,519
Total interests in unconsolidated subsidiaries	**42,886**	**91,278**	**134,164**	39,049	64,472	103,521
Derivative financial instruments *(Note 6)*	**28**	**1,179**	**1,207**	3	700	703
Total investments	**128,089**	**213,915**	**342,004**	147,506	183,544	331,050

1. An amount of $1,410 million was reclassified from corporate sector bonds to corporate debt as at December 31, 2017.
2. The total acquisition cost of the investments amounts to $289,453 million as at December 31, 2018 ($275,870 million as at December 31, 2017).

EQUITIES IN GROWTH MARKETS

La Caisse has Qualified Foreign Institutional Investor status and obtained an investment quota to access the Chinese capital markets. Although la Caisse has a long-term investment strategy, it must meet the conditions set by the regulatory authorities in the event of a repatriation of invested capital. As at December 31, 2018, the fair value of securities invested in China amounted to $1,629 million ($2,466 million as at December 31, 2017).

B) INVESTMENT LIABILITIES

The following table presents the fair values of investment liabilities. The geographic allocation of non-derivative financial liabilities is determined using the country of the issuer's principal place of business, while the allocation of derivative financial instruments is determined according to the currency in which the instrument will be settled:

	December 31, 2018			December 31, 2017		
	Canada	**Foreign**	**Fair value[1]**	Canada	Foreign	Fair value[1]
Investment liabilities						
Non-derivative financial liabilities						
Securities sold under repurchase agreements	**9,856**	**2,683**	**12,539**	12,430	3,542	15,972
Securities sold short						
Equities	**91**	**433**	**524**	384	224	608
Bonds	**3,976**	**3,302**	**7,278**	291	4,197	4,488
Commercial paper payable	**5,921**	**–**	**5,921**	4,556	–	4,556
Loans payable	**128**	**162**	**290**	129	235	364
Term notes payable	**9,598**	**–**	**9,598**	9,198	–	9,198
Total non-derivative financial liabilities	**29,570**	**6,580**	**36,150**	26,988	8,198	35,186
Derivative financial instruments *(Note 6)*	**35**	**2,022**	**2,057**	36	623	659
Total investment liabilities	**29,605**	**8,602**	**38,207**	27,024	8,821	35,845

1. The total acquisition cost of the investment liabilities amounts to $33,493 million as at December 31, 2018 ($33,443 million as at December 31, 2017).

05
ALLOCATION OF NET ASSETS ATTRIBUTABLE TO DEPOSITORS

The following table presents the allocation of net assets attributable to depositors according to la Caisse's total specialized portfolios offering:

	December 31, 2018	December 31, 2017
Fixed income		
Short Term Investments	**867**	1,892
Rates	**32,985**	40,065
Credit	**56,378**	50,645
Long Term Bonds	**2,863**	2,935
Real Return Bonds	**1,192**	1,187
	94,285	96,724
Real assets		
Infrastructure	**22,741**	16,177
Real Estate	**38,225**	34,260
	60,966	50,437
Equities		
Equity Markets	**108,301**	112,179
Private Equity	**42,927**	37,332
	151,228	149,511
Other		
Asset Allocation	**1,611**	1,356
Active Overlay Strategies	**586**	563
	2,197	1,919
Customized strategies of individual funds[1] and cash activities	**835**	(79)
Net assets attributable to depositors	**309,511**	298,512

1. The customized strategies consist of direct holdings of derivative financial instruments by the individual funds for the customized management of the desired exposure by each depositor.

06
DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments are financial contracts whose value fluctuates according to an underlying item, which require very little or no initial investment and are settled at a future date. The underlying item may be of a financial nature (interest rate, foreign currency or stock market security or index) or may be a commodity (precious metal, produce or oil). Certain derivative financial instruments are settled through clearing houses. La Caisse uses, among others, the derivative financial instruments described below.

Forward contracts are commitments that enable the purchase or sale of an underlying item, the quantity and price of which are determined in the contract, which includes a predetermined maturity date. Forward contracts have customized terms and conditions negotiated directly between the parties on the over-the-counter market. Futures contracts have terms and conditions determined by an exchange market.

Options are contracts traded on over-the-counter or exchange markets and that give the purchaser the right, but not the obligation, to buy or sell a given amount of an underlying security, index or commodity at a strike price stipulated in advance, either at a determined future date or at any time before a specified maturity date.

Swaps are derivatives traded on over-the-counter markets whereby two parties agree to exchange a series of cash flows according to predetermined conditions that include a notional amount, payment dates and a term to maturity.

Warrants are contracts traded on over-the-counter or exchange markets that enable the purchase of an underlying item, the price of which is determined in the contract, which includes a predetermined maturity date.

The notional amount is the amount to which a rate or price is applied to determine the amounts of cash flows to be exchanged periodically.

DERIVATIVE FINANCIAL INSTRUMENTS (continued)

The following table presents the fair values and the notional amounts of the derivative financial instruments held by la Caisse:

	December 31, 2018			December 31, 2017		
	Fair value		Notional amount	Fair value		Notional amount
	Assets	Liabilities		Assets	Liabilities	
Exchange markets						
Interest rate derivatives						
Futures contracts	–	–	120,930	–	–	119,618
Equity derivatives						
Futures contracts	–	–	24,394	–	–	22,909
Options	61	29	1,080	58	11	6,079
Warrants	1	–	15	3	–	10
Commodity derivatives						
Futures contracts	3	1	845	1	1	1,034
Options	–	–	–	1	–	27
Total exchange markets	65	30	147,264	63	12	149,677
Over-the-counter markets						
Interest rate derivatives						
Swaps	65	3	1,860	95	–	1,606
Swaps settled through a clearing house	–	–	115,320	–	–	49,951
Forward contracts	28	4	4,376	–	6	1,497
Options	152	5	2,807	2	–	18,794
Currency derivatives						
Swaps	–	107	1,695	5	38	662
Forward contracts	333	1,332	59,226	288	329	41,189
Options	164	72	18,361	21	43	5,928
Credit default derivatives						
Swaps settled through a clearing house	–	–	18,805	–	–	11,642
Equity derivatives						
Swaps	311	389	14,149	197	213	15,420
Options	89	115	7,630	32	18	4,301
Warrants	–	–	3	–	–	9
Total over-the-counter markets	1,142	2,027	244,232	640	647	150,999
Total derivative financial instruments	1,207	2,057	391,496	703	659	300,676

07
FAIR VALUE MEASUREMENT

A) THE POLICIES, DIRECTIVES, PROTOCOLS AND PROCEDURES RELATED TO FAIR VALUE MEASUREMENT

La Caisse's valuation procedures are governed by the *Caisse Investment Valuation Policy*, which is approved by the Board of Directors. This general policy is further supported by the valuation directive applicable to private investments and the valuation protocols that stipulate the valuation process and methodology for each type of investment held by la Caisse. The general policy and the directive also establish the governance framework for the valuation and reporting process. Application of the policy is the responsibility of the Valuation Committee, which reports to the Executive Committee, supported by a valuation team. The Valuation Committee approves compliance with the policy and the fair values on a semi-annual basis. Subsequently, the Valuation Committee recommends the fair values to the Audit Committee. For valuations of private investments, consisting of private equity investments and infrastructure investments as well as specialized financing, the policy provides for an external review, over a period of three years, of substantially all the fair value of these investments. External reviews include valuations by independent valuators, observations of comparable transactions in the market, or valuations by a partner.

The policy also includes directives to be followed when using prices from external sources such as broker quotes and net asset values provided by external administrators of the funds or general partners.

When fair value is determined by external valuators or third parties, the Valuation Committee, supported by the valuation team, verifies the qualifications, experience and independence of these parties. It also reviews the valuation techniques, the significant inputs used in calculating fair value, and the results and conclusions to ensure that they are in compliance with recognized valuation standards.

In addition, to ensure the reasonableness of the fair value determined, la Caisse conducts backtesting, compares the established fair value with values of comparable transactions, including the values of comparable public companies, and uses the services of external valuators.

B) FAIR VALUE VALUATION TECHNIQUES

The following paragraphs describe the main valuation techniques used to measure la Caisse's financial instruments.

SHORT-TERM INVESTMENTS, SECURITIES PURCHASED UNDER REVERSE REPURCHASE AGREEMENTS, SECURITIES SOLD UNDER REPURCHASE AGREEMENTS, COMMERCIAL PAPER PAYABLE, LOANS PAYABLE AND TERM NOTES PAYABLE

The fair value of these financial assets and liabilities is determined using a discounted cash flow technique that primarily uses observable inputs such as the interest rate curves and credit spreads that make up the discount rates.

CORPORATE DEBT

The fair value of the corporate debt is determined using a discounted cash flow technique that primarily uses observable and unobservable inputs such as the interest rate curves and credit spreads that make up the discount rates. La Caisse may also use prices published by brokers in active markets for identical or similar instruments.

BONDS

The fair value of bonds, with the exception of bond funds, is determined using prices published in active markets for identical or similar instruments. The fair value of bonds that have no published prices is determined using either a discounted cash flow technique or broker quotes. Discounted cash flow valuations use observable and unobservable inputs such as the interest rate curves and credit spreads that make up the discount rates.

EQUITIES AND CONVERTIBLE SECURITIES

Public companies
The fair value of equities and convertible securities of public companies is determined based on closing prices observed on major stock exchanges, which represent the active market.

The fair value of an ownership interest in a subsidiary or associate whose securities are listed is determined using a business valuation technique based on observable and unobservable inputs.

Private companies
The fair value of equities of private equity investment companies, with the exception of private investment funds, is primarily determined according to the market approach, which includes techniques based on comparable company multiples and comparable transaction multiples. La Caisse identifies comparable companies based on their industry, size, financial position and strategy and selects an appropriate multiple for each comparable company identified. This technique uses observable and unobservable inputs such as earnings before interest, taxes, depreciation and amortization (EBITDA) multiples and other multiples.

The fair value of equities of private infrastructure investment companies, with the exception of infrastructure investment funds, is primarily determined using a discounted cash flow technique and corroborated by the market approach. This technique uses observable and unobservable inputs such as discount rates that take into account the risk associated with the investment as well as future cash flows.

La Caisse may also use information about recent transactions carried out in the market for valuations of private equity investments and infrastructure investments.

FUNDS

The fair value of bond funds, hedge funds, investment funds, private investment funds and infrastructure funds is determined using the net assets provided by the administrator or by the general partner, unless there is an indication that the fair value differs from the value of the net assets provided. La Caisse ensures that the valuation techniques used by the fund's administrator or general partner to determine the fair value of the net assets are in compliance with IFRS. Furthermore, the fair value of the net assets is adjusted to reflect purchases and sales of fund units between the fund's financial statement date and the valuation date when there are securities of publicly listed corporations where the closing price is adjusted to the quoted price of the underlyings or when there are other indications requiring judgment to be made.

INTERESTS IN UNCONSOLIDATED SUBSIDIARIES

The fair value of la Caisse's interests in various unconsolidated subsidiaries is determined using an enterprise valuation technique.

Investments in real estate holdings
The fair value resulting from the enterprise value technique is determined using a commonly used method, i.e., the comparable company multiples method, which is supported by observable and unobservable inputs such as the price-to-book value ratio. This value is determined annually by an independent external firm. Enterprise value attributed to equity instruments reflects, among other things, the fair value of the assets and liabilities held directly by these subsidiaries, which include investment property, other real estate investments, which mainly include real estate funds and ownership interests held in companies, liabilities associated with investment property, as well as the fair value resulting from the quality of the portfolio and the integrated management of the platform of these subsidiaries.

The fair value of interests in the form of debt instruments in these subsidiaries is determined using the discounted cash flow technique, which is supported mainly by observable inputs such as the interest rates and credit spreads that make up the discount rates.

The fair value of investment property, which is measured according to the highest and best use, is determined and certified semi-annually by external, recognized and independent chartered real estate appraisers. Valuations are carried out in compliance with the valuation standards in effect in each market. The valuation techniques used are based primarily on two recognized methodologies, namely, the discounted cash flow technique and the capitalization of revenue technique. These techniques use observable and unobservable inputs such as lease terms and conditions, operating expenses, residual value and rates of return, discount rates and capitalization rates. Values observed for comparable transactions are used to determine the representative fair value range and support the fair value determined.

The fair value of other real estate investments is determined based on characteristics specific to these assets, whose value is based on net assets which may be provided by an administrator or available in a published financial statement. The net asset value is adjusted to reflect external factors or when there are other indications requiring judgment to be exercised.

The fair value of financial liabilities associated with investment property is determined based on the discounted cash flow technique. This technique uses observable and unobservable inputs such as the interest rates and credit spreads that make up the discount rates.

Investments in real estate debt
Enterprise value reflects the fair value of the assets held directly by these subsidiaries, which primarily include commercial mortgages. The fair value of interests in the form of equity instruments in these subsidiaries corresponds to the net assets in the audited financial statements.

The fair value of interests in the form of debt instruments in these subsidiaries is determined using the discounted cash flow technique. This valuation primarily uses observable inputs such as the interest rates and credit spreads that make up the discount rates.

The fair value of commercial mortgages is determined using the discounted cash flow technique and are divided into risk categories, according to the loan-to-value ratio, and for which an appropriate discount rate is determined. Commercial mortgage valuations are reviewed annually by an independent external firm.

Private equity, infrastructure, fixed-income securities, hedge funds, and stock markets
Enterprise value reflects the fair value of assets held directly by these subsidiaries, which include bonds, corporate debt, equities of private companies, equities of public companies as well as funds whose valuation techniques are described above.

The fair value of interests in specialized finance activities included in fixed-income security investments is determined using a discounted cash flow technique. This valuation technique uses observable and unobservable inputs such as discount rates that reflect the risk associated with the investment.

La Caisse may also use information about recent transactions carried out in the market for valuations of these financial assets.

SECURITIES SOLD SHORT

The fair value of bonds and equities that are sold short is determined using the fair value of the security that is sold short. The techniques for valuing these securities have been described above.

DERIVATIVE FINANCIAL INSTRUMENTS

The fair value of derivative financial instruments is determined according to the type of derivative financial instrument. The fair value of derivative financial instruments traded on exchange markets and derivative financial instruments traded on over-the-counter markets that are settled through a clearing house is determined, respectively, using the prices on the major stock exchanges representing the active market and clearing house prices. The fair value of the other derivative financial instruments traded on over-the-counter markets is determined using recognized and commonly used valuation techniques such as the discounted cash flow technique or other financial models. These techniques require the development and use of assumptions that take into account observable and unobservable inputs such as the interest rate curves and credit spreads that make up the discount rates as well as foreign exchange rate curves, prices of the underlying, and volatility.

NET ASSETS ATTRIBUTABLE TO DEPOSITORS

Demand deposits
The fair value of demand deposits is determined based on their nominal value, as they are repayable at any time at the option of the issuer without penalty.

Term deposits and distributions payable to depositors
The fair value of term deposits and distributions payable to depositors is determined using the discounted cash flow technique. This valuation technique mainly uses observable inputs such as the interest rate curves and credit spreads that make up the discount rates.

Participation deposits
The fair value of depositor participation deposits stems from a valuation of all the financial assets and liabilities held by la Caisse.

C) FAIR VALUE HIERARCHY

La Caisse's financial instruments at FVTPL are classified according to the below-described fair value hierarchy, based on the lowest level of significant input used in measuring fair value.

Level 1: The fair value calculation of the financial instrument is based on observable prices (unadjusted) in active markets that the entity can access at the measurement date for identical assets or liabilities.

Level 2: The fair value of the financial instrument is calculated using valuation techniques for which the significant inputs are observable, either directly or indirectly.

Level 3: The fair value of the financial instrument is calculated using valuation techniques for which the significant inputs are unobservable. This level includes financial instruments whose valuation is based on prices observed for similar financial instruments, substantially adjusted to reflect the characteristics specific to the financial instrument being measured and available market data.

Classification into the fair value hierarchy levels is determined upon initial measurement of the financial instrument and is reviewed on each subsequent measurement date. Transfers between levels of the fair value hierarchy are measured at fair value at the beginning of each fiscal year.

FAIR VALUE MEASUREMENT (continued)

The following tables present an allocation of the fair value of financial instruments into the three levels of the fair value hierarchy:

				December 31, 2018
	Level 1	Level 2	Level 3	Total
Financial assets				
Amounts receivable from transactions being settled	–	4,587	–	4,587
Advances to depositors	–	903	–	903
Investment income, accrued and receivable	–	1,352	–	1,352
Investments				
Cash equivalents	–	360	–	360
Short-term investments	–	222	–	222
Securities purchased under reverse repurchase agreements	–	8,275	–	8,275
Corporate debt	–	76	2,073	2,149
Bonds	–	69,288	722	70,010
Equities and convertible securities				
Public companies	105,631	641	–	106,272
Private companies	–	1,138	15,960	17,098
Hedge funds	–	1,947	300	2,247
Interests in unconsolidated subsidiaries				
Investments in real estate holdings	–	12,254	38,317	50,571
Investments in real estate debt	–	10,613	2,782	13,395
Private equity investments	–	–	26,275	26,275
Infrastructure investments	–	–	19,577	19,577
Investments in fixed-income securities	–	7,174	8,769	15,943
Investments in hedge funds	–	5,609	–	5,609
Stock market investments	–	1,041	1,753	2,794
Derivative financial instruments	65	1,142	–	1,207
	105,696	126,622	116,528	348,846
Financial liabilities excluding net assets attributable to depositors				
Amounts payable on transactions being settled	–	1,113	–	1,113
Other financial liabilities	–	1,172	–	1,172
Investment liabilities				
Securities sold under repurchase agreements	–	12,539	–	12,539
Securities sold short	516	7,278	8	7,802
Commercial paper payable	–	5,921	–	5,921
Loans payable	–	290	–	290
Term notes payable	–	9,598	–	9,598
Derivative financial instruments	30	2,007	20	2,057
	546	39,918	28	40,492
Net assets attributable to depositors				
Demand deposits	–	712	–	712
Term deposits	–	6	–	6
Distributions payable to depositors	–	2,506	–	2,506
Participation deposits	–	306,287	–	306,287
	–	309,511	–	309,511

TRANSFERS BETWEEN LEVELS OF THE FAIR VALUE HIERARCHY

During the year ended December 31, 2018, due to changes in the availability of observable inputs given changing market conditions, financial instruments with a value of $237 million were transferred from Level 1 to Level 2, of $62 million from Level 1 to Level 3, of $306 million from Level 2 to Level 1, of $645 million from Level 2 to Level 3, and of $1,077 million from Level 3 to Level 2.

FAIR VALUE MEASUREMENT (continued)

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Financial assets				
Amounts receivable from transactions being settled	–	2,447	–	2,447
Advances to depositors	–	1,056	–	1,056
Investment income, accrued and receivable	–	1,395	–	1,395
Investments				
Short-term investments	–	276	–	276
Securities purchased under reverse repurchase agreements	–	10,288	–	10,288
Corporate debt	–	572	2,014	2,586
Bonds	–	80,562	143	80,705
Equities and convertible securities				
Public companies	114,643	811	–	115,454
Private companies	–	279	14,916	15,195
Hedge funds	–	1,920	402	2,322
Interests in unconsolidated subsidiaries				
Investments in real estate holdings	–	9,327	34,401	43,728
Investments in real estate debt	–	9,649	2,342	11,991
Private equity investments	–	169	19,576	19,745
Infrastructure investments	–	–	11,439	11,439
Investments in fixed-income securities	–	5,535	4,566	10,101
Investments in hedge funds	–	3,998	–	3,998
Stock market investments	–	937	1,582	2,519
Derivative financial instruments	59	642	2	703
	114,702	129,863	91,383	335,948
Financial liabilities excluding net assets attributable to depositors				
Amounts payable on transactions being settled	–	2,102	–	2,102
Other financial liabilities	–	691	–	691
Investment liabilities				
Securities sold under repurchase agreements	–	15,972	–	15,972
Securities sold short	602	4,488	6	5,096
Commercial paper payable	–	4,556	–	4,556
Loans payable	–	364	–	364
Term notes payable	–	9,198	–	9,198
Derivative financial instruments	12	617	30	659
	614	37,988	36	38,638
Net assets attributable to depositors				
Demand deposits	–	88	–	88
Term deposits	–	6	–	6
Distributions payable to depositors	–	1,975	–	1,975
Participation deposits	–	296,443	–	296,443
	–	298,512	–	298,512

TRANSFERS BETWEEN LEVELS OF THE FAIR VALUE HIERARCHY

During the year ended December 31, 2017, due to changes in the availability of observable inputs given changing market conditions, financial instruments with a value of $217 million were transferred from Level 1 to Level 2, of $12 million from Level 2 to Level 1, of $2,130 million from Level 2 to Level 3, and of $395 million from Level 3 to Level 2.

D) LEVEL 3: RECONCILIATION BETWEEN OPENING AND CLOSING BALANCES

For financial instruments classified in Level 3 of the hierarchy, reconciliations between the opening and closing balances as at December 31, 2018 and 2017 are as follows:

								2018
	Opening balance (assets / (liabilities))	**Gains (losses) recognized in comprehensive income[2]**	**Purchases**	**Sales**	**Settlements**	**Transfers**	**Closing balance (assets / (liabilities))**	**Unrealized gains (losses) on financial instruments held at year-end[2]**
Corporate debt	**2,014**	**(53)**	**638**	**(209)**	**(317)**	**–**	**2,073**	**(54)**
Bonds	**143**	**45**	**–**	**–**	**(16)**	**550**	**722**	**38**
Equities and convertible securities	**15,318**	**1,804**	**3,284**	**(3,359)**	**–**	**(787)**	**16,260**	**1,218**
Interests in unconsolidated subsidiaries	**73,906**	**7,554**	**20,399**	**(4,253)**	**–**	**(133)**	**97,473**	**7,436**
Derivative financial instruments[1]	**(28)**	**(2)**	**–**	**(1)**	**11**	**–**	**(20)**	**(1)**
Securities sold short	**(6)**	**(2)**	**–**	**–**	**–**	**–**	**(8)**	**(2)**

								2017
	Opening balance (assets / (liabilities))	Gains (losses) recognized in comprehensive income[2]	Purchases	Sales	Settlements	Transfers	Closing balance (assets / (liabilities))	Unrealized gains (losses) on financial instruments held at year-end[2]
Corporate debt	1,256	(13)	581	(24)	(101)	315	2,014	(11)
Bonds	127	(3)	59	(38)	(10)	8	143	(3)
ABTNs	3,970	9	–	–	(3,979)	–	–	–
Equities and convertible securities	13,616	683	4,347	(2,933)	–	(395)	15,318	954
Interests in unconsolidated subsidiaries	59,995	3,748	15,011	(6,653)	–	1,805	73,906	3,884
Derivative financial instruments[1]	(72)	(2)	–	(2)	46	2	(28)	(1)
Securities sold short	(9)	1	2	–	–	–	(6)	2

1. The assets and liabilities related to derivative financial instruments are presented on a net basis.
2. Presented under "Net gains on financial instruments at fair value" in the Consolidated Statements of Comprehensive Income.

E) LEVEL 3: FAIR VALUE MEASUREMENT BASED ON REASONABLY POSSIBLE ALTERNATIVE ASSUMPTIONS

In certain cases, the assumptions used in the valuation techniques are based on unobservable inputs or observable inputs adjusted significantly to reflect the characteristics specific to the financial instrument being measured. While la Caisse considers its fair value measurements to be appropriate, the use of reasonably possible alternative assumptions could result in different fair values. For a given measurement date, it is possible that other market participants could measure a same financial instrument at a different fair value, with the valuation techniques and inputs used by these market participants still meeting the definition of fair value. The fact that different fair value measurements exist reflects the judgment, estimates and assumptions applied as well as the uncertainty involved in determining the fair value of these financial instruments.

FAIR VALUE MEASUREMENT (continued)

The following tables present quantitative information on the primary valuation techniques and unobservable inputs for the main financial instruments classified in Level 3 of the fair value hierarchy that are subject to the sensitivity analysis in Note 7f as well as those that are excluded from the analysis:

				December 31, 2018
	Fair value	Valuation techniques	Unobservable inputs	Range (weighted average)
Included in the sensitivity analysis				
Corporate debt	1,861	Discounted cash flows	Credit spreads	1.2% to 11.1% (3.9%)
			Discount rates	7.5% to 9.3% (7.8%)
Equities of private companies				
Private equity investments	5,191	Comparable company multiples	EBITDA multiples	6.8 to 16.5 (11.4)
Infrastructure investments	3,642	Discounted cash flows	Discount rates	6.0% to 10.3% (9.7%)
Interests in unconsolidated subsidiaries				
Investments in real estate holdings	38,317	Comparable company multiples	Price-to-book value ratios	1.06
		Discounted cash flows	Discount rates	4.8% to 13.3% (6.4%)
			Credit spreads	0.0% to 12.0% (1.6%)
		Capitalization of revenue	Capitalization rates	4.1% to 12.6% (5.3%)
		Net real estate assets	Discounts to net asset value	0.0% to 17.5% (5.1%)
Private equity investments	4,263	Comparable company multiples	EBITDA multiples	8.5 to 13.0 (12.2)
Infrastructure investments	10,682	Discounted cash flows	Discount rates	7.2% to 13.0% (9.0%)
Investments in fixed-income securities	6,525	Discounted cash flows	Discount rates	6.4%
			Credit spreads	0.9% to 9.4% (4.6%)
	70,481			
Excluded from the sensitivity analysis				
Financial instruments[1]	46,019	Recent transactions[2]	n.a.	n.a.
		Broker quotes[3]	n.a.	n.a.
		Net assets[3]	n.a.	n.a.
Net financial instruments classified in Level 3	116,500			

n.a.: not applicable

1. The fair value of the financial instruments presented in this item includes corporate debt, bonds, equities, interests in unconsolidated subsidiaries, derivative financial instruments, and securities sold short.
2. When fair value is determined based on recent transaction information, this value is the most representative indication of fair value. Consequently, la Caisse did not conduct a sensitivity analysis.
3. When fair value is determined using broker quotes or net asset value, this value is the only reasonable indication of fair value. Consequently, la Caisse is unable to conduct a sensitivity analysis.

FAIR VALUE MEASUREMENT (continued)

				December 31, 2017
	Fair value	Valuation techniques	Unobservable inputs	Range (weighted average)
Included in the sensitivity analysis				
Corporate debt	1,488	Discounted cash flows	Credit spreads	1.1% to 2.5% (2.0%)
			Discount rates	8.0%
Equities of private companies				
Private equity investments	3,258	Comparable company multiples	EBITDA multiples	7.5 to 11.5 (9.6)
Infrastructure investments	3,318	Discounted cash flows	Discount rates	6.0% to 11.9% (10.5%)
Interests in unconsolidated subsidiaries				
Investments in real estate holdings	34,401	Comparable company multiples	Price-to-book value ratios	1.06
		Discounted cash flows	Discount rates	4.8% to 13.3% (6.4%)
			Credit spreads	0.0% to 10.5% (1.7%)
		Capitalization of revenue	Capitalization rates	4.1% to 11.6% (5.3%)
		Net real estate assets	Discounts to net asset value	0.0%
Private equity investments	7,353	Comparable company multiples	EBITDA multiples	7.5 to 13.0 (11.0)
Infrastructure investments	10,620	Discounted cash flows	Discount rates	6.8% to 12.5% (8.8%)
		Comparable company multiples	EBITDA multiples	10.8
Investments in fixed-income securities	3,404	Discounted cash flows	Credit spreads	1.0% to 9.2% (4.5%)
	63,842			
Excluded from the sensitivity analysis				
Financial instruments[1]	27,505	Recent transactions[2]	n.a.	n.a.
		Broker quotes[3]	n.a.	n.a.
		Net assets[3]	n.a.	n.a.
Net financial instruments classified in Level 3	91,347			

n.a.: not applicable

1. The fair value of the financial instruments presented in this item includes corporate debt, bonds, equities, interests in unconsolidated subsidiaries, derivative financial instruments and securities sold short.
2. When fair value is determined based on recent transaction information, this value is the most representative indication of fair value. Consequently, la Caisse did not conduct a sensitivity analysis.
3. When fair value is determined using broker quotes or net asset value, this value is the only reasonable indication of fair value. Consequently, la Caisse is unable to conduct a ensitivity analysis.

F) SENSITIVITY ANALYSIS OF FAIR VALUE

The following analysis shows the sensitivity of fair value measurements to reasonably possible alternative assumptions for the significant unobservable inputs presented in the preceding tables of Note 7e. La Caisse identified reasonably possible alternative assumptions using its judgment and knowledge of the markets. The following table shows the increases and decreases in fair value that would result from these alternative assumptions for the main financial instruments classified in Level 3 of the fair value hierarchy that are subject to a sensitivity analysis:

	December 31, 2018		December 31, 2017	
	Increase	**Decrease**	Increase	Decrease
Sensitivity of fair value	**4,691**	**(4,348)**	4,153	(3,871)

As at December 31, 2018, the fair value sensitivity analysis above shows an increase in fair value of $2,800 million ($2,445 million as at December 31, 2017) and a decrease in fair value of $2,551 million ($2,236 million as at December 31, 2017) attributable to investments in real estate holdings.

There is a correlation between unobservable inputs and the determination of fair value. Therefore, an increase (decrease) in discount rates, credit spreads, capitalization rates and discounts to net asset value would result in a decrease (increase) in fair value. Furthermore, an increase (decrease) in EBITDA multiples and price-to-book value ratios would result in an increase (decrease) in fair value. There is no predictable correlation between unobservable inputs.

08
OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES

A financial asset and a financial liability must be offset in the Consolidated Statements of Financial Position when la Caisse has a legally enforceable right of set-off and intends either to settle on a net basis or to realize the financial asset and settle the financial liability simultaneously with the counterparty. La Caisse has a legally enforceable right of set-off when this right is exercisable in the normal course of business and in the event of default, insolvency or bankruptcy.

Amounts receivable from and amounts payable on transactions being settled, securities purchased under reverse repurchase agreements, securities sold under repurchase agreements and derivative financial instruments traded on over-the-counter markets in accordance with agreements of the International Swaps and Derivatives Association (ISDA) are subject to master netting agreements that do not meet the criteria for offsetting in the Consolidated Statements of Financial Position as they give a right of set-off that is enforceable only in the event of default, insolvency or bankruptcy.

Securities purchased under reverse repurchase agreements and securities sold under repurchase agreements settled through a clearing house satisfy the offsetting criteria. Derivative financial instruments traded on exchange markets as well as those settled by clearing houses through brokers also satisfy offsetting criteria.

OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES (continued)

The following tables present information about financial assets and liabilities that are offset and not offset in the Consolidated Statements of Financial Position and that are subject to master netting agreements or similar arrangements:

						December 31, 2018
	Gross amounts recognized	**Amounts offset**	**Net amounts presented in the Consolidated Statement of Financial Position[1]**	**Amounts subject to master netting agreements**	**Collateral received/ pledged[2]**	**Net amounts**
Financial assets						
Amounts receivable from transactions being settled	**4,587**	**–**	**4,587**	**(498)**	**–**	**4,089**
Securities purchased under reverse repurchase agreements	**10,859**	**(2,224)**	**8,635**	**(6,869)**	**(1,759)**	**7**
Derivative financial instruments[3]	**1,257**	**(36)**	**1,221**	**(981)**	**(114)**	**126**
	16,703	**(2,260)**	**14,443**	**(8,348)**	**(1,873)**	**4,222**
Financial liabilities						
Amounts payable on transactions being settled	**1,113**	**–**	**1,113**	**(933)**	**–**	**180**
Securities sold under repurchase agreements	**14,763**	**(2,224)**	**12,539**	**(6,434)**	**(6,102)**	**3**
Derivative financial instruments[3]	**2,111**	**(36)**	**2,075**	**(981)**	**(1,016)**	**78**
	17,987	**(2,260)**	**15,727**	**(8,348)**	**(7,118)**	**261**

						December 31, 2017
	Gross amounts recognized	Amounts offset	Net amounts presented in the Consolidated Statement of Financial Position[1]	Amounts subject to master netting agreements	Collateral received/ pledged[2]	Net amounts
Financial assets						
Amounts receivable from transactions being settled	2,447	–	2,447	(670)	–	1,777
Securities purchased under reverse repurchase agreements	10,288	–	10,288	(5,508)	(4,763)	17
Derivative financial instruments[3]	753	(26)	727	(426)	(128)	173
	13,488	(26)	13,462	(6,604)	(4,891)	1,967
Financial liabilities						
Amounts payable on transactions being settled	2,102	–	2,102	(1,458)	–	644
Securities sold under repurchase agreements	15,972	–	15,972	(4,720)	(11,246)	6
Derivative financial instruments[3]	697	(26)	671	(426)	(212)	33
	18,771	(26)	18,745	(6,604)	(11,458)	683

1. Net amounts presented in the Consolidated Statements of Financial Position or in Notes 4a and 4b.
2. The financial collateral received or pledged cannot include a net amount per counterparty less than zero. The total amounts of financial collateral received or pledged are presented in Notes 14 and 15.
3. The amounts presented in this item include amounts receivable and payable related to derivative financial instruments presented, respectively, under "Investment income, accrued and receivable" and "Other financial liabilities".

09
NET INVESTMENT INCOME

The following table presents the investment income and expense of the financial instruments at FVTPL:

			2018			2017
	Dividend income (expense)	**Interest income (expense)**	**Net investment income**	Dividend income (expense)	Interest income (expense)	Net investment income
Cash management activities	**–**	**23**	**23**	–	17	17
Investing activities						
Short-term investments	**–**	**4**	**4**	–	15	15
Securities purchased under reverse repurchase agreements	**–**	**144**	**144**	–	43	43
Corporate debt	**–**	**152**	**152**	–	183	183
Bonds	**–**	**2,661**	**2,661**	–	1,975	1,975
Equities and convertible securities	**3,655**	**–**	**3,655**	4,226	7	4,233
Interests in unconsolidated subsidiaries	**2,530**	**973**	**3,503**	2,204	839	3,043
	6,185	**3,957**	**10,142**	6,430	3,079	9,509
Other			**80**			67
Total investment income			**10,222**			9,576
Investment liability activities						
Securities sold under repurchase agreements	**–**	**(249)**	**(249)**	–	(115)	(115)
Securities sold short	**(14)**	**(87)**	**(101)**	(17)	(48)	(65)
Financing activities						
Commercial paper payable	**–**	**(106)**	**(106)**	–	(58)	(58)
Loans payable	**–**	**(3)**	**(3)**	–	(2)	(2)
Term notes payable	**–**	**(369)**	**(369)**	–	(356)	(356)
	(14)	**(814)**	**(828)**	(17)	(579)	(596)
Other expenses						
External management fees			**(58)**			(54)
Total investment expense			**(886)**			(650)
Net investment income			**9,336**			8,926

10
INVESTMENT RESULT BEFORE DISTRIBUTIONS TO DEPOSITORS

The following table presents the net investment income, net gains (losses) on financial instruments at FVTPL as well as operating expenses:

	2018			2017		
	Net investment income *(Note 9)*	**Net gains (losses)[1]**	**Total**	Net investment Income *(Note 9)*	Net gains (losses)[1]	Total
Cash management activities	**23**	**3**	**26**	17	4	21
Investing activities						
Short-term investments	**4**	**14**	**18**	15	(14)	1
Securities purchased under reverse repurchase agreements	**144**	**214**	**358**	43	(239)	(196)
Corporate debt	**152**	**13**	**165**	183	(178)	5
Bonds	**2,661**	**(172)**	**2,489**	1,975	(390)	1,585
Equities and convertible securities	**3,655**	**(2,713)**	**942**	4,233	12,982	17,215
Interests in unconsolidated subsidiaries	**3,503**	**8,171**	**11,674**	3,043	2,907	5,950
Net derivative financial instruments	**–**	**(462)**	**(462)**	–	(5)	(5)
Other	**80**	**62**	**142**	67	(55)	12
	10,222	**5,130**	**15,352**	9,576	15,012	24,588
Investment liability activities						
Securities sold under repurchase agreements	**(249)**	**(283)**	**(532)**	(115)	518	403
Securities sold short	**(101)**	**(763)**	**(864)**	(65)	200	135
Financing activities						
Commercial paper payable	**(106)**	**(416)**	**(522)**	(58)	258	200
Loans payable	**(3)**	**(17)**	**(20)**	(2)	11	9
Term notes payable	**(369)**	**(412)**	**(781)**	(356)	378	22
Other						
External management fees	**(58)**	**(37)**	**(95)**	(54)	(32)	(86)
Transaction costs	**–**	**(163)**	**(163)**	–	(139)	(139)
	(886)	**(2,091)**	**(2,977)**	(650)	1,194	544
	9,336	**3,039**	**12,375**	8,926	16,206	25,132
Operating expenses *(Note 11)*			**(585)**			(536)
Net investment result before distributions to depositors			**11,790**			24,596

1. For the year ended December 31, 2018, the net gains (losses) included $7,980 million in net realized gains and $4,941 million in net unrealized losses (for the year ended December 31, 2017, net realized gains of $9,822 million and net unrealized gains of $6,384 million).

11
OPERATING EXPENSES

The following table presents the operating expenses:

	2018	2017
Salaries and employee benefits	**377**	331
Information technology and professional services	**59**	64
Maintenance, equipment and amortization	**55**	54
Data services and subscriptions	**21**	21
Rent	**18**	18
Other expenses	**37**	32
	567	520
Safekeeping of securities	**18**	16
	585	536

12
RISK IDENTIFICATION AND MANAGEMENT

RISK MANAGEMENT POLICIES, DIRECTIVES AND PROCEDURES RELATED TO INVESTMENT ACTIVITIES

La Caisse is responsible for managing deposits in accordance with service agreements and depositor investment policies, the investment policies for specialized portfolios and the integrated risk management policy. To do so, it has implemented various policies, directives and procedures to oversee the management of the risks relating to its operations.

The integrated risk management policy is adopted by la Caisse's Board of Directors. The purpose of this policy is to promote a rigorous risk management culture and practices that help la Caisse carry out its mission on behalf of its depositors. The integrated risk management policy defines market risk, concentration risk, credit risk, counterparty risk associated with derivative financial instruments, and financing-liquidity risk.

Specifically, this policy aims to:

- Establish the guiding principles that support la Caisse's integrated risk management framework and promote a sound risk management culture at all levels of the organization
- Set out the risk management model and governance structure
- Define the roles and responsibilities of stakeholders
- Establish oversight of the main risks to which la Caisse is exposed

La Caisse's governance and risk management are based on the following twelve guiding principles:

- A risk tolerance framework
- The roles of the Board of Directors and senior executives
- A client-centric approach that focuses on the needs of depositors
- A long-term investment strategy
- Liquidity and financing management
- In-depth knowledge of assets and markets
- Independent functions and stakeholder accountability
- Collaboration for comprehensive risk management
- Operational excellence
- Use of derivative financial instruments and counterparty risk management
- Oversight of new investment activities and new financial instruments
- A responsible investment framework

The levels of control and parties responsible for risk management governance are as follows:

1. Investment groups have the primary responsibility for managing the risks related to their operations.
2. Independent teams and internal committees are responsible for supporting investment group employees and setting appropriate control mechanisms.
3. The Board of Directors and its committees ensure a management framework is adopted, and the Internal Audit group ensures execution and compliance with the established risk management framework.

The integrated risk management policy sets out risk limits and authorization levels for la Caisse as a whole as well as limits applicable to cross-functional activities. In addition, la Caisse develops and periodically reviews the specialized portfolio investment policies that are designed to oversee the work of the specialized portfolio managers. A separate investment policy sets out investment strategy, management style, eligible investments, target returns, benchmark index, and concentration and risk limits.

Furthermore, each investment group must adopt an investment strategy. Strategic investment planning (SIP) seeks to strengthen the decision-making process by achieving a better matching of return to risk when choosing investments. SIP sets future directions, strengthens the collaboration and information sharing processes required to make strategic investment decisions and ensures a better alignment between the directions and strategies. The SIP process is conducted annually and includes the following steps: 1) Diagnostic and strategic directions; 2) Strategic plans; 3) Review and approval and 4) Execution and accountability. Investment plans are presented to the Investment-Risk Committee (IRC) for approval and are communicated to the Executive Committee and Board of Directors.

La Caisse is exposed to various financial risks. Detailed information regarding these risks is presented in the following sections.

MARKET RISK

Market risk is the risk of financial loss arising from fluctuations in the fair value of financial instruments. Volatility in financial instrument prices stems from changes in market risk factors, in particular interest rates, credit spreads, exchange rates, share prices and commodity prices. La Caisse uses derivative financial instruments to manage market risks.

La Caisse manages all market risks according to an integrated approach for all specialized portfolios. The main factors contributing to risk, such as industry sector, geographic region and issuer, are taken into account. La Caisse's market risks are managed and calculated according to factors that can influence the fair value of investments and investment liabilities.

La Caisse measures its market risk using Value-at-Risk (VaR), which is based on a statistical estimate of the volatility of the fair value of each position and of correlations between market risk factors. VaR is a statistical estimate of the potential financial loss that could be incurred by la Caisse's actual portfolio, based on a predetermined confidence level and a given exposure period. The market VaR is estimated with a 95% confidence level over an exposure period of one year. To summarize, VaR indicates the level of loss that the actual portfolio of la Caisse could exceed in 5% of cases. La Caisse estimates VaR for each instrument held in its specialized portfolios and aggregates the information for la Caisse's actual portfolio.

The historical-simulation method is used to measure VaR. This method is based mainly on the assumption that the future will be similar to the past. It requires that historical data series on all the risk factors needed to estimate the returns on financial instruments be available. In the absence of historical data, alternative methods are used.

The calculation results obtained by applying this methodology do not make it possible to estimate the amount of loss, based on a specific event, that would be incurred by la Caisse's portfolio if this event re-occurred. For example, if future conditions and market risk factors were substantially different from past economic conditions, actual losses could differ substantially from estimated losses. Moreover, these estimates at a given date do not take into account all possible losses resulting from exceptional market events or losses that could arise over and above the 95% confidence level. Consequently, in light of these limitations, la Caisse's actual portfolio losses could exceed the estimates.

A history of 3,000 days of observation of risk factors is used to measure the volatility of returns and the correlation between the return of financial instruments. Moreover, due to the methodology, the effects on the portfolio of the unfavourable events seen over a one-month horizon are repeated several times during the year.

Two risk measures are calculated and analyzed:

- The absolute risk of the actual portfolio represents the total risk associated with the categories of financial instruments that make up la Caisse's actual portfolio.
- The absolute risk of the benchmark portfolio targeted by depositors represents the total risk of the benchmark indexes associated with the categories of financial instruments that make up la Caisse's benchmark portfolio.

The absolute risks of la Caisse's actual and benchmark portfolios are measured regularly and used to calculate the absolute risk ratio, which is subject to certain limitations. The absolute risk ratio is obtained by dividing the absolute risk of the actual portfolio by the absolute risk of the benchmark portfolio.

The absolute risk of the actual portfolio and the absolute risk of the benchmark portfolio, including the risk associated with the underlying investments of unconsolidated subsidiaries whose risk is managed by la Caisse, as a percentage of net assets, according to a 95% confidence level and a history of 3,000 days, are as follows:

	December 31, 2018			December 31, 2017		
	Absolute risk of the actual portfolio %	**Absolute risk of the benchmark portfolio %**	**Absolute risk ratio**	Absolute risk of the actual portfolio %	Absolute risk of the benchmark portfolio %	Absolute risk ratio
Value at risk	**13.7**	**13.8**	**0.99**	13.4	13.6	0.99

Moreover, when managing market risk, la Caisse uses stress tests that allow it to evaluate the consequences of specific circumstances on the returns of la Caisse's actual portfolio based on historical, hypothetical or risk factor sensitivity scenarios. Using various types of scenarios, stress tests measure the gains or losses in value of a financial instrument following a change in one or more often-related risk factors, such as share prices, interest rates, rate spreads, exchange rates, commodity prices and market volatility.

CURRENCY RISK

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. This risk is integrated into the VaR measurement.

La Caisse uses a dynamic management approach for the main currencies of developed countries. Dynamic management is used to protect certain specialized portfolios when the Canadian dollar appears to be significantly undervalued or overvalued compared to its equilibrium value according to the valuation models. Dynamic hedging should therefore be less frequent, but the duration of the hedge, being unforeseeable, may vary widely and last for a few weeks to several months. Certain specialized portfolios may therefore be partially hedged against foreign exchange risk.

When managing currency risk, la Caisse uses derivative financial instruments to manage its exposure to currencies. Moreover, currency risk can be managed by way of natural hedging activities, including the financing of investments in the same currency.

The net exposure to foreign currencies takes into account the effects of currency derivatives, natural hedging and the underlying investments in currencies of unconsolidated subsidiaries whose currency risk is managed by la Caisse. La Caisse's net exposure to foreign currencies, as a percentage of net assets including purchases and cancellations of participation units of the specialized portfolios completed at the beginning of each month, is as follows:

	December 31, 2018 %	December 31, 2017 %
Canadian dollar	**45**	51
U.S. dollar	**27**	23
Euro	**7**	7
Pound sterling	**4**	3
Yen	**2**	2
Australian dollar	**1**	2
Other	**14**	12
	100	100

INTEREST RATE RISK

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. This risk is integrated into the VaR measurement.

PRICE RISK

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than changes arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer or by factors that affect all similar financial instruments traded on the market. This risk is integrated into the VaR measurement.

CONCENTRATION RISK

La Caisse analyzes overall concentration risk for the entire group of specialized portfolios it manages. The integrated risk management policy sets out exposure limits according to category of financial instrument and according to issuer for growth markets and for certain countries. Moreover, the investment policies of the specialized portfolios set out specific limits for each issuer, industry sector, and geographic region.

The concentration limit by issuer is 3% of la Caisse's total assets, with the exception of securities issued by the Canadian or U.S. governments or by their agencies and that feature an explicit guarantee or those issued by a Canadian province or territory of Canada or a ministry or agency thereof or by sovereign issuers rated AAA, which are not included in the concentration limit. Concentration by issuer is monitored monthly or upon initiation of a transaction requiring approval of the IRC or the Board of Directors, as appropriate.

The following table presents the principal geographic concentrations as a percentage of total net exposure, established according to the country of the issuers' principal place of business, after the effects of certain derivative financial instruments and including the underlying investments in unconsolidated subsidiaries whose concentration risk is managed by la Caisse:

	December 31, 2018	December 31, 2017
	%	%
Canada	**36**	42
United States	**30**	28
Europe	**14**	13
Growth markets	**14**	11
Other	**6**	6
	100	100

The following table presents the principal industry sector concentrations as a percentage of total net exposure, established according to the industry sector in which the issuers operate, after the effects of certain derivative financial instruments and including the underlying investments in unconsolidated subsidiaries whose concentration risk is managed by la Caisse:

	December 31, 2018	December 31, 2017
	%	%
Industry sector		
Real estate	**19**	18
Financials	**9**	10
Industrials	**12**	9
Consumer discretionary	**5**	7
Information technology	**6**	6
Energy	**5**	5
Consumer staples	**5**	5
Utilities	**6**	4
Real estate debt	**4**	4
Health care	**5**	4
Materials	**2**	3
Telecommunication services	**4**	2
Other	**3**	3
Government sector		
Government of Canada	**5**	8
Government of Québec	**4**	5
Government corporations and other public administrations in Québec	**2**	2
Other	**4**	5
	100	100

CREDIT RISK

Credit risk is the possibility of incurring a loss in value should a borrower, endorser, or guarantor experience a deterioration in financial position, fail to meet an obligation to repay a loan or fail to meet any other financial commitment.

Maximum credit risk exposure is measured based on the fair value of financial instruments without taking into account guarantees or other credit enhancements. For the other items, the maximum exposure to credit risk is the total amount guaranteed or committed.

The following table presents the maximum exposure to credit risk:

	December 31, 2018	December 31, 2017
Cash	**675**	947
Amounts receivable from transactions being settled	**4,587**	2,447
Advances to depositors	**903**	1,056
Investment income, accrued and receivable	**1,352**	1,395
Investments		
Cash equivalents	**360**	–
Fixed-income securities	**80,656**	93,855
Interests in unconsolidated subsidiaries in the form of debt instruments	**27,922**	22,159
Derivative financial instruments	**1,207**	703
	117,662	122,562
Other items		
Guarantees *(Note 19)*	**397**	86
	118,059	122,648

La Caisse enters into master netting agreements *(Note 8)*, receives guarantees *(Note 15)* and may also use derivative financial instruments such as credit default swaps to reduce its total credit risk exposure.

In addition, to manage credit risk, la Caisse closely monitors changes in the credit cycle of issuers and uses a credit VaR to calculate the potential financial loss related to possible changes in the credit quality of issuers of fixed-income securities.

CONCENTRATION OF CREDIT RISK

A credit risk concentration analysis measures the fair value of all financial instruments related to a same issuer. The investment policy of the specialized portfolios sets out concentration limits according to credit rating. The credit risk analysis considers the probability of default and the recovery rate on debt securities held by la Caisse and monitors changes in the credit quality of issuers.

The following table presents the credit risk concentration according to the credit ratings of issuers of fixed-income securities and certain derivative financial instruments used to manage credit risk, as a percentage of the total exposure to credit concentration risk:

	December 31, 2018	December 31, 2017
	%	%
Credit rating		
AAA – AA	**26**	37
A	**32**	34
BBB	**18**	11
BB of lower	**19**	14
No credit rating	**5**	4
	100	100

The credit ratings of securities issued or guaranteed by governments are obtained from recognized credit rating agencies. For corporate sector securities, credit ratings are determined using an internal rating process that monitors changes in the credit cycle annually when the necessary information is available. Otherwise, la Caisse uses recognized credit rating agencies.

COUNTERPARTY RISK RELATED TO DERIVATIVE FINANCIAL INSTRUMENTS

Certain over-the-counter financial instruments give rise to counterparty risk because they are negotiated by contract without being traded or settled through a clearing house. Counterparty risk related to derivative financial instruments is the credit risk created by current or potential exposures arising from derivative financial instrument transactions where the counterparty becomes unable to honour the terms of the contracts.

To limit its exposure to the counterparty risk arising from transactions involving over-the-counter derivative financial instruments, la Caisse carries out transactions with financial institutions in accordance with management's criteria regarding the quality of the issuer. Moreover, la Caisse enters into legal agreements based on ISDA standards under which it benefits from the compensating effects between at-risk amounts and the collateral exchanged in order to limit its net exposure to this risk.

This risk is measured by counterparty, pursuant to the applicable legal agreement, from which it is possible to calculate the net exposure created by all of the over-the-counter derivative financial instruments and collateral exchanged. Actual exposure to counterparty risk is measured on a daily basis, whereas potential exposure to counterparty risk is measured on a monthly basis.

As at December 31, 2018, the legal agreements and the collateral received helped reduce exposure to the counterparty risk of over-the-counter derivative financial instruments. The maximum exposure to this risk was $61 million ($138 million as at December 31, 2017) related to 33 counterparties (29 counterparties as at December 31, 2017).

LIQUIDITY RISK

Liquidity risk is the possibility of la Caisse not always being able to honour its financial liability commitments without having to obtain funds at abnormally high prices or having to sell assets through forced liquidation. It is also the risk of la Caisse not being able to quickly sell investments without having a significant unfavourable effect on the price of the investment in question.

Liquidity is managed across all of la Caisse's cash activities. Compliance with the established rules is analyzed on a monthly basis, and the liquidity status is determined daily. Managers are responsible for evaluating the liquidity of the markets in which la Caisse obtains financing for its operations.

To ensure that sources of liquidity and potential liquidity requirements are properly aligned, la Caisse has a number of sources of liquidity in addition to its cash and cash equivalents, including receipt of investment income, the sale of bonds, sales under repurchase agreements, and liquid money market securities. In addition, la Caisse may issue commercial paper and term notes payable as well as a committed credit facility totalling US$4 billion to meet its contractual commitments and financial obligations. As at December 31, 2018, la Caisse had close to $37 billion in liquidity in the form of government bonds and money market securities ($47 billion as at December 31, 2017).

Furthermore, to manage liquidity risk, la Caisse conducts simulations of scenarios over different horizons and examines events that could lead to a liquidity crisis.

An analysis of undiscounted contractual cash flows of financial liabilities, presented in the table below, is a component of liquidity and financing management. However, this by-maturity allocation is not necessarily representative of the manner in which la Caisse manages its liquidity risk and financing requirements.

The following tables present the maturities of the undiscounted contractual cash flows of non-derivative financial liabilities, derivative financial instruments and other items:

					December 31, 2018
	On demand	Less than 1 year	1 year to 5 years	More than 5 years	Total
Non-derivative financial liabilities					
Amounts payable on transactions being settled	–	(1,113)	–	–	(1,113)
Other financial liabilities	–	(881)	–	–	(881)
Investment liabilities					
Securities sold under repurchase agreements	–	(12,562)	–	–	(12,562)
Securities sold short	–	(659)	(3,802)	(5,540)	(10,001)
Commercial paper payable	–	(5,939)	–	–	(5,939)
Loans payable	–	(290)	–	–	(290)
Term notes payable	–	(2,746)	(3,019)	(5,680)	(11,445)
Net assets attributable to depositors					
Demand and term deposits	(712)	(6)	–	–	(718)
Distributions payable to depositors	–	(2,506)	–	–	(2,506)
	(712)	(26,702)	(6,821)	(11,220)	(45,455)
Derivative financial instruments					
Derivative instruments with net settlement	–	(4,409)	157	50	(4,202)
Derivative instruments with gross settlement					
Contractual cash flows receivable	–	72,651	1,245	1,016	74,912
Contractual cash flows payable	–	(73,629)	(1,274)	(1,105)	(76,008)
	–	(5,387)	128	(39)	(5,298)
Other items					
Commitments *(Note 19)*	(11)	(18,474)	(134)	(347)	(18,966)
Guarantees *(Note 19)*	–	(40)	(357)	–	(397)
	(11)	(18,514)	(491)	(347)	(19,363)
	(723)	(50,603)	(7,184)	(11,606)	(70,116)

					December 31, 2017
	On demand	Less than 1 year	1 year to 5 years	More than 5 years	Total
Non-derivative financial liabilities					
Amounts payable on transactions being settled	–	(2,102)	–	–	(2,102)
Other financial liabilities	–	(576)	–	–	(576)
Investment liabilities					
Securities sold under repurchase agreements	–	(15,977)	–	–	(15,977)
Securities sold short	–	(654)	(3,043)	(1,842)	(5,539)
Commercial paper payable	–	(4,567)	–	–	(4,567)
Loans payable	–	(364)	–	–	(364)
Term notes payable	–	(348)	(5,298)	(5,499)	(11,145)
Net assets attributable to depositors					
Demand and term deposits	(88)	(6)	–	–	(94)
Distributions payable to depositors	–	(1,975)	–	–	(1,975)
	(88)	(26,569)	(8,341)	(7,341)	(42,339)
Derivative financial instruments					
Derivative instruments with net settlement	–	(1,400)	(1)	75	(1,326)
Derivative instruments with gross settlement					
Contractual cash flows receivable	–	44,289	213	594	45,096
Contractual cash flows payable	–	(44,330)	(228)	(605)	(45,163)
	–	(1,441)	(16)	64	(1,393)
Other items					
Commitments *(Note 19)*	(50)	(19,296)	(124)	(386)	(19,856)
Guarantees *(Note 19)*	–	(36)	(7)	(43)	(86)
	(50)	(19,332)	(131)	(429)	(19,942)
	(138)	(47,342)	(8,488)	(7,706)	(63,674)

Moreover, concerning net assets attributable to holders of participation deposits, the Regulation sets monthly limits for cancelling participation units, i.e., a depositor is limited to a maximum reimbursement of all their participation units in all of la Caisse's specialized portfolios of $15 million plus the proceeds of $2 million multiplied by the number of months that have elapsed since receipt of the notice of withdrawal. Any participation units that are not cancelled given the maximum amount permitted is carried forward to the first day of the subsequent month and are cancelled as soon as the limit permits. The purpose of the limits is to ensure optimal management of la Caisse's overall liquidity. Moreover, substantially all depositors are required to invest with la Caisse in accordance with the Act or the respective applicable legislation.

FINANCING-LIQUIDITY RISK

The following tables present the main terms and conditions and interest rates of the investment liabilities related to la Caisse's financing activities:

				December 31, 2018
	Currency	Nominal value[1]	Maturity	Interest rate %
Loans payable	USD	290	Less than one year	2.37
		290		
Commercial paper payable	CAD	1,000	Less than one year	1.90
	USD	4,945	Less than one year	2.60
		5,945		
Term notes payable	USD	2,390	November 2019	4.40
	EUR	1,171	June 2020	3.50
	CAD	1,000	July 2020	4.60
	USD	2,732	July 2024	3.15
	USD	1,707	November 2039	5.60
		9,000		

				December 31, 2017
	Currency	Nominal value[1]	Maturity	Interest rate %
Loans payable	USD	364	Less than one year	1.37
		364		
Commercial paper payable	CAD	1,000	Less than one year	1.12
	USD	3,571	Less than one year	1.53
		4,571		
Term notes payable	USD	2,193	November 2019	4.40
	EUR	1,128	June 2020	3.50
	CAD	1,000	July 2020	4.60
	USD	2,506	July 2024	3.15
	USD	1,566	November 2039	5.60
		8,393		

1. The amounts shown are translated into Canadian dollars and represent amounts to be repaid at maturity.

Commercial paper payable is issued at fixed rates, with maturities not exceeding 12 months, guaranteed by la Caisse's assets. The nominal value for all outstanding commercial paper may never exceed CA$3 billion and US$5 billion in accordance with the limit prescribed in the commercial paper issuance information document.

Term notes payable are repayable at maturity and guaranteed by la Caisse's assets. Certain interest-bearing fixed-rate term notes have an optional prepayment clause at the option of the issuer.

Furthermore, during the year ended December 31, 2018, la Caisse renewed its credit facility arranged with a banking syndicate for an amount of CA$5 billion, i.e., in two tranches of US$2 billion that are renewable after two and three years, respectively. The credit facility bears interest at a variable rate and is entirely secured, unconditionally and irrevocably, by la Caisse. As at December 31, 2018 and 2017, no amount had been drawn on this credit facility.

13
CAPITAL MANAGEMENT

La Caisse defines its capital as net assets attributable to depositors. La Caisse's capital may fluctuate according to depositor demands for cancellations and issuances of participation deposit units and for deposits and withdrawals of demand and term deposits. La Caisse's capital management objective is to invest contributions and deposits in the best interests of the depositors in accordance with the Act in order to achieve an optimal return while respecting the depositor investment policies.

La Caisse is not subject to external capital requirements.

Furthermore, la Caisse's objective is to maintain its AAA credit rating to ensure access to capital markets at the best cost through its CDP Financial Inc. subsidiary. Consequently, the Board of Directors has limited the amount of notes that la Caisse may issue on capital markets to 10% of its net assets attributable to depositors, to which is added the fair value of outstanding notes (adjusted net assets).

14
FINANCIAL ASSETS TRANSFERRED BUT NOT DERECOGNIZED

La Caisse enters into securities lending and borrowing transactions as well as securities repurchase agreements whereby it transfers financial assets to counterparties. The transferred securities do not meet derecognition criteria since la Caisse retains most of the risks such as credit risk, interest rate risk, currency risk, and price risk, as well as most of the related rewards such as cash flows.

The following table presents the fair values of the financial assets transferred but not derecognized from the Consolidated Statements of Financial Position as well as the fair values of the associated liabilities:

	December 31, 2018	December 31, 2017
Financial assets transferred but not derecognized		
Bonds	**15,001**	16,143
Equities	**12,420**	9,935
	27,421	26,078
Associated financial liabilities		
Loans payable[1]	**237**	239
Securities sold under repurchase agreements[2]	**14,763**	15,972
	15,000	16,211

1. The amount presented corresponds to cash received as collateral on securities lending transactions and derivative financial instruments.
2. The net amount is presented in Notes 4 and 8.

15
GUARANTEES

FINANCIAL ASSETS PLEDGED AS COLLATERAL

In the normal course of business, la Caisse pledges financial assets as collateral for transactions involving securities borrowings, securities sold under repurchase agreements and derivative financial instruments. The counterparties are authorized, by way of legal contract or market practices, to either sell or repledge these securities as collateral. On certain conditions, la Caisse may have to pledge additional collateral if the pledged securities lose value.

The following table presents the fair value of collateral pledged by la Caisse according to transaction type:

	December 31, 2018	December 31, 2017
Securities borrowing	**120**	157
Securities sold under repurchase agreements	**14,935**	15,986
Exchange-traded derivative financial instruments	**715**	1,092
Over-the-counter derivative financial instruments	**1,545**	648
	17,315	17,883

FINANCIAL ASSETS RECEIVED AS COLLATERAL

La Caisse receives financial assets as collateral for transactions involving securities lending, securities purchased under reverse repurchase agreements and derivative financial instruments. If the fair value of the collateral received decreases, la Caisse may, in certain cases, request additional collateral. La Caisse is authorized to sell or repledge as collateral certain securities in the absence of default by the counterparty. However, no security received as collateral was sold or repledged as collateral for the years ended December 31, 2018 and 2017.

The following table presents the fair value of collateral received by la Caisse according to transaction type:

	December 31, 2018	December 31, 2017
Securities lending	**12,488**	9,740
Securities purchased under reverse repurchase agreements	**10,454**	9,496
Over-the-counter derivative financial instruments	**–**	40
	22,942	19,276

16
RELATED PARTY DISCLOSURES

RELATED PARTY TRANSACTIONS

La Caisse's primary related parties include unconsolidated subsidiaries, joint ventures, associates, and la Caisse's key management personnel.

La Caisse enters into various transactions with related parties. These transactions are concluded under the same conditions as those prevailing in the market with unrelated parties and are measured at fair value. Given the very nature of la Caisse's activities as an investment entity, it may make investments in several investment categories, including investments in unconsolidated subsidiaries, joint ventures and associates.

OTHER RELATED PARTIES

La Caisse is governed by the Act, and the Government of Québec appoints the Board of Director members, at least two-thirds of whom must be independent. The Government of Québec also approves the appointment of the President and Chief Executive Officer. Consequently, la Caisse has availed itself of the exemption set out in IAS 24 – *Related Party Disclosures* regarding the disclosure of transactions with a related government and with any entities related to the related government. The transactions carried out with the Government of Québec and its related entities are investment activities involving bonds issued by or guaranteed by the government and are carried out under normal market conditions through external brokers. These bonds are included in the "Governments" and "Government corporations and other public administrations" bond categories of Note 4a. In addition, la Caisse discloses information on the Government sector category in the "Government of Québec" and "Government corporations and other public administrations in Québec" items of Note 12. Furthermore, the Government of Québec and its related entities have entered into agreements related to a public infrastructure project in Québec being carried out through CDPQ Infra Inc, a subsidiary of la Caisse. These agreements were signed in the subsidiary's normal course of business.

COMPENSATION OF KEY MANAGEMENT PERSONNEL

La Caisse's key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the entity, either directly or indirectly. These persons are the members of the Board of Directors, the President and Chief Executive Officer, and key members of the Executive Committee.

The following table presents the compensation of la Caisse's key management personnel:

	2018	2017
Salaries and other short-term employee benefits	**9**	8
Post-employment benefits	**2**	1
Other long-term employee benefits	**7**	6
	18	15

17
INTERESTS IN OTHER ENTITIES

SUBSIDIARIES

CONSOLIDATED SUBSIDIARY

CDP Financial Inc is a wholly owned subsidiary that issues debt securities in order to finance la Caisse's investments at an optimal financing cost.

UNCONSOLIDATED SUBSIDIARIES

The subsidiaries presented in this category are entities controlled by la Caisse either directly or indirectly through subsidiaries in accordance with the criteria in IFRS 10.

INTERMEDIATE SUBSIDIARIES

As part of certain investment activities, la Caisse may use intermediate subsidiaries whose sole purpose is to hold investments for la Caisse. They are therefore not included in the information presented in the following tables, while the main underlying ownership interests in subsidiaries, joint ventures, associates and non-controlled structured entities are presented.

INTERESTS IN OTHER ENTITIES (continued)

The following table presents the ownership interests held in the main consolidated and unconsolidated subsidiaries as at December 31, 2018 as well as the comparative ownership interests as at December 31, 2017:

	Principal place of business	**December 31, 2017** **Ownership interest %**	December 31, 2017 Ownership interest %
Consolidated subsidiary			
CDP Financial Inc	Canada	**100.0**	100.0
Unconsolidated subsidiaries			
Real estate debt			
Otéra Capital inc[1]	Canada	**97.5**	97.5
Energy			
Southern Star Acquisition Corporation[2]	United States	**100.0**	50.0
Tenedora de Energía Renovable Sol y Viento S.A.P.I. de C.V.[3]	Mexico	**67.1**	–
Trencap LP (Énergir)[4]	Canada	**64.7**	64.7
Hedge funds			
AIM Quantitative Global SF II Ltd	United States[9]	**100.0**	100.0
CTA ALP Fund, LP	United States	**100.0**	–
CTA FCW Fund, LP	United States	**100.0**	–
CTA JNM Fund, LP (formerly JMFFO Ltd)	United States	**100.0**	100.0
CTA QN5 Fund, LP (formerly AlphaQuest Original Ltd)	United States	**100.0**	100.0
CTA WLH Fund, LP (formerly CDP WTN Diversified Strategy Fund Limited)	United Kingdom[10]	**100.0**	100.0
DSAM Neutral LP	United Kingdom[9]	**100.0**	–
EMN CNM Fund, LP	United States	**100.0**	–
EMN ENP Fund, LP	United States	**100.0**	–
Ionic Pamli Global Credit Strategies Fund	United States[9]	**100.0**	100.0
Kildonan Quebec Fund Ltd	United States[9]	**100.0**	100.0
Newport Mount Royal Opportunity Fund Ltd	United States[9]	**–**	100.0
Private debt fund			
Global Credit Opportunities (Canada) LP	Canada	**100.0**	–
Private investment funds			
Apollo Hercules Partners LP	United States[9]	**97.6**	97.6
EC Partners LP	Singapore	**100.0**	100.0
GSO Churchill Partners LP	United States[9]	**98.0**	98.0
GSO Churchill Partners II LP	United States[9]	**98.0**	98.0
KKR-CDP Partners LP	United States[9]	**90.1**	90.1
Real estate – Ivanhoé Cambridge Group			
Careit Canada DCR GP	Canada	**94.2**	93.5
Careit Canada GP	Canada	**94.2**	93.5
IC Australia Trust	Australia	**94.2**	93.5
IC Investments US G.P.	Canada	**94.2**	93.5
IC Investments Mexico G.P.	Canada	**94.2**	93.5
Ivanhoé Cambridge Inc	Canada	**94.2**	93.5
SITQ E.U. LP	United States	**94.1**	93.4
Industrials			
CDPQ Infra Inc	Canada	**100.0**	100.0
Einn Volant Aircraft Leasing Holdings Ltd	Ireland[11]	**90.5**	90.5
Patina Rail LLP[5]	United Kingdom	**75.0**	75.0
Spinner US AcquireCo Inc (Student Transportation of America)	United States	**79.9**	–
Trust No. 2431[6]	Mexico	**43.0**	43.0
Materials			
Beaudier Ciment Inc (Ciment McInnis Inc)[7]	Canada	**57.3**	58.9
Services			
Datamars SA[8]	Switzerland	**64.8**	65.1

1. Otéra Capital inc owns 78.1% of MCAP Commercial LP.
2. Southern Star Acquisition Corporation was an unconsolidated subsidiary as at December 31, 2018 (presented in the Joint Ventures category as at December 31, 2017).
3. Voting rights amount to 60%.
4. Trencap LP owns 61.1% of Noverco Inc, which owns 100.0% of Énergir Inc., which owns 71.0% of Énergir LP.
5. Patina Rail LLP owns 40.0% of Eurostar International Limited.
6. La Caisse exercises control through a majority of the members of the Board of Directors. Trust No. 2431 owns 49.0% of ICA Operadora de Vias Terrestres, S.A.P.I. de C.V.
7. Beaudier Ciment Inc owns 67.8% of Ciment McInnis Inc (65.5% as at December 31, 2017).
8. Voting rights amount to 55.0% as at December 31, 2018 (55.5% as at December 31, 2017).
9. Constituted in the Cayman Islands in accordance with the limited partner structure.
10. Constituted in the United States.
11. Constituted in Bermuda.

JOINT VENTURES

The following table presents the ownership interests held in the main joint ventures as at December 31, 2018 as well as the comparative ownership interests as at December 31, 2017:

		December 31, 2018	December 31, 2017
	Principal place of business	**Ownership interest %**	Ownership interest %
Consumer discretionary			
MED ParentCo LP	United States	**47.7**	47.7
Energy			
HEF HoldCo II, Inc	United States	**33.3**	33.3
Financials			
USI Advantage Corp[1]	United States	**26.0**	26.0
Industrials			
Delachaux SA[2]	France	**43.0**	–
DP World Canada Investment Inc	Canada	**45.0**	45.0
Information technology			
Kiwi Holdco Cayco, Ltd (FNZ)[3]	United Kingdom[4]	**72.0**	–

1. Voting rights amount to 50.0%.
2. Voting rights amount to 50.0%.
3. La Caisse exercises joint control through agreements with the other shareholders.
4. Constituted in the Cayman Islands.

ASSOCIATES

The following table presents the ownership interests held in the main associates as at December 31, 2018 as well as the comparative ownership interests as at December 31, 2017:

		December 31, 2018	December 31, 2017
	Principal place of business	**Ownership interest %**	Ownership interest %
Consumer discretionary			
Cogeco Communications USA Inc	United States	**21.0**	–
Québecor Média Inc[1]	Canada	**–**	18.5
SGU Holdings LP	United States[10]	**46.7**	46.7
Energy			
Azure Power Global Ltd	India[11]	**40.3**	21.0
Corex Resources Ltd	Canada	**49.5**	49.5
Fluxys SA	Belgium	**20.0**	20.0
Interconnector UK Ltd	United Kingdom	**–**	33.5
Invenergy Renewables LLC[2]	United States	**53.6**	31.7
IPALCO Enterprises, Inc	United States	**30.0**	30.0
London Array Ltd, London Array Unincorporated JV	United Kingdom	**25.0**	25.0
NSW Electricity Networks Assets Holding Trust, NSW Electricity Networks Operations Holding Trust (TransGrid)	Australia	**22.5**	22.5
Suez Water Technologies and Solutions SA	France	**30.0**	30.0
Techem GmbH	Germany	**24.5**	–
Finance			
Avison Young (Canada) Inc	Canada	**33.3**	–
Catalina Holdings (Bermuda) Ltd	United States[12]	**–**	29.9
Greenstone Ltd	Australia	**30.0**	30.0
Hyperion Insurance Group Ltd	United Kingdom	**29.6**	–
Industrials			
Airport Holding Kft	Hungary	**21.2**	21.2
Alix Partners LLP	United States	**21.0**	21.0
Alvest International Equity SAS[3]	France	**39.9**	–
CAMSO Inc[4]	Canada	**–**	19.5
Fives Group[5]	France	**30.4**	–
Groupe Keolis SAS	France	**30.0**	30.0
Groupe Solmax Inc	Canada	**30.0**	30.0
Knowlton Development Corporation Inc[6]	Canada	**35.8**	–
Lightspeed POS Inc	Canada	**44.6**	44.6
Organización de Proyectos de Infraestructura, S.A.P.I. de C.V. (OPI), OPCEM, S.A.P.I. de C.V. (OPCEM)	Mexico	**45.5**	–
IPL Plastics Inc. (formerly IPL Plastics Plc)	Canada	**27.4**	26.6
PlusGrade Parent LP[7]	Canada	**39.9**	–
QPH Hold Trust, QPH Hold Co PTY Limited (Port of Brisbane)	Australia	**26.7**	26.7
Sedgwick LLP (formerly Sedgwick Inc)[8]	United States	**21.0**	29.2
TVS Logistics Services	India	**38.2**	38.2
Health care			
Image Networks Holdings Pty Ltd	Australia	**–**	30.0
Sphinx SAS (formerly Sam Topco SAS)[9]	France	**–**	49.1
Community services			
CLP India Pvt Ltd	India	**40.0**	–
Real estate services			
Groupe Foncia	France	**29.1**	29.1
Rail transport			
Bombardier Transportation (Investment) UK Limited	Germany[13]	**27.5**	30.0

1. Voting rights amount to 20.0% as at December 31, 2017.
2. Voting rights amount to 45.0%. La Caisse did not have any significant influence as at December 31, 2017.
3. Voting rights amount to 28.6%.
4. Voting rights amount to 22.2% as at December 31, 2017.
5. Voting rights amount to 20.3%.
6. Voting rights amount to 27.8%.
7. Voting rights amount to 37.5%.
8. La Caisse ceased to have significant influence in 2018 as a result of a transaction.
9. Voting rights amount to 20.0% as at December 31, 2017.
10. Constituted in Canada.
11. Constituted in Mauritius.
12. Constituted in Bermuda in accordance with the limited partner structure.
13. Constituted in the United Kingdom.

NON-CONTROLLED STRUCTURED ENTITIES

La Caisse holds interests in non-controlled structured entities, the majority of which represent private investment funds or limited partnerships. The interests held by la Caisse do not give it power over the relevant activities of these entities, as control is established by contractual agreement in favour, generally, of a general partner or administrator. The maximum exposure to loss attributable to the various interests held in the main non-controlled structured entities is limited to the fair value of the investment held by la Caisse, i.e., $25,732 million in 207 companies as at December 31, 2018 ($23,517 million in 261 companies as at December 31, 2017).

18
RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The following tables present changes in liabilities arising from financing activities, including non-cash changes:

			Non-cash changes		
	January 1, 2018	**Cash flows from financing activities**	**Change in foreign exchange**	**Change in fair value**	**December 31, 2018**
Commercial paper payable	**4,556**	**1,180**	**182**	**3**	**5,921**
Loans payable	**364**	**(80)**	**–**	**6**	**290**
Term notes payable	**9,198**	**–**	**607**	**(207)**	**9,598**
	14,118	**1,100**	**789**	**(198)**	**15,809**

			Non-cash changes		
	January 1, 2017	Cash flows from financing activities	Change in foreign exchange	Change in fair value	December 31, 2017
Commercial paper payable	4,813	(151)	(106)	–	4,556
Loans payable	189	176	(1)	–	364
Term notes payable	9,574	–	(372)	(4)	9,198
	14,576	25	(479)	(4)	14,118

19
COMMITMENTS AND CONTINGENCIES

Given the nature of its activities, la Caisse enters into various investment purchase commitments that will be settled in the coming fiscal years in accordance with the terms and conditions in the related agreements.

For la Caisse, guarantees consist of providing guarantees, to financial institutions and corporations, on derivative financial instrument transactions, repayment of loans taken by companies in which it has an economic interest, and certain letters of credit of its subsidiaries. As part of certain investment transactions, la Caisse may also provide guarantees or issue letters of credit to third parties. The maturities of the commitments are presented in Note 12.

The commitments and guarantees are detailed as follows:

	December 31, 2018	December 31, 2017
Investment purchase commitments	**18,450**	19,314
Commitments under operating leases	**516**	542
Guarantees	**397**	86
	19,363	19,942

LITIGATION

In the normal course of business, la Caisse may be subject to legal actions. Although la Caisse cannot predict the outcomes of any ongoing legal proceedings as at December 31, 2018, it has no reason to believe that the settlement of any one of these proceedings could have a material impact on its financial position.

20
SUPPLEMENTARY INFORMATION

The following statements present the financial information of the specialized portfolios:

	SHORT-TERM INVESTMENTS (740)		RATES (765)		CREDIT (766)		LONG-TERM BONDS (764)	
Statement of financial position	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
ASSETS								
Investments	**866**	1,892	**47,154**	59,599	**63,842**	67,532	**3,637**	3,697
Other financial assets	**2**	–	**3,796**	1,500	**950**	739	**44**	34
Total assets	**868**	1,892	**50,950**	61,099	**64,792**	68,271	**3,681**	3,731
LIABILITIES								
Investment liabilities	**–**	–	**17,681**	20,541	**7,203**	16,693	**818**	793
Other financial liabilities	**2**	–	**485**	546	**1,914**	1,505	**18**	9
Total liabilities excluding net assets attributable to holders of participation units	**2**	–	**18,166**	21,087	**9,117**	18,198	**836**	802
Net assets attributable to holders of participation units	**866**	1,892	**32,784**	40,012	**55,675**	50,073	**2,845**	2,929

Statement of comprehensive income	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Investment income	**16**	22	**1,225**	904	**2,732**	2,057	**83**	83
Investment expense	**(1)**	–	**(275)**	(185)	**(415)**	(292)	**(1)**	–
Net investment income	**15**	22	**950**	719	**2,317**	1,765	**82**	83
Operating expenses	**–**	–	**(24)**	(19)	**(72)**	(67)	**–**	(1)
Net income	**15**	22	**926**	700	**2,245**	1,698	**82**	82
Net gains (losses) on financial instruments at fair value	**–**	–	**(175)**	(35)	**(1,112)**	563	**(84)**	141
Investment result before distributions to (recoveries from) holders of participation units	**15**	22	**751**	665	**1,133**	2,261	**(2)**	223
Recoveries (distributions)	**(15)**	(22)	**(926)**	(700)	**(2,245)**	(1,698)	**(82)**	(82)
Net income and comprehensive income attributable to holders of participation units	**–**	–	**(175)**	(35)	**(1,112)**	563	**(84)**	141

Statement of changes in net assets attributable to holders of participation units	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Balance at beginning of the year	**1,892**	6,154	**40,012**	36,817	**50,073**	42,686	**2,929**	2,633
Participation units								
Units issued	**963**	2,926	**4,185**	5,684	**8,294**	7,964	**393**	356
Units cancelled	**(1,989)**	(7,188)	**(11,238)**	(2,454)	**(1,580)**	(1,140)	**(393)**	(201)
Net change in participation units for the year	**(1,026)**	(4,262)	**(7,053)**	3,230	**6,714**	6,824	**–**	155
Net income and comprehensive income attributable to holders of participation units	**–**	–	**(175)**	(35)	**(1,112)**	563	**(84)**	141
Balance at end of the year	**866**	1,892	**32,784**	40,012	**55,675**	50,073	**2,845**	2,929

	REAL RETURN BONDS (762)		INFRASTRUCTURE (782)		REAL ESTATE (710)		EQUITY MARKETS (737)	
Statement of financial position	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Assets								
Investments	**1,294**	1,199	**24,383**	16,236	**38,317**	34,401	**104,327**	111,125
Other financial assets	**17**	2	**64**	15	**9**	4	**5,493**	4,214
Total assets	**1,311**	1,201	**24,447**	16,251	**38,326**	34,405	**109,820**	115,339
Liabilities								
Investment liabilities	**116**	10	**1,699**	50	**19**	30	**1,341**	2,841
Other financial liabilities	**–**	6	**198**	227	**81**	111	**464**	537
Total liabilities excluding net assets attributable to holders of participation units	**116**	16	**1,897**	277	**100**	141	**1,805**	3,378
Net assets attributable to holders of participation units	**1,195**	1,185	**22,550**	15,974	**38,226**	34,264	**108,015**	111,961

Statement of comprehensive income	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Investment income	**27**	23	**974**	762	**17**	190	**2,849**	2,669
Investment expense	**–**	–	**(106)**	(4)	**(1)**	–	**(101)**	(81)
Net investment income	**27**	23	**868**	758	**16**	190	**2,748**	2,588
Operating expenses	**(1)**	–	**(97)**	(74)	**(10)**	(14)	**(137)**	(135)
Net income	**26**	23	**771**	684	**6**	176	**2,611**	2,453
Net gains (losses) on financial instruments at fair value	**(27)**	(13)	**1,265**	756	**2,729**	2,363	**(3,639)**	11,104
Investment result before distributions to (recoveries from) holders of participation units	**(1)**	10	**2,036**	1,440	**2,735**	2,539	**(1,028)**	13,557
Recoveries (distributions)	**(26)**	(23)	**(771)**	(684)	**(6)**	(176)	**(2,611)**	(2,453)
Net income and comprehensive income attributable to holders of participation units	**(27)**	(13)	**1,265**	756	**2,729**	2,363	**(3,639)**	11,104

Statement of changes in net assets attributable to holders of participation units	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
Balance at beginning of the year	**1,185**	1,085	**15,974**	14,563	**34,264**	31,724	**111,961**	101,040
Participation units								
Units issued	**146**	154	**5,956**	1,741	**1,416**	1,222	**7,636**	7,945
Units cancelled	**(109)**	(41)	**(645)**	(1,086)	**(183)**	(1,045)	**(7,943)**	(8,128)
Net change in participation units for the year	**37**	113	**5,311**	655	**1,233**	177	**(307)**	(183)
Net income and comprehensive income attributable to holders of participation units	**(27)**	(13)	**1,265**	756	**2,729**	2,363	**(3,639)**	11,104
Balance at end of the year	**1,195**	1,185	**22,550**	15,974	**38,226**	34,264	**108,015**	111,961

	PRIVATE EQUITY (780)		ASSET ALLOCATION (771)		ACTIVE OVERLAY STRATEGIES (773)	
STATEMENT OF FINANCIAL POSITION	**2018**	2017	**2018**	2017	**2018**	2017
ASSETS						
Investments	**44,323**	36,718	**4,204**	5,072	**9,068**	7,202
Other financial assets	**156**	1,026	**1,326**	1,362	**508**	272
Total assets	**44,479**	37,744	**5,530**	6,434	**9,576**	7,474
LIABILITIES						
Investment liabilities	**1,361**	406	**3,441**	4,235	**8,957**	6,885
Other financial liabilities	**976**	838	**465**	841	**90**	16
Total liabilities excluding net assets attributable to holders of participation units	**2,337**	1,244	**3,906**	5,076	**9,047**	6,901
Net assets attributable to holders of participation units	**42,142**	36,500	**1,624**	1,358	**529**	573

Statement of comprehensive income	**2018**	2017	**2018**	2017	**2018**	2017
Investment income	**2,114**	2,760	**61**	77	**297**	18
Investment expense	**(12)**	(10)	**(69)**	(38)	**(185)**	(94)
Net investment income	**2,102**	2,750	**(8)**	39	**112**	(76)
Operating expenses	**(199)**	(178)	**(15)**	(11)	**(28)**	(33)
Net income	**1,903**	2,572	**(23)**	28	**84**	(109)
Net gains (losses) on financial instruments at fair value	**3,965**	1,427	**26**	(859)	**(247)**	(16)
Investment result before distributions to (recoveries from) holders of participation units	**5,868**	3,999	**3**	(831)	**(163)**	(125)
Recoveries (distributions)	**(1,903)**	(2,572)	**23**	(28)	**(84)**	109
Net income and comprehensive income attributable to holders of participation units	**3,965**	1,427	**26**	(859)	**(247)**	(16)

Statement of changes in net assets attributable of holders of participation units	**2018**	2017	**2018**	2017	**2018**	2017
Balance at beginning of the year	**36,500**	29,960	**1,358**	1,356	**573**	629
Participation units						
Units issued	**4,908**	7,141	**735**	940	**550**	232
Units cancelled	**(3,231)**	(2,028)	**(495)**	(79)	**(347)**	(272)
Net change in participation units for the year	**1,677**	5,113	**240**	861	**203**	(40)
Net income and comprehensive income attributable to holders of participation units	**3,965**	1,427	**26**	(859)	**(247)**	(16)
Balance at end of the year	**42,142**	36,500	**1,624**	1,358	**529**	573

FINANCIAL CERTIFICATE OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

I, Michael Sabia, President and Chief Executive Officer of Caisse de dépôt et placement du Québec, certify that:

1. **Review:** I have reviewed the consolidated financial statements, the tables of returns, the press release announcing the annual results and the Annual Report (hereafter referred to as the "Annual Filings") of Caisse de dépôt et placement du Québec ("la Caisse") for the year ended December 31, 2018.

2. **No false or misleading information:** To the best of my knowledge, having exercised reasonable diligence, the Annual Filings do not contain any untrue statement of a material fact or omit to state any material fact that is required to be stated or necessary to make a statement that is not misleading in light of the circumstances in which it was made, with respect to the period covered by the Annual Filings.

3. **Fair presentation:** To the best of my knowledge, having exercised reasonable diligence, the consolidated financial statements and the other financial information included in the Annual Filings present fairly, in all material respects, the financial position of la Caisse as at the closing dates of the periods presented in the Annual Filings, as well as its comprehensive income, changes in net assets attributable to depositors, and cash flows for those years.

4. **Responsibility:** I am responsible for the establishment and maintenance of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR) for la Caisse.

5. **Design:** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, at fiscal year-end, I have:
   a) Designed, or caused to be designed under my supervision, DC&P to provide reasonable assurance that:
      i) Material information relating to la Caisse is made known to me by others, particularly during the period in which the Annual Filings are prepared; and that
      ii) Information required to be disclosed by la Caisse in its Annual Filings filed or submitted by it under the legislation is recorded, processed, summarized and reported within the time periods prescribed by the legislation.
   b) Designed, or caused to be designed under my supervision, ICFR to provide reasonable assurance that financial information is reliable and that the consolidated financial statements have been prepared, with a view to publication of financial information, in accordance with International Financial Reporting Standards (IFRS).

5.1. **Control framework:** The control framework that I have used to design the ICFR is that proposed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO 2013).

5.2. **ICFR material weakness relating to design:** Not applicable.

5.3. **Limitation of scope and design:** Not applicable.

6. **Evaluation:** I have:
   a) Evaluated or caused to be evaluated under my supervision, the effectiveness of the DC&P of la Caisse at fiscal year-end and la Caisse disclosed in its Annual Report my conclusions based on this evaluation.
   b) Evaluated or caused to be evaluated under my supervision, the effectiveness of the ICFR of la Caisse at fiscal year-end and la Caisse disclosed in its Annual Report the following information:
      i) My conclusions about the effectiveness of the ICFR at fiscal year-end based on that evaluation.
      ii) Description of any material weaknesses relating to current operation at fiscal year-end: Not applicable.

7. **Reporting changes to the ICFR:** La Caisse disclosed in its Annual Report any change made to the ICFR that occurred during the accounting period beginning on January 1, 2018 and ending on December 31, 2018 that has had, or is likely to have, a material impact on the ICFR.

8. **Reporting to co-auditors and the Board of Directors or Audit Committee of la Caisse:** I have disclosed, based on our most recent valuation of the ICFR, to the co-auditors and the Board of Directors of la Caisse or its Audit Committee, any fraud that involves management or other employees who have a significant role in the ICFR.

MICHAEL SABIA
President and Chief Executive Officer

April 5, 2019

FINANCIAL CERTIFICATE OF THE EXECUTIVE VICE-PRESIDENT AND CHIEF FINANCIAL OFFICER

I, Maarika Paul, Executive Vice-President and Chief Financial and Operations Officer of Caisse de dépôt et placement du Québec, certify that:

1. **Review:** I have reviewed the consolidated financial statements, the tables of returns, the press release announcing the annual results and the Annual Report (hereafter referred to as the "Annual Filings") of Caisse de dépôt et placement du Québec ("la Caisse") for the year ended December 31, 2018.

2. **No false or misleading information:** To the best of my knowledge, having exercised reasonable diligence, the Annual Filings do not contain any untrue statement of a material fact or omit to state any material fact that is required to be stated or necessary to make a statement that is not misleading in light of the circumstances in which it was made, with respect to the period covered by the Annual Filings.

3. **Fair presentation:** To the best of my knowledge, having exercised reasonable diligence, the consolidated financial statements and the other financial information included in the Annual Filings present fairly, in all material respects, the financial position of la Caisse as at the closing dates of the periods presented in the Annual Filings, as well as its comprehensive income, changes in net assets attributable to depositors, and cash flows for those years.

4. **Responsibility:** I am responsible for the establishment and maintenance of disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR) for la Caisse.

5. **Design:** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, at fiscal year-end, I have:
   a) Designed, or caused to be designed under my supervision, DC&P to provide reasonable assurance that:
      i) Material information relating to la Caisse is made known to me by others, particularly during the period in which the Annual Filings are prepared; and that
      ii) Information required to be disclosed by la Caisse in its Annual Filings filed or submitted by it under the legislation is recorded, processed, summarized and reported within the time periods prescribed by the legislation.
   b) Designed, or caused to be designed under my supervision, ICFR to provide reasonable assurance that financial information is reliable and that the consolidated financial statements have been prepared, with a view to publication of financial information, in accordance with International Financial Reporting Standards (IFRS).

5.1. **Control framework:** The control framework that I have used to design the ICFR is that proposed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO 2013).

5.2 **ICFR material weakness relating to design:** Not applicable.

5.3. **Limitation of scope and design:** Not applicable.

6. **Evaluation:** I have:
   a) Evaluated or caused to be evaluated under my supervision, the effectiveness of the DC&P of la Caisse at fiscal year-end and la Caisse disclosed in its Annual Report my conclusions based on this evaluation.
   b) Evaluated or caused to be evaluated under my supervision, the effectiveness of the ICFR of la Caisse at fiscal year-end and la Caisse disclosed in its Annual Report the following information:
      i) My conclusions about the effectiveness of the ICFR at fiscal year-end based on that evaluation; and
      ii) Description of any material weaknesses relating to current operation at fiscal year-end: Not applicable.

7. **Reporting changes to the ICFR:** La Caisse disclosed in its Annual Report any change made to the ICFR that occurred during the accounting period beginning on January 1, 2018 and ending on December 31, 2018 that has had, or is likely to have, a material impact on the ICFR.

8. **Reporting to co-auditors and the Board of Directors or Audit Committee of la Caisse:** I have disclosed, based on our most recent valuation of the ICFR, to the co-auditors and the Board of Directors of la Caisse or its Audit Committee, any fraud that involves management or other employees who have a significant role in the ICFR.

MAARIKA PAUL, FCPA, FCA, EEE, IAS.A
Executive Vice-President and
Chief Financial and Operations Officer

April 5, 2019

CONCLUSIONS ABOUT THE DESIGN AND EFFECTIVENESS OF INTERNAL CONTROL OVER FINANCIAL REPORTING

In 2018, the Chief Financial and Operations Officer oversaw work to update existing documentation and to evaluate the design and effectiveness of internal control over financial reporting, and the Executive Committee approved the methodology for evaluating key controls. The purpose of this evaluation of internal control over the main financial processes was to ensure that la Caisse could meet its quality objectives related to financial reporting, in all material respects.

The evaluation of the design and effectiveness of internal control over financial reporting was carried out with the framework usually adopted by North American companies, namely that of the Committee of Sponsoring Organizations of the Treadway Commission (COSO 2013). This work enabled the Executive Committee to conclude that the design of control over financial reporting is adequate and effective, and that it provides reasonable assurance that the financial information presented in the Annual Filings, as defined by la Caisse's Financial Certification Policy, is reliable, and that la Caisse's consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS).

CONCLUSIONS ABOUT THE DESIGN AND EFFECTIVENESS OF FINANCIAL REPORTING CONTROLS AND PROCEDURES

Under la Caisse's Financial Certification Policy, the design and effectiveness of disclosure controls and procedures pertaining to the Annual Filings, namely the consolidated financial statements, the tables of returns, the press release announcing the annual results and the Annual Report, must be evaluated.

As with the evaluation of internal control over financial reporting, the Chief Financial and Operations Officer also oversaw efforts to update existing documentation and to evaluate the design and effectiveness of disclosure controls and procedures, and the Executive Committee also approved the methodology for evaluating key controls.

As at December 31, 2018, the evaluation confirmed that the disclosure controls and procedures are adequate and effective, and provide reasonable assurance that all relevant information is gathered and submitted in a timely fashion to senior management, in particular to the President and Chief Executive Officer and to the Chief Financial and Operations Officer, so as to ensure that appropriate decisions concerning disclosure can be made.

The Board of Directors also approved the 2018 Annual Filings before their public disclosure.

General Notes

1. La Caisse's operations comply with the requirements of the Act respecting the Caisse de dépôt et placement du Québec[1] and investment industry practices. Its financial statements are prepared in accordance with International Financial Reporting Standards. Each year, la Caisse's co-auditors, the Auditor General of Québec and Ernst & Young LLP, audit the financial statements, the compliance of operations with laws, regulations, policies and guidelines, to the extent they deem appropriate.

2. The 2018 Annual Report Additional Information is an integral part of the 2018 Annual Report and presents, in the first section, the Tables of Returns as at December 31, 2018, for composites of la Caisse's depositors' accounts. These tables and calculations have been audited as at December 31, 2018 by Deloitte LLP for compliance with the Global Investment Performance Standards (GIPS®).

3. In this Annual Report, net assets and net investment results are defined as being, in the consolidated financial statements, net assets attributable to depositors and investment results before distributions to depositors.

4. The returns of the specialized portfolios use the time-weighted rate of return formula.

5. The benchmark indexes for the asset classes and overall portfolio are based on the weighted average of the benchmark indexes for the specialized portfolios that comprise them.

6. Unless otherwise stated, returns, which are expressed as a percentage, are presented net of transaction fees, external management fees related to investment funds, and unconsolidated real estate subsidiaries fees, but before operating expenses and other fees. They are annualized for periods of more than one year. They include the return on cash and cash equivalents and they take into account any foreign exchange hedging. The ratio of operating expenses to the average net assets of each specialized portfolio is presented in the notes in the 2018 Annual Report Additional Information.

7. Unless otherwise stated, net investment results and net assets attributable to depositors are presented net of operating expenses and other fees.

8. Some returns are expressed in basis points (b.p.s.). One hundred basis points equal 1.00% and one basis point equals 0.01%.

9. Unless otherwise stated, all figures are in Canadian dollars. The letters M and B used with dollar amounts designate millions and billions, respectively.

10. Totals (figures or percentages) may vary because of rounding of figures.

11. Unless otherwise stated, all data in the tables and figures are from studies carried out by la Caisse.

12. The tables listing the top 10 investments present, in alphabetical order, the main cash positions based on information shown in tables 7, 8, 9 and 10 of the 2018 Annual Report Additional Information.

13. To determine whether an asset is classified as a Québec investment, la Caisse uses the location of the head office of the company or of the issuer or, in the case of real estate, the location of the property.

    This classification system is widely used in the fund management industry but involves biases. Some companies are included even though their core operations are outside Québec. Similarly, companies with extensive operations in Québec are excluded if their head office is outside the province.

1. The Act respecting the Caisse de dépôt et placement du Québec is available on la Caisse's website at www.cdpq.com.

INTERNATIONAL OFFICES

AUSTRALIA

CDPQ SYDNEY

Deutsche Bank Place, Suite 2201
126 Phillip Street
Sydney NSW 2000
Australia

Telephone: +61 2 8316 3800

BRAZIL

CDPQ BRASIL

Av. Brigadeiro Faria Lima 3477
5th Floor, Suite 51, North Tower
Itaim Bibi, São Paulo, SP
Brazil 04538-133

Telephone: +55 11 46 32 01 90

INDIA

CDPQ INDIA

5th Floor, Worldmark 3
Suite No. 507
Aerocity, New Delhi
Delhi 110037
India

Telephone: +91 11 4957 7802

MEXICO

CDPQ MÉXICO

Torre Virreyes
Pedregal 24, 9th Floor, Suite 902
Colonia Molino del Rey
Delegación Miguel Hidalgo
11040 Mexico, CDMX
Mexico

Telephone: +52 55 4170 9625

NEW YORK

CDPQ US (NEW YORK)

1211 Avenue of the Americas
Suite 3001
New York, NY 10036
USA

Telephone: +1 212 596-6300
Fax: +1 212 730-2356

PARIS

CDPQ PARIS

28-32, avenue Victor-Hugo
6th Floor
75116 Paris
France

Telephone: +33 1 56 69 25 30
Fax: +33 1 56 69 25 80

SHANGHAI

CDPQ SHANGHAI

One Corporate Avenue
Unit 1504, 15th Floor
222 Hubin Road, Huang Pu District
Shanghai, 200021
China

Telephone: +86 21 6390 0100

SINGAPORE

CDPQ SINGAPORE

One Raffles Quay
#21-01 North Tower
Singapore 048583
Singapore

Telephone: +65 6800 4870
Fax: +65 6800 4889

UNITED KINGDOM

CDPQ LONDON

11 Charles II Street
2nd Floor
London, SW1Y 4QU
United Kingdom

Telephone: +44 207 024 8186
Fax: +44 207 024 8198

WASHINGTON

CDPQ US (WASHINGTON)

1775 Pennsylvania Avenue NW
Suite 200
Washington, DC 20006
USA

Telephone: +1 202 730-8010
Fax: +1 202 730-8014

The 2018 Annual Report and the 2018 Annual Report Additional Information are available at www.cdpq.com.
For information: 514 842-3261, info@cdpq.com
Le Rapport annuel 2018 et le document Renseignements additionnels au Rapport annuel 2018 sont aussi accessibles en français au www.cdpq.com.
Legal Deposit – Bibliothèque et Archives nationales du Québec, 2019
ISSN 1705-6462
ISSN online 1705-6470

BUSINESS OFFICE

1000, place Jean-Paul-Riopelle
Montréal, Québec H2Z 2B3
Telephone: +1 514 842-3261
Toll free: +1 866 330-3936
Fax: +1 514 842-4833

HEAD OFFICE

65, rue Sainte-Anne, 14th floor
Québec, Québec G1R 3X5
Telephone: +1 418 684-2334
Fax: +1 418 684-2335

www.cdpq.com

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145548

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

Parsons Brinckerhoff Holdings Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

One Penn Plaza
New York, NY 10119
United States

C. Telephone:

717-859-7838

Fax:

D. Name of contact person:

Ms. Laura Sue Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. Gregory A. Kelly
Title:	President & Chief Executive Officer
Role:	Both

- - - -

Role:	Both

Officer/Director:	Ms. Hillary F. Jassey
Title:	Assistant Secretary
Role:	Officer

---

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

- WSP USA Buildings Inc. - 100.0% - EDS 145549

Owner Details

Name	Business Address
WSP USA Buildings Inc.	One Penn Plaza New York, NY 10119 United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I certify the above to be true

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;

b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

Not applicable because disclosing party is not the Applicant

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official

City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from

the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof

currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You

are responsible for redacting any non-public information from your documents before uploading.

Disclosing Party's ultimate parent company is WSP Global Inc., which is publically traded on the Toronto Stock Exchange. The following entities, having more than a 7.5% shareholder interest in WSP Global, Inc., are exempt from filing an EDS, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board (CPPIB) owns 19.73% and the Caisse de Depot et Placement du Quebec (CDPQ) owns 18.81%.

List of attachments uploaded by vendor

None.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 09/27/2019
Ms. Laura Sue Unger
Asst. General Counsel, Regulatory Compliance
Parsons Brinckerhoff Holdings Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145549

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP USA Buildings Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

One Penn Plaza
New York, NY 10119
United States

C. Telephone:

206-382-5282

Fax:

D. Name of contact person:

Ms. Laura Sue Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

New York

Registered to do business in the State of Illinois as a foreign entity?

Yes

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. Gregory A. Kelly
Title:	President & CEO
Role:	Both

- - - -

Officer/Director: Mr. Eric Hechler
Title: Assistant Secretary
Role: Officer

Officer/Director: Ms. Hillary F. Jassey
Title: Assistant Secretary
Role: Officer

Officer/Director: Ms. Jennifer Brown
Title: Board Director
Role: Director

Officer/Director: Mr. Robert Giambrone
Title: Board Director
Role: Director

Officer/Director: Mr. Richard Rome
Title: Board Director
Role: Director

Officer/Director: Mr. Mark Warren
Title: Board Director
Role: Director

Officer/Director: Mr. Todd M. See
Title: Assistant Vice President
Role: Officer

Officer/Director: Ms. Sarah S. Kuchera
Title: Vice President
Role: Officer

Officer/Director: Mr. Bernard P. McNeilly
Title: Board Director
Role: Director

---

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited

lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

- WSP USA Holdings, Inc. - 100.0% - EDS 145550

Owner Details

Name	Business Address
WSP USA Holdings, Inc.	One Penn Plaza New York, NY 10119 United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I certify the above to be true

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;

d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

I certify the above to be true

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions.

Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members

and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

Disclosing Party's ultimate parent company is WSP Global Inc., which is publically traded on the Toronto Stock Exchange. The following entities, having more than a 7.5% interest in WSP Global, Inc., are exempt from filing an EDS, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board ("CPPIB") owns 19.73% and the Caisse de Depot et Placement du Quebec ("CDPQ") owns 18.81%.

List of attachments uploaded by vendor

None.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 09/27/2019
Ms. Laura Sue Unger
Asst. General Counsel, Regulatory Compliance
WSP USA Buildings Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145550

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP USA Holdings, Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

One Penn Plaza
New York, NY 10119
United States

C. Telephone:

206-382-5282

Fax:

D. Name of contact person:

Ms. Laura Sue Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. Gregory A. Kelly
Title:	President, CEO and Director
Role:	Both

Officer/Director:	Mr. Patrick T. Sheridan
Title:	Executive Vice President, CFO, Treasurer and Director
Role:	Both

Officer/Director:	Mr. W. Stephen Dale
Title:	Senior Vice President, General Counsel & Secretary
Role:	Officer

Officer/Director:	Mr. Andrew J. Lynn
Title:	Vice President
Role:	Officer

Officer/Director:	Ms. Hillary F. Jassey
Title:	Assistant Secretary
Role:	Officer

Officer/Director:	Jennifer Brown
Title:	Board Director
Role:	Director

Officer/Director:	Robert Giambrone
Title:	Board Director
Role:	Director

---

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

- WSP Group Holding LLC - 100.0% - EDS 145551

Owner Details

Name	Business Address
WSP Group Holding LLC	One Penn Plaza 2nd Floor New York, NY 10119 United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain :

Please see attached disclosure statement provided under Additional Info tab regarding affiliate Berger Group Holdings, Inc.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or

any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;

b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

Not applicable because disclosing party is not the Applicant

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

Disclosing Party's ultimate parent company is WSP Global Inc., which is publicly traded on the Toronto Stock Exchange. The following entities having more than a 7.5% shareholder interest in WSP Global, Inc. are exempt from filing an EDS, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board (CPPIB) owns 19.73% and the Caisse de Depot et Placement du Quebec (CDPQ) owns 18.81%.

List of attachments uploaded by vendor

Affiliate disclosure statement

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 09/27/2019
Ms. Laura Sue Unger
U.S. Regulatory Compliance Manager
WSP USA Holdings, Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

DISCLOSURE STATEMENT

This Statement provides disclosures about the Louis Berger companies for events occurring prior to the acquisition of Berger Group Holdings, Inc. ("BGH") by WSP Global Inc. ("WSP") which acquired BGH on December 18, 2018. WSP continues to provide this Statement in accordance with the highest standards of corporate transparency and conduct.

Louis Berger Companies

Until December 18, 2018, BGH was the common parent of a group of professional services companies (collectively the "LB Company") with its first tier subsidiaries being:

- Louis Berger Group, Inc. ("LBG"), formed in 1963, is an operating company with a general purpose of providing engineering, planning, architecture, development, construction management and program management services primarily to U.S. federal, state and local governments and private clients. Louis Berger U.S., Inc., formerly a subsidiary of LBG after being acquired in 2015, is currently a wholly-owned subsidiary of WSP USA Inc.
- Louis Berger International, Inc. ("LBI"), formed in 2012, is a holding company with a general purpose of owning certain foreign subsidiaries that provide engineering, planning, architecture, development, construction management and program management services to foreign governments and private clients.
- Louis Berger Services, Inc. ("LBS"), acquired in 2012 is an operating company with a general purpose of providing commercial services related to operations and maintenance, power generation, and related services to federal, state and local governments and private clients. LBS is currently a wholly-owned subsidiary of WSP USA Services Inc. and is the parent of Louis Berger Aircraft Services, Inc. and Louis Berger Hawthorne Services, Inc.

BGH and two of its subsidiaries, LBG and LBI, were the subject of related investigations involving conduct by former employees in 2010 and earlier. These investigations resulted in a False Claims Act Settlement Agreement and an Administrative Agreement in 2010 as well as Deferred Prosecution Agreements in 2010 and 2015. All of these agreements have expired. These matters, discussed below, have been fully resolved with the U.S. government. The LB Company took full responsibility for the historical actions of former managers and employees. The LB Company entered into Integrity Monitoring Agreements with the Port Authority of New York and New Jersey, the New York City Department of Investigation, New York State Department of Transportation and the Metropolitan Transportation Authority, and a Contractor Certification with the City University of New York. These Integrity Monitoring Agreements have expired.

CORRECTIVE ACTIONS BY LB COMPANY

The LB Company implemented and continuously improved on a $25-million reform program including: broadening ownership by employees; implementing a new, state-of-the-art Enterprise Resource Planning (Accounting) System specifically designed for Government Contractors; and, creation of an Office of Compliance and Ethics, managed by the Chief Integrity Officer. The LB Company maintains a comprehensive Code of Business Conduct and other internal controls, specifically including an anti-corruption program.

LOUIS BERGER COMPANIES ARE RESPONSIBLE, CONTRACT AWARD-ELIGIBLE VENDORS

The Louis Berger companies are responsible vendors serving and are receiving new contract awards from federal civil and military agencies, and state and local government clients. The matters discussed below arise out of misconduct of former LB Company employees that occurred in 2010 and earlier. This disclosure statement, the reform efforts undertaken, and the continuing attention to corporate responsibility ensure that the LB Company is presently a responsible vendor that deals fairly and honestly with its clients. This responsibility is best evidenced by the continued receipt of government contract awards by the Louis Berger Companies from federal, state and local government agencies.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

2010 False Claims Matter (LBG)

LBG was the subject of a False Claims Act ("FCA") investigation by the U.S. Attorney's Office in Newark, New Jersey for the over-allocation of overhead charges in connection with contracts performed for the U.S. Government overseas, primarily for USAID, between 1998 and 2007. LBG voluntarily refunded the over-allocated overhead charges to the U.S. Government. On November 5, 2010, LBG entered into a two-year Deferred Prosecution Agreement (the "2010 DPA") with the U.S. Department of Justice (the "DOJ"), a civil FCA Settlement Agreement (the "FCA Settlement"), and a three-year Administrative Agreement (the "AA") with USAID. LBG fully complied with the terms of and successfully completed the 2010 DPA, which expired in accordance with its terms on November 5, 2012 The AA was successfully completed on November 5, 2013. USAID has praised the Company's performance under the AA. All potential charges associated with the 2010 DPA were dismissed in November 2012. LBG paid a fine of $18.7 million under the 2010 DPA. LBG also paid $50.6 million (including the refunded overhead) under the FCA Settlement. The former LBG employees who were identified as orchestrating the improper conduct at issue in the FCA matter were separated from the company in 2009 and 2010, and were separately prosecuted by the DOJ.

2015 Foreign Corrupt Practices Act Matter (LBI)

During its own internal investigation of the FCA matter, the LB Company discovered evidence of potential inappropriate payments made to foreign government officials by rogue employees in breach of express company policy. The Company disclosed that information to the U.S. Government. The LB Company voluntarily commissioned a private law firm to conduct an extensive internal investigation for potential Foreign Corrupt Practices Act ("FCPA") violations, as well as a review of company business operations for potential violations of the standards of conduct applicable to projects financed by the World Bank and the Japan International Cooperation Agency ("JICA"). These apparent violations by personnel, previously employed by the LB Company, were limited to several overseas offices involving certain procurements in several countries in the Middle East and Asia and occurred between 1998 and 2010. The LB Company self-reported the misconduct uncovered by its internal investigation to the DOJ, the World Bank and JICA. The reviews performed by the DOJ, the World Bank, and JICA all centered on the conduct by same former employees.

- 2015 Deferred Prosecution Agreement: The DOJ and the U.S. Attorney's Office in Newark, New Jersey evaluated the self-reported FCPA issues involving conduct that occurred in 2010 and prior. LBI is the business unit that houses the operations responsible for these actions. In July 2015, LBI entered into a Deferred Prosecution Agreement with the DOJ and the U.S. Attorney's Office (the "2015 DPA") for a term of three years. LBI fully complied with the terms of and successfully completed the 2015 DPA, which expired in accordance with its terms on July 7, 2018. The LB Company fully cooperated with the criminal investigations of the individuals responsible for the misconduct, both of whom were separated from the LB Company in 2012, and eventually plead guilty to charges brought by the DOJ.
- World Bank Matter: The World Bank, as a public international organization, is not subject to U.S. domestic law and it is not a "governmental entity." It applies its own rules of conduct to the use of its finances. The World Bank reviewed the results of the LB Company's internal FCPA investigation of the LB Company's foreign business units with respect to World Bank-financed international development projects under the World Bank's internal standards of conduct. On January 29, 2015, the World Bank debarred LBG and its controlled subsidiaries for a period of 12 months, based on LBG's Vietnam contracts awarded before 2010, from participating in World Bank-financed projects. LBG worked cooperatively with the World Bank to satisfy the conditions of the World Bank order. On January 28, 2016, LBG fully complied with the terms of and successfully completed the one-year World Bank debarment and the LBG is now fully eligible to participate in World Bank projects.
- JICA Matter: As the FCPA investigation progressed toward conclusion, the LB Company's legal and management representatives briefed JICA regarding two JICA-financed international development projects, based in India, that were later named in the 2015 DPA. On September 18, 2015, JICA sanctioned LBG, the legal entity that originally entered into these two India-based JICA-financed projects, from pursuing new JICA-financed projects for a period of nine months. JICA did not impose any fine upon LBG or seek restitution of any payments received by LBG

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

under the contracts at issue. On June 18, 2016, LBG fully complied with the terms of and successfully completed the JICA sanction period and the LBG is reinstated as an eligible bidder on all JICA-financed projects.

- India Projects Inquiries**:** The JICA-financed India projects referenced in the 2015 DPA were water supply projects in the Indian state of Goa and city of Guwahati. After the 2015 DPA was announced, local Indian authorities initiated investigations of the same self-reported conduct by former rogue employees that formed the basis of the 2015 DPA. This conduct occurred before the LB Company's comprehensive reform that began in 2010. LBG continues to cooperate with Indian investigative authorities in all aspects of their investigations.
    - During the Goa Crime Branch investigation, the LB Company shared requested documents and information and also shared the results of its internal investigations, with respect to the Goa project, with the authorities. Two former Louis Berger non-management employees provided evidence to Goa authorities. In August 2015, former Louis Berger India employee Satyakam Mohanty and former Goa Public Works Department Minister Churchill Alemao were arrested as part of this investigation. In addition, former Goa Chief Minister Digambar Kamat was charged with disappearance of evidence relevant to the investigation. In January 2017, Mr. Kamat was charged as a prime accused in the matter.
        - As part of the Goa investigation, LBG was charged on September 25, 2015 with violating section 120-B of the Indian Penal Code relating to conspiracy and with violating sections 7, 8, 9, and 13 of the Prevention of Corruption Act of 1988. The matter is pending before Special Judge, CBI Court Goa, and the charges in this matter have not yet been framed by the court against the accused.
    - The Directorate of Enforcement, Goa (the "ED") is currently conducting an investigation under the Prevention of Money Laundering Act, 2002 (the "PMLA") with respect to the Goa water supply project. The Company is fully cooperating with ED officials in all aspects of this investigation. On July 12, 2018, ED filed a criminal complaint in the Special Court under PMLA against the former Goa Chief Minister Digambar Kamath and former Minister Churchill Alemao charging them with violations of PMLA. LBG is not charged in this charge sheet.
    - The Guwahati Criminal Investigation Department ("CID") investigation, subsequently transferred to the Indian Central Bureau of Investigation ("CBI"), the LB Company shared requested documents and information required by the CID and CBI and also shared the results of its internal investigations, with respect to the Guwahati project. The CBI initiated their review in the normal manner for their cases, which consists of filing a First Information Report (FIR). The LB Company is fully cooperating with the authorities' ongoing investigation in Guwahati.
    - As a result of the Goa investigation, the Government of Maharashtra created an inquiry committee to look into the Maharashtra infrastructure contracts held by the LB Company. The committee has not sent any notices to the LB Company requesting any information or statements.

Statement as of March 1, 2019. Additional information on these topics are available, upon request, from the LB Company.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145551

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP Group Holding LLC

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

One Penn Plaza
2nd Floor
New York, NY 10119
United States

C. Telephone:

206-382-5282

Fax:

D. Name of contact person:

Ms. Laura S. Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Limited liability company

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.2 Does the Disclosing Party have any officers?

Yes

1.a.4 List below the full names and titles of all executive officers of the entity.

Officer:	Mr. Karl Bissonnette
Title:	Treasurer
Role:	Officer

Officer:	Mr. William Cambron
Title:	Secretary and Director
Role:	Officer

B. CERTIFICATION REGARDING CONTROLLING INTEREST

1.b.1 Are there any individuals who directly or indirectly control the day-to-day management of the Disclosing Party as a general partner, managing member, manager, or other capacity?

No

1.b.3 Are there any legal entities that directly or indirectly control the day-to-day management of the Disclosing Party as a general partner, managing member, manager, or other capacity?

No

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

- WSP USA Group Holding Inc. - 100.0% - EDS 145552

Owner Details

Name	Business Address
WSP USA Group Holding Inc.	One Penn Plaza 2nd Floor New York, NY 10119 United States

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a

financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain :

Please see attached disclosure statement provided under Additional Info Tab regarding affiliate Berger Group Holdings, Inc.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or

d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

Not applicable because disclosing party is not the Applicant

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to

be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

Applicant's ultimate parent company is WSP Global Inc., which is publicly traded on the Toronto Stock Exchange. The following entities having more than a 7.5% interest in WSP Global Inc. are exempt from filling an EDS under Rule 1(i) of the Rules Regarding Economic Disclosure Statement and Affidavit, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board ("CPPIB") owns 19.73% and the Caisse de Depot et Placement du Quebec ("CDPQ") owns 18.81%. Attached are the year-end public financial statements in accordance with the rule.

List of attachments uploaded by vendor

Affiliate Disclosure Statement

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 09/27/2019
Ms. Laura S. Unger
Asst. General Counsel, Regulatory Compliance
WSP Group Holding LLC

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

DISCLOSURE STATEMENT

This Statement provides disclosures about the Louis Berger companies for events occurring prior to the acquisition of Berger Group Holdings, Inc. ("BGH") by WSP Global Inc. ("WSP") which acquired BGH on December 18, 2018. WSP continues to provide this Statement in accordance with the highest standards of corporate transparency and conduct.

Louis Berger Companies

Until December 18, 2018, BGH was the common parent of a group of professional services companies (collectively the "LB Company") with its first tier subsidiaries being:

- Louis Berger Group, Inc. ("LBG"), formed in 1963, is an operating company with a general purpose of providing engineering, planning, architecture, development, construction management and program management services primarily to U.S. federal, state and local governments and private clients. Louis Berger U.S., Inc., formerly a subsidiary of LBG after being acquired in 2015, is currently a wholly-owned subsidiary of WSP USA Inc.
- Louis Berger International, Inc. ("LBI"), formed in 2012, is a holding company with a general purpose of owning certain foreign subsidiaries that provide engineering, planning, architecture, development, construction management and program management services to foreign governments and private clients.
- Louis Berger Services, Inc. ("LBS"), acquired in 2012 is an operating company with a general purpose of providing commercial services related to operations and maintenance, power generation, and related services to federal, state and local governments and private clients. LBS is currently a wholly-owned subsidiary of WSP USA Services Inc. and is the parent of Louis Berger Aircraft Services, Inc. and Louis Berger Hawthorne Services, Inc.

BGH and two of its subsidiaries, LBG and LBI, were the subject of related investigations involving conduct by former employees in 2010 and earlier. These investigations resulted in a False Claims Act Settlement Agreement and an Administrative Agreement in 2010 as well as Deferred Prosecution Agreements in 2010 and 2015. All of these agreements have expired. These matters, discussed below, have been fully resolved with the U.S. government. The LB Company took full responsibility for the historical actions of former managers and employees. The LB Company entered into Integrity Monitoring Agreements with the Port Authority of New York and New Jersey, the New York City Department of Investigation, New York State Department of Transportation and the Metropolitan Transportation Authority, and a Contractor Certification with the City University of New York. These Integrity Monitoring Agreements have expired.

CORRECTIVE ACTIONS BY LB COMPANY

The LB Company implemented and continuously improved on a $25-million reform program including: broadening ownership by employees; implementing a new, state-of-the-art Enterprise Resource Planning (Accounting) System specifically designed for Government Contractors; and, creation of an Office of Compliance and Ethics, managed by the Chief Integrity Officer. The LB Company maintains a comprehensive Code of Business Conduct and other internal controls, specifically including an anti-corruption program.

LOUIS BERGER COMPANIES ARE RESPONSIBLE, CONTRACT AWARD-ELIGIBLE VENDORS

The Louis Berger companies are responsible vendors serving and are receiving new contract awards from federal civil and military agencies, and state and local government clients. The matters discussed below arise out of misconduct of former LB Company employees that occurred in 2010 and earlier. This disclosure statement, the reform efforts undertaken, and the continuing attention to corporate responsibility ensure that the LB Company is presently a responsible vendor that deals fairly and honestly with its clients. This responsibility is best evidenced by the continued receipt of government contract awards by the Louis Berger Companies from federal, state and local government agencies.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

2010 False Claims Matter (LBG)

LBG was the subject of a False Claims Act ("FCA") investigation by the U.S. Attorney's Office in Newark, New Jersey for the over-allocation of overhead charges in connection with contracts performed for the U.S. Government overseas, primarily for USAID, between 1998 and 2007. LBG voluntarily refunded the over-allocated overhead charges to the U.S. Government. On November 5, 2010, LBG entered into a two-year Deferred Prosecution Agreement (the "2010 DPA") with the U.S. Department of Justice (the "DOJ"), a civil FCA Settlement Agreement (the "FCA Settlement"), and a three-year Administrative Agreement (the "AA") with USAID. LBG fully complied with the terms of and successfully completed the 2010 DPA, which expired in accordance with its terms on November 5, 2012 The AA was successfully completed on November 5, 2013. USAID has praised the Company's performance under the AA. All potential charges associated with the 2010 DPA were dismissed in November 2012. LBG paid a fine of $18.7 million under the 2010 DPA. LBG also paid $50.6 million (including the refunded overhead) under the FCA Settlement. The former LBG employees who were identified as orchestrating the improper conduct at issue in the FCA matter were separated from the company in 2009 and 2010, and were separately prosecuted by the DOJ.

2015 Foreign Corrupt Practices Act Matter (LBI)

During its own internal investigation of the FCA matter, the LB Company discovered evidence of potential inappropriate payments made to foreign government officials by rogue employees in breach of express company policy. The Company disclosed that information to the U.S. Government. The LB Company voluntarily commissioned a private law firm to conduct an extensive internal investigation for potential Foreign Corrupt Practices Act ("FCPA") violations, as well as a review of company business operations for potential violations of the standards of conduct applicable to projects financed by the World Bank and the Japan International Cooperation Agency ("JICA"). These apparent violations by personnel, previously employed by the LB Company, were limited to several overseas offices involving certain procurements in several countries in the Middle East and Asia and occurred between 1998 and 2010. The LB Company self-reported the misconduct uncovered by its internal investigation to the DOJ, the World Bank and JICA. The reviews performed by the DOJ, the World Bank, and JICA all centered on the conduct by same former employees.

- 2015 Deferred Prosecution Agreement: The DOJ and the U.S. Attorney's Office in Newark, New Jersey evaluated the self-reported FCPA issues involving conduct that occurred in 2010 and prior. LBI is the business unit that houses the operations responsible for these actions. In July 2015, LBI entered into a Deferred Prosecution Agreement with the DOJ and the U.S. Attorney's Office (the "2015 DPA") for a term of three years. LBI fully complied with the terms of and successfully completed the 2015 DPA, which expired in accordance with its terms on July 7, 2018. The LB Company fully cooperated with the criminal investigations of the individuals responsible for the misconduct, both of whom were separated from the LB Company in 2012, and eventually plead guilty to charges brought by the DOJ.
- World Bank Matter: The World Bank, as a public international organization, is not subject to U.S. domestic law and it is not a "governmental entity." It applies its own rules of conduct to the use of its finances. The World Bank reviewed the results of the LB Company's internal FCPA investigation of the LB Company's foreign business units with respect to World Bank-financed international development projects under the World Bank's internal standards of conduct. On January 29, 2015, the World Bank debarred LBG and its controlled subsidiaries for a period of 12 months, based on LBG's Vietnam contracts awarded before 2010, from participating in World Bank-financed projects. LBG worked cooperatively with the World Bank to satisfy the conditions of the World Bank order. On January 28, 2016, LBG fully complied with the terms of and successfully completed the one-year World Bank debarment and the LBG is now fully eligible to participate in World Bank projects.
- JICA Matter: As the FCPA investigation progressed toward conclusion, the LB Company's legal and management representatives briefed JICA regarding two JICA-financed international development projects, based in India, that were later named in the 2015 DPA. On September 18, 2015, JICA sanctioned LBG, the legal entity that originally entered into these two India-based JICA-financed projects, from pursuing new JICA-financed projects for a period of nine months. JICA did not impose any fine upon LBG or seek restitution of any payments received by LBG

LOUIS BERGER
412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

under the contracts at issue. On June 18, 2016, LBG fully complied with the terms of and successfully completed the JICA sanction period and the LBG is reinstated as an eligible bidder on all JICA-financed projects.

- India Projects Inquiries**:** The JICA-financed India projects referenced in the 2015 DPA were water supply projects in the Indian state of Goa and city of Guwahati. After the 2015 DPA was announced, local Indian authorities initiated investigations of the same self-reported conduct by former rogue employees that formed the basis of the 2015 DPA. This conduct occurred before the LB Company's comprehensive reform that began in 2010. LBG continues to cooperate with Indian investigative authorities in all aspects of their investigations.
    - During the Goa Crime Branch investigation, the LB Company shared requested documents and information and also shared the results of its internal investigations, with respect to the Goa project, with the authorities. Two former Louis Berger non-management employees provided evidence to Goa authorities. In August 2015, former Louis Berger India employee Satyakam Mohanty and former Goa Public Works Department Minister Churchill Alemao were arrested as part of this investigation. In addition, former Goa Chief Minister Digambar Kamat was charged with disappearance of evidence relevant to the investigation. In January 2017, Mr. Kamat was charged as a prime accused in the matter.
        - As part of the Goa investigation, LBG was charged on September 25, 2015 with violating section 120-B of the Indian Penal Code relating to conspiracy and with violating sections 7, 8, 9, and 13 of the Prevention of Corruption Act of 1988. The matter is pending before Special Judge, CBI Court Goa, and the charges in this matter have not yet been framed by the court against the accused.
    - The Directorate of Enforcement, Goa (the "ED") is currently conducting an investigation under the Prevention of Money Laundering Act, 2002 (the "PMLA") with respect to the Goa water supply project. The Company is fully cooperating with ED officials in all aspects of this investigation. On July 12, 2018, ED filed a criminal complaint in the Special Court under PMLA against the former Goa Chief Minister Digambar Kamath and former Minister Churchill Alemao charging them with violations of PMLA. LBG is not charged in this charge sheet.
    - The Guwahati Criminal Investigation Department ("CID") investigation, subsequently transferred to the Indian Central Bureau of Investigation ("CBI"), the LB Company shared requested documents and information required by the CID and CBI and also shared the results of its internal investigations, with respect to the Guwahati project. The CBI initiated their review in the normal manner for their cases, which consists of filing a First Information Report (FIR). The LB Company is fully cooperating with the authorities' ongoing investigation in Guwahati.
    - As a result of the Goa investigation, the Government of Maharashtra created an inquiry committee to look into the Maharashtra infrastructure contracts held by the LB Company. The committee has not sent any notices to the LB Company requesting any information or statements.

Statement as of March 1, 2019. Additional information on these topics are available, upon request, from the LB Company.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145552

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP USA Group Holding Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

One Penn Plaza
2nd Floor
New York, NY 10119
United States

C. Telephone:

206-382-5282

Fax:

D. Name of contact person:

Ms. Laura S. Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Delaware

Registered to do business in the State of Illinois as a foreign entity?

No

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. Karl Bissonnette
Title:	Treasurer
Role:	Officer

- - - -

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

- WSP Group Consulting Inc. - 100.0% - EDS 145553

Owner Details

Name	Business Address
WSP Group Consulting Inc.	16 Floor - 1600 Rene-Levesque Blvd. West Montreal, Quebec H3H 1P9 Canada

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I am unable to certify the above to be true

Explain :

Please see attached disclosure statement provided under Additional Info tab regarding affiliate Berger Group Holdings, Inc.

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them

in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

Not applicable because disclosing party is not the Applicant

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official

City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from

the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof

currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You

are responsible for redacting any non-public information from your documents before uploading.

Applicant's utlimate parent company is WSP Global Inc., which is publicly traded on the Toronto Stock Exchange. The following entities have more than a 7.5% interest in WSP Gloabl Inc. are exempt from filing an EDS under Rule 1(i) of the Rules Regarding Economic Disclosure Statement and Affidavit, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board ("CPPIB") owns 19.73% and the Caisse de Depot et Placement du Quebec ("CDPQ") owns 18.81%. Attached are the year-end public financial statements in accordance with the rule.

List of attachments uploaded by vendor

Affiliate Disclosure Statement

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 09/27/2019
Ms. Laura S. Unger
Asst. General Counsel, Regulatory Compliance
WSP USA Group Holding Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

DISCLOSURE STATEMENT

This Statement provides disclosures about the Louis Berger companies for events occurring prior to the acquisition of Berger Group Holdings, Inc. ("BGH") by WSP Global Inc. ("WSP") which acquired BGH on December 18, 2018. WSP continues to provide this Statement in accordance with the highest standards of corporate transparency and conduct.

Louis Berger Companies

Until December 18, 2018, BGH was the common parent of a group of professional services companies (collectively the "LB Company") with its first tier subsidiaries being:

- Louis Berger Group, Inc. ("LBG"), formed in 1963, is an operating company with a general purpose of providing engineering, planning, architecture, development, construction management and program management services primarily to U.S. federal, state and local governments and private clients. Louis Berger U.S., Inc., formerly a subsidiary of LBG after being acquired in 2015, is currently a wholly-owned subsidiary of WSP USA Inc.
- Louis Berger International, Inc. ("LBI"), formed in 2012, is a holding company with a general purpose of owning certain foreign subsidiaries that provide engineering, planning, architecture, development, construction management and program management services to foreign governments and private clients.
- Louis Berger Services, Inc. ("LBS"), acquired in 2012 is an operating company with a general purpose of providing commercial services related to operations and maintenance, power generation, and related services to federal, state and local governments and private clients. LBS is currently a wholly-owned subsidiary of WSP USA Services Inc. and is the parent of Louis Berger Aircraft Services, Inc. and Louis Berger Hawthorne Services, Inc.

BGH and two of its subsidiaries, LBG and LBI, were the subject of related investigations involving conduct by former employees in 2010 and earlier. These investigations resulted in a False Claims Act Settlement Agreement and an Administrative Agreement in 2010 as well as Deferred Prosecution Agreements in 2010 and 2015. All of these agreements have expired. These matters, discussed below, have been fully resolved with the U.S. government. The LB Company took full responsibility for the historical actions of former managers and employees. The LB Company entered into Integrity Monitoring Agreements with the Port Authority of New York and New Jersey, the New York City Department of Investigation, New York State Department of Transportation and the Metropolitan Transportation Authority, and a Contractor Certification with the City University of New York. These Integrity Monitoring Agreements have expired.

CORRECTIVE ACTIONS BY LB COMPANY

The LB Company implemented and continuously improved on a $25-million reform program including: broadening ownership by employees; implementing a new, state-of-the-art Enterprise Resource Planning (Accounting) System specifically designed for Government Contractors; and, creation of an Office of Compliance and Ethics, managed by the Chief Integrity Officer. The LB Company maintains a comprehensive Code of Business Conduct and other internal controls, specifically including an anti-corruption program.

LOUIS BERGER COMPANIES ARE RESPONSIBLE, CONTRACT AWARD-ELIGIBLE VENDORS

The Louis Berger companies are responsible vendors serving and are receiving new contract awards from federal civil and military agencies, and state and local government clients. The matters discussed below arise out of misconduct of former LB Company employees that occurred in 2010 and earlier. This disclosure statement, the reform efforts undertaken, and the continuing attention to corporate responsibility ensure that the LB Company is presently a responsible vendor that deals fairly and honestly with its clients. This responsibility is best evidenced by the continued receipt of government contract awards by the Louis Berger Companies from federal, state and local government agencies.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

2010 False Claims Matter (LBG)

LBG was the subject of a False Claims Act ("FCA") investigation by the U.S. Attorney's Office in Newark, New Jersey for the over-allocation of overhead charges in connection with contracts performed for the U.S. Government overseas, primarily for USAID, between 1998 and 2007. LBG voluntarily refunded the over-allocated overhead charges to the U.S. Government. On November 5, 2010, LBG entered into a two-year Deferred Prosecution Agreement (the "2010 DPA") with the U.S. Department of Justice (the "DOJ"), a civil FCA Settlement Agreement (the "FCA Settlement"), and a three-year Administrative Agreement (the "AA") with USAID. LBG fully complied with the terms of and successfully completed the 2010 DPA, which expired in accordance with its terms on November 5, 2012 The AA was successfully completed on November 5, 2013. USAID has praised the Company's performance under the AA. All potential charges associated with the 2010 DPA were dismissed in November 2012. LBG paid a fine of $18.7 million under the 2010 DPA. LBG also paid $50.6 million (including the refunded overhead) under the FCA Settlement. The former LBG employees who were identified as orchestrating the improper conduct at issue in the FCA matter were separated from the company in 2009 and 2010, and were separately prosecuted by the DOJ.

2015 Foreign Corrupt Practices Act Matter (LBI)

During its own internal investigation of the FCA matter, the LB Company discovered evidence of potential inappropriate payments made to foreign government officials by rogue employees in breach of express company policy. The Company disclosed that information to the U.S. Government. The LB Company voluntarily commissioned a private law firm to conduct an extensive internal investigation for potential Foreign Corrupt Practices Act ("FCPA") violations, as well as a review of company business operations for potential violations of the standards of conduct applicable to projects financed by the World Bank and the Japan International Cooperation Agency ("JICA"). These apparent violations by personnel, previously employed by the LB Company, were limited to several overseas offices involving certain procurements in several countries in the Middle East and Asia and occurred between 1998 and 2010. The LB Company self-reported the misconduct uncovered by its internal investigation to the DOJ, the World Bank and JICA. The reviews performed by the DOJ, the World Bank, and JICA all centered on the conduct by same former employees.

- 2015 Deferred Prosecution Agreement: The DOJ and the U.S. Attorney's Office in Newark, New Jersey evaluated the self-reported FCPA issues involving conduct that occurred in 2010 and prior. LBI is the business unit that houses the operations responsible for these actions. In July 2015, LBI entered into a Deferred Prosecution Agreement with the DOJ and the U.S. Attorney's Office (the "2015 DPA") for a term of three years. LBI fully complied with the terms of and successfully completed the 2015 DPA, which expired in accordance with its terms on July 7, 2018. The LB Company fully cooperated with the criminal investigations of the individuals responsible for the misconduct, both of whom were separated from the LB Company in 2012, and eventually plead guilty to charges brought by the DOJ.
- World Bank Matter: The World Bank, as a public international organization, is not subject to U.S. domestic law and it is not a "governmental entity." It applies its own rules of conduct to the use of its finances. The World Bank reviewed the results of the LB Company's internal FCPA investigation of the LB Company's foreign business units with respect to World Bank-financed international development projects under the World Bank's internal standards of conduct. On January 29, 2015, the World Bank debarred LBG and its controlled subsidiaries for a period of 12 months, based on LBG's Vietnam contracts awarded before 2010, from participating in World Bank-financed projects. LBG worked cooperatively with the World Bank to satisfy the conditions of the World Bank order. On January 28, 2016, LBG fully complied with the terms of and successfully completed the one-year World Bank debarment and the LBG is now fully eligible to participate in World Bank projects.
- JICA Matter: As the FCPA investigation progressed toward conclusion, the LB Company's legal and management representatives briefed JICA regarding two JICA-financed international development projects, based in India, that were later named in the 2015 DPA. On September 18, 2015, JICA sanctioned LBG, the legal entity that originally entered into these two India-based JICA-financed projects, from pursuing new JICA-financed projects for a period of nine months. JICA did not impose any fine upon LBG or seek restitution of any payments received by LBG

LOUIS BERGER
412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

under the contracts at issue. On June 18, 2016, LBG fully complied with the terms of and successfully completed the JICA sanction period and the LBG is reinstated as an eligible bidder on all JICA-financed projects.

- India Projects Inquiries**:** The JICA-financed India projects referenced in the 2015 DPA were water supply projects in the Indian state of Goa and city of Guwahati. After the 2015 DPA was announced, local Indian authorities initiated investigations of the same self-reported conduct by former rogue employees that formed the basis of the 2015 DPA. This conduct occurred before the LB Company's comprehensive reform that began in 2010. LBG continues to cooperate with Indian investigative authorities in all aspects of their investigations.
    - During the Goa Crime Branch investigation, the LB Company shared requested documents and information and also shared the results of its internal investigations, with respect to the Goa project, with the authorities. Two former Louis Berger non-management employees provided evidence to Goa authorities. In August 2015, former Louis Berger India employee Satyakam Mohanty and former Goa Public Works Department Minister Churchill Alemao were arrested as part of this investigation. In addition, former Goa Chief Minister Digambar Kamat was charged with disappearance of evidence relevant to the investigation. In January 2017, Mr. Kamat was charged as a prime accused in the matter.
        - As part of the Goa investigation, LBG was charged on September 25, 2015 with violating section 120-B of the Indian Penal Code relating to conspiracy and with violating sections 7, 8, 9, and 13 of the Prevention of Corruption Act of 1988. The matter is pending before Special Judge, CBI Court Goa, and the charges in this matter have not yet been framed by the court against the accused.
    - The Directorate of Enforcement, Goa (the "ED") is currently conducting an investigation under the Prevention of Money Laundering Act, 2002 (the "PMLA") with respect to the Goa water supply project. The Company is fully cooperating with ED officials in all aspects of this investigation. On July 12, 2018, ED filed a criminal complaint in the Special Court under PMLA against the former Goa Chief Minister Digambar Kamath and former Minister Churchill Alemao charging them with violations of PMLA. LBG is not charged in this charge sheet.
    - The Guwahati Criminal Investigation Department ("CID") investigation, subsequently transferred to the Indian Central Bureau of Investigation ("CBI"), the LB Company shared requested documents and information required by the CID and CBI and also shared the results of its internal investigations, with respect to the Guwahati project. The CBI initiated their review in the normal manner for their cases, which consists of filing a First Information Report (FIR). The LB Company is fully cooperating with the authorities' ongoing investigation in Guwahati.
    - As a result of the Goa investigation, the Government of Maharashtra created an inquiry committee to look into the Maharashtra infrastructure contracts held by the LB Company. The committee has not sent any notices to the LB Company requesting any information or statements.

Statement as of March 1, 2019. Additional information on these topics are available, upon request, from the LB Company.

LOUIS BERGER

412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145553

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP Group Consulting Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

16 Floor - 1600 Rene-Levesque Blvd. West
Montreal, Quebec H3H 1P9
Canada

C. Telephone:

206-382-5282

Fax:

D. Name of contact person:

Ms. Laura Sue Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Privately held business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Canada

Registered to do business in the State of Illinois as a foreign entity?

No

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. David Langlois
Title:	Treasurer
Role:	Both

Officer/Director:	Ms. Barbara Oberleitner
Title:	Vice-President, Global Head of Tax
Role:	Officer

Officer/Director:	Mr. Bruno Roy
Title:	President
Role:	Both

Officer/Director:	Mr. Philippe Fortier
Title:	Corporate Secretary
Role:	Officer

---

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

- WSP Global Inc. - 100.0% - EDS 145554

Owner Details

Name	Business Address
WSP Global Inc.	16 Floor - 1600 Rene-Levesque Blvd. West Montreal, Quebec H3H 1P9 Canada

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I certify the above to be true

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;

c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or

- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

Not applicable because disclosing party is not the Applicant

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.
B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild,

father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

The ultimate parent company of the Disclosing Party is WSP Global Inc., which is publically traded on the Toronto Stock Exchange. The following entities, having more than a 7.5% shareholder interest in WSP Global, Inc., are exempt from filing an EDS, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment

Board (CPPIB) owns 19.73% and the Caisse de Depot et Placement du Quebec (CDPQ) owns 18.81%. Please see attached updated disclosure for affiliate WSP Canada Inc.

List of attachments uploaded by vendor

Affiliate WSP Canada Inc. disclosure

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 10/03/2019
Ms. Laura Sue Unger
Asst. General Counsel, Regulatory Compliance
WSP Group Consulting Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

ANNEX A

WSP Global Inc. (WSP) is the ultimate parent company of WSP USA Inc. WSP and its affiliates have not and have never been charged or convicted for issues related to corruption, bribery or anti-competitive conduct. That being said, WSP notably wishes to draw the below facts and circumstances to your attention.

Should any additional information about this Annex A be required, please do not hesitate to contact Laura Unger, U.S. Regulatory Compliance Manager (complianceusa@wsp.com)

Facts and circumstances related to Genivar (now WSP Canada Inc., a subsidiary of WSP Global Inc.)

Genivar has never been charged or convicted for issues related to fraud, corruption or anti-competitive conduct.

As WSP has disclosed in public filings, since 2012 Genivar had been the object of investigations and search warrants initiated by Quebec's Unité Permanente Anticorruption (UPAC) and the Canadian Competition Bureau in several regions within the Province of Québec in connection with the award of municipal infrastructure contracts in Québec between 2002 and 2011. In 2013, Genivar was named at a Commission of Inquiry on the Awarding and Management of Public Contracts in the Construction Industry in the Province of Quebec, Canada (colloquially the Charbonneau Commission) which conducted an investigation into the construction industry in Quebec. The Commission identified potential or actual wrongdoing and inappropriate conduct with respect to the award of certain municipal infrastructure contracts by former employees of most consulting firms, including Genivar. The Commission, which had no law enforcement function, issued recommendations in its Report of November 2015. Certain Genivar employees who may have been involved in these potential or actual wrongdoings have been the subject of legal and regulatory proceedings, some of which are still under investigation by Canada's Competition Bureau and the Quebec Order of Engineers. In particular, criminal charges against a former Genivar employee were laid by the Competition Bureau on June 21st, 2018.

During the course of 2017, WSP Canada Inc., in connection with the voluntary reimbursement program established pursuant to Bill 26, An Act to ensure mainly the recovery of amounts improperly paid as a result of fraud or fraudulent tactics in connection with public contracts, came to a settlement with relevant municipalities in Québec and satisfied its obligations under such settlement. Furthermore, in March 2019, the Québec Superior Court approved a settlement between Genivar (now WSP Canada), Canada's Competition Bureau and Director of Public Prosecutions. As a result of the settlement, WSP Canada will not face any prosecution in connection with the award of municipal infrastructure contracts in Québec between 2002 and 2011. In fact, as a reason to approve the settlement, the Court expressly recognized the efficacity of WSP's Compliance and Ethics program, which notably includes the following components:

- WSP has a Chief Ethics and Compliance Officer (CECO) responsible for overseeing the implementation of the global ethics and anti-corruption program. The CECO reports directly to the Board of Directors on a quarterly basis.
- WSP has a Compliance and Ethics team comprised of qualified individuals located in offices across the globe.
- WSP has a Code of Conduct and associated ethics policies, including (i) Anti-corruption Policy, (ii) a Working with Third Parties Policy, and (iii) a Gifts, Entertainment and Hospitality Policy, which are available in 12 different languages. The Code and associated policies are approved and regularly reviewed by the Board and implemented throughout the organization.

- WSP has a whistleblowing hotline managed by an external independent third party service provider. Reports can be made on an anonymous and confidential basis.
- WSP has an anti-retaliation policy that protects persons who allege misconduct in good faith.
- Business ethics and fair competition training is carried out through: an online onboarding training module, yearly online training refreshers, and live training sessions.
- Specific communication campaigns – endorsed by key leaders in the organization to promote tone from the top – are regularly launched on ethics-related subjects such as: whistleblowing, anti-corruption, fraud, and fair competition.

To this day, Genivar has never been charged or convicted for issues related to fraud, corruption or anti-competitive conduct. WSP Canada is fully entitled to bid for and obtain public contracts, including in Quebec.

CITY OF CHICAGO
ECONOMIC DISCLOSURE STATEMENT and AFFIDAVIT
Related to Contract/Amendment/Solicitation
EDS # 145554

SECTION I -- GENERAL INFORMATION

A. Legal name of the Disclosing Party submitting the EDS:

WSP Global Inc.

Enter d/b/a if applicable:

The Disclosing Party submitting this EDS is:

a legal entity currently holding an interest in the Applicant

The Disclosing Party holds an interest in

WSP USA Inc. and EDS is 145544

B. Business address of the Disclosing Party:

16 Floor - 1600 Rene-Levesque Blvd. West
Montreal, Quebec H3H 1P9
Canada

C. Telephone:

206-382-5282

Fax:

D. Name of contact person:

Ms. Laura Sue Unger

SECTION II -- DISCLOSURE OF OWNERSHIP INTERESTS

A. NATURE OF THE DISCLOSING PARTY

1. Indicate the nature of the Disclosing Party:

Publicly registered business corporation

Is the Disclosing Party incorporated or organized in the State of Illinois?

No

State or foreign country of incorporation or organization:

Canada

Registered to do business in the State of Illinois as a foreign entity?

No

B. DISCLOSING PARTY IS A LEGAL ENTITY:

1.a.1 Does the Disclosing Party have any directors?

Yes

1.a.3 List below the full names and titles of all executive officers and all directors, if any, of the entity. Do not include any directors who have no power to select the entity's officers.

Officer/Director:	Mr. Alexandre L'Heureux
Title:	President and CEO
Role:	Both

Officer/Director:	Mr. Christopher Cole
Title:	Chairman of the Board
Role:	Director

Officer/Director:	Ms. Birgit NÃ#rgaard
Title:	Board Director
Role:	Director

Officer/Director:	Ms. Suzanne Rancourt
Title:	Board Director
Role:	Director

Officer/Director: Barbara Oberleitner
Title: Vice President, Global Head of Tax
Role: Officer

Officer/Director: Paul Dollin
Title: Chief Operating Officer
Role: Officer

Officer/Director: Mr. Bruno Roy
Title: Chief Financial Officer
Role: Officer

Officer/Director: Mr. Pierre Shoiry
Title: Board Director
Role: Director

Officer/Director: Mr. Philippe Fortier
Title: Chief Legal Officer and Corporate Secretary
Role: Officer

Officer/Director: Mr. Louis-Philippe CarriÃ¨re
Title: Board Director
Role: Director

Officer/Director: Mr. David Langlois
Title: Chief Accounting and Treasury Officer
Role: Officer

Officer/Director: Mr. Robert Ouellette
Title: Chief Corporate Services Officer
Role: Officer

Officer/Director: Mrs. Julianna Fox
Title: Chief Ethics and Compliance Officer
Role: Officer

Officer/Director: Ms. Linda Smith Galipeau
Title: Director
Role: Director

---

2. Ownership Information

Please confirm ownership information concerning each person or entity that having a direct or indirect beneficial interest in excess of 7.5% of the Disclosing Party (your entity). Examples of such an interest include shares in a corporation, partnership interest in a partnership or joint venture, interest of a member or manager in a limited lability company, or interest of a beneficiary of a trust, estate, or other similar entity. Note: Each legal entity below may be required to submit an EDS on its own behalf.

As reported by the Disclosing Party, the immediate owner(s) of the Disclosing Party is/ are listed below:

There are no owners with greater than 7.5 percent ownership in the Disclosing Party.

SECTION III -- INCOME OR COMPENSATION TO, OR OWNERSHIP BY, CITY ELECTED OFFICIALS

A. Has the Disclosing Party provided any income or compensation to any City elected official during the 12-month period preceding the date of this EDS?

No

B. Does the Disclosing Party reasonably expect to provide any income or compensation to any City elected official during the 12-month period following the date of this EDS?

No

D. Does any City elected official or, to the best of the Disclosing Party's knowledge after reasonable inquiry, any City elected official's spouse or domestic partner, have a financial interest (as defined in Chapter 2-156 of the Municipal Code ("MCC")) in the Disclosing Party?

No

SECTION V -- CERTIFICATIONS

A. COURT-ORDERED CHILD SUPPORT COMPLIANCE

Under MCC Section 2-92-415, substantial owners of business entities that contract with the City must remain in compliance with their child support obligations throughout the contract's term.

Has any person who directly or indirectly owns 10% or more of the Disclosing Party been declared in arrearage of any child support obligations by any Illinois court of competent jurisdiction?

Not applicable because no person directly or indirectly owns 10% or more of the Disclosing Party

B. FURTHER CERTIFICATIONS

1. [This certification applies only if the Matter is a contract being handled by the City's Department of Procurement Services.] In the 5-year period preceding the date of this EDS, neither the Disclosing Party nor any Affiliated Entity has engaged, in connection with the performance of any public contract, the services of an integrity monitor, independent private sector inspector general, or integrity compliance consultant (i.e. an individual or entity with legal, auditing, investigative, or other similar skills, designated by a public agency to help the agency monitor the activity of specified agency vendors as well as help the vendors reform their business practices so they can be considered for agency contracts in the future, or continue with a contract in progress).

I certify the above to be true

2. The Disclosing Party and its Affiliated Entities are not delinquent in the payment of any fine, fee, tax or other source of indebtedness owed to the City of Chicago, including, but not limited to, water and sewer charges, license fees, parking tickets, property taxes and sales taxes, nor is the Disclosing Party delinquent in the payment of any tax administered by the Illinois Department of Revenue.

I certify the above to be true

3. The Disclosing Party and, if the Disclosing Party is a legal entity, all of those persons or entities identified in Section II(B)(1) of this EDS:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from any transactions by any federal, state or local unit of government;
b. have not, during the 5 years before the date of this EDS, been convicted of a criminal offense, adjudged guilty, or had a civil judgment rendered against them in connection with: obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; a violation of federal or state antitrust statutes; fraud; embezzlement; theft; forgery; bribery; falsification or destruction of records; making false statements; or receiving stolen property;
c. are not presently indicted for, or criminally or civilly charged by, a governmental entity (federal, state or local) with committing any of the offenses set forth in subparagraph (b) above;
d. have not, during the 5 years before the date of this EDS, had one or more public transactions (federal, state or local) terminated for cause or default; and
e. have not, during the 5 years before the date of this EDS, been convicted, adjudged guilty, or found liable in a civil proceeding, or in any criminal or civil action, including actions concerning environmental violations, instituted by the City or by the federal government, any state, or any other unit of local government.

I certify the above to be true

4. The Disclosing Party understands and shall comply with the applicable requirements of MCC Chapter 2-56 (Inspector General) and Chapter 2-156 (Governmental Ethics).

I certify the above to be true

5. Neither the Disclosing Party, nor any Contractor, nor any Affiliated Entity of either the Disclosing Party or any Contractor, nor any Agents have, during the 5 years before the date of this EDS, or, with respect to a Contractor, an Affiliated Entity, or an Affiliated Entity of a Contractor during the 5 years before the date of such Contractor's or Affiliated Entity's contract or engagement in connection with the Matter:

a. bribed or attempted to bribe, or been convicted or adjudged guilty of bribery or attempting to bribe, a public officer or employee of the City, the State of Illinois, or any agency of the federal government or of any state or local government in the United States of America, in that officer's or employee's official capacity;
b. agreed or colluded with other bidders or prospective bidders, or been a party to any such agreement, or been convicted or adjudged guilty of agreement or collusion among bidders or prospective bidders, in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or
c. made an admission of such conduct described in subparagraph (a) or (b) above that is a matter of record, but have not been prosecuted for such conduct; or
d. violated the provisions referenced in MCC Subsection 2-92-320(a)(4)(Contracts Requiring a Base Wage); (a)(5)(Debarment Regulations); or (a)(6)(Minimum Wage Ordinance).

I certify the above to be true

6. Neither the Disclosing Party, nor any Affiliated Entity or Contractor, or any of their employees, officials, agents or partners, is barred from contracting with any unit of state or local government as a result of engaging in or being convicted of

- bid-rigging in violation of 720 ILCS 5/33E-3;
- bid-rotating in violation of 720 ILCS 5/33E-4; or
- any similar offense of any state or of the United States of America that contains the same elements as the offense of bid-rigging or bid-rotating.

I certify the above to be true

7. Neither the Disclosing Party nor any Affiliated Entity is listed on a Sanctions List maintained by the United States Department of Commerce, State, or Treasury, or any successor federal agency.

I certify the above to be true

8. [FOR APPLICANT ONLY]

i. Neither the Applicant nor any "controlling person" [see MCC Chapter 1-23, Article I for applicability and defined terms] of the Applicant is currently indicted or charged with, or has admitted guilt of, or has ever been convicted of, or placed under supervision for, any criminal offense involving actual, attempted, or conspiracy to commit bribery, theft, fraud, forgery, perjury, dishonesty or deceit against an officer or employee of the City or any "sister agency" ; and
ii. the Applicant understands and acknowledges that compliance with Article I is a continuing requirement for doing business with the City.

NOTE: If MCC Chapter 1-23, Article I applies to the Applicant, that Article's permanent compliance timeframe supersedes 5-year compliance timeframes in this Section V.

Not applicable because disclosing party is not the Applicant

11. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all current employees of the Disclosing Party who were, at any time during the 12-month period preceding the date of this EDS, an employee, or elected or appointed official, of the City of Chicago.

None

12. To the best of the Disclosing Party's knowledge after reasonable inquiry, the following is a complete list of all gifts that the Disclosing Party has given or caused to be given, at any time during the 12-month period preceding the execution date of this EDS, to an employee, or elected or appointed official, of the City of Chicago. For purposes of this statement, a "gift" does not include: (i) anything made generally available to City employees or to the general public, or (ii) food or drink provided in the course of official City business and having a retail value of less than $25 per recipient, or (iii) a political contribution otherwise duly reported as required by law.

None

C. CERTIFICATION OF STATUS AS FINANCIAL INSTITUTION

The Disclosing Party certifies, as defined in MCC Section 2-32-455(b), the Disclosing Party

is not a "financial institution"

E. CERTIFICATION REGARDING SLAVERY ERA BUSINESS

If the Disclosing Party cannot make this verification, the Disclosing Party must disclose all required information in the space provided below or in an attachment in the "Additional Info" tab. Failure to comply with these disclosure requirements may make any contract entered into with the City in connection with the Matter voidable by the City.

The Disclosing Party verifies that the Disclosing Party has searched any and all records of the Disclosing Party and any and all predecessor entities regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era (including insurance policies issued to slaveholders that provided coverage for damage to or injury or death of their slaves), and the Disclosing Party has found no such records.

I can make the above verification

SECTION VII - FURTHER ACKNOWLEDGMENTS AND CERTIFICATION

The Disclosing Party understands and agrees that:

A. The certifications, disclosures, and acknowledgments contained in this EDS will become part of any contract or other agreement between the Applicant and the City in connection with the Matter, whether procurement, City assistance, or other City action, and are material inducements to the City's execution of any contract or taking other action with respect to the Matter. The Disclosing Party understands that it must comply with all statutes, ordinances, and regulations on which this EDS is based.

B. The City's Governmental Ethics Ordinance, MCC Chapter 2-156, imposes certain duties and obligations on persons or entities seeking City contracts, work, business, or transactions. The full text of this ordinance and a training program is available on line at www.cityofchicago.org/Ethics, and may also be obtained from the City's Board of Ethics, 740 N. Sedgwick St., Suite 500, Chicago, IL 60610, (312) 744-9660. The Disclosing Party must comply fully with this ordinance.

I acknowledge and consent to the above

The Disclosing Party understands and agrees that:

C. If the City determines that any information provided in this EDS is false, incomplete or inaccurate, any contract or other agreement in connection with which it is submitted may be rescinded or be void or voidable, and the City may pursue any remedies under the contract or agreement (if not rescinded or void), at law, or in equity, including terminating the Disclosing Party's participation in the Matter and/ or declining to allow the Disclosing Party to participate in other City transactions. Remedies at law for a false statement of material fact may include incarceration and an award to the City of treble damages.

D. It is the City's policy to make this document available to the public on its Internet site and/or upon request. Some or all of the information provided in, and appended to, this EDS may be made publicly available on the Internet, in response to a Freedom of Information Act request, or otherwise. By completing and signing this EDS, the Disclosing Party waives and releases any possible rights or claims which

it may have against the City in connection with the public release of information contained in this EDS and also authorizes the City to verify the accuracy of any information submitted in this EDS.

E. The information provided in this EDS must be kept current. In the event of changes, the Disclosing Party must supplement this EDS up to the time the City takes action on the Matter. If the Matter is a contract being handled by the City's Department of Procurement Services, the Disclosing Party must update this EDS as the contract requires. NOTE: With respect to Matters subject to MCC Article I of Chapter 1-23 (imposing PERMANENT INELIGIBILITY for certain specified offenses), the information provided herein regarding eligibility must be kept current for a longer period, as required by MCC Chapter 1-23 and Section 2-154-020.

I acknowledge and consent to the above

APPENDIX A - FAMILIAL RELATIONSHIPS WITH ELECTED CITY OFFICIALS AND DEPARTMENT HEADS

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5%. It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Under MCC Section 2-154-015, the Disclosing Party must disclose whether such Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently has a "familial relationship" with any elected city official or department head. A "familial relationship" exists if, as of the date this EDS is signed, the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof is related to the mayor, any alderman, the city clerk, the city treasurer or any city department head as spouse or domestic partner or as any of the following, whether by blood or adoption: parent, child, brother or sister, aunt or uncle, niece or nephew, grandparent, grandchild, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather or stepmother, stepson or stepdaughter, stepbrother or stepsister or half-brother or half-sister.

"Applicable Party" means (1) all corporate officers of the Disclosing Party, if the Disclosing Party is a corporation; all partners of the Disclosing Party, if the Disclosing Party is a general partnership; all general partners and limited partners of the Disclosing Party, if the Disclosing Party is a limited partnership; all managers, managing members and members of the Disclosing Party, if the Disclosing Party is a limited liability company; (2) all principal officers of the Disclosing Party; and (3) any person having more than a 7.5% ownership interest in the Disclosing Party. "Principal officers" means the president, chief operating officer, executive director, chief financial officer, treasurer or secretary of a legal entity or any person exercising similar authority.

Does the Disclosing Party or any "Applicable Party" or any Spouse or Domestic Partner thereof currently have a "familial relationship" with an elected city official or department head?

No

APPENDIX B - BUILDING CODE SCOFFLAW/PROBLEM LANDLORD CERTIFICATION

This Appendix is to be completed only by (a) the Applicant, and (b) any legal entity which has a direct ownership interest in the Applicant exceeding 7.5% (an "Owner"). It is not to be completed by any legal entity which has only an indirect ownership interest in the Applicant.

Pursuant to MCC Section 2-154-010, is the Applicant or any Owner identified as a building code scofflaw or problem landlord pursuant to MCC Section 2-92-416?

No

If the Applicant is a legal entity publicly traded on any exchange, is any officer or director of the Applicant identified as a building code scofflaw or problem landlord pursuant to Section 2-92-416 of the Municipal Code?

No

ADDITIONAL INFO

Please add any additional explanatory information here. If explanation is longer than 1000 characters, you may add an attachment below. Please note that your EDS, including all attachments, becomes available for public viewing upon contract award. Your attachments will be viewable "as is" without manual redaction by the City. You are responsible for redacting any non-public information from your documents before uploading.

The Disclosing Party supplements its answer to Section II(2). WSP Global Inc. is publicly traded on the Toronto Stock Exchange. The following entities, having more than a 7.5% shareholder interest in WSP Global Inc., are exempt from filing an EDS on the basis that they are foreign government agencies, but were disclosed in the March 28, 2019 Management Information Circular: the Canadian Pension Plan Investment Board (CPPIB) owns 19.73% and the Caisse de Depot et Placement du Quebec (CDPQ) owns 18.81%. CPPIB is a Canadian crown corporation created by an act of the Canadian Parliament. CPPIB invests assets of the Canada Pension Plan not currently needed to pay benefits. Similarly, the CDPQ is a Canadian state-owned enterprise that invests and manages public and quasi-public pension plans and insurance programs within Canada. The Disclosing Party additionally supplements its response to Section V(B)(3) via the attached document.

List of attachments uploaded by vendor

2019 Management Information Circular
Disclosure regarding subsidiary WSP Canada Inc.

CERTIFICATION

Under penalty of perjury, the person signing below: (1) warrants that he/she is authorized to execute this EDS, and all applicable appendices, on behalf of the Disclosing Party, and (2) warrants that all certifications and statements contained in this EDS, and all applicable appendices, are true, accurate and complete as of the date furnished to the City. Submission of this form constitutes making the oath associated with notarization.

/s/ 10/03/2019
Ms. Laura Sue Unger
U.S. Regulatory Compliance Manager
WSP Global Inc.

This is a printed copy of the Economic Disclosure Statement, the original of which is filed electronically with the City of Chicago. Any alterations must be made electronically, alterations on this printed copy are void and of no effect.

Notice of Annual Meeting of Shareholders

to be held on May 15, 2019 and

Management Information Circular

March 28, 2019

March 28, 2019

Dear Shareholders:

You are cordially invited to attend the 2019 annual meeting (the "**Meeting**") of holders (the "**Shareholders**") of common shares (the "**Shares**") of WSP Global Inc. (the "**Corporation**") to be held at the Holiday Inn & Suites, Room Stanley A, situated at 1390 René-Lévesque Blvd. West, Montreal, Quebec on May 15, 2019 at 10:00 a.m. (Montreal time).

The accompanying management information circular dated March 28, 2019 describes the annual business of the Corporation to be conducted at the Meeting, including (a) the presentation before the Shareholders of the audited consolidated financial statements of the Corporation for the fiscal year ended December 31, 2018 and the independent auditor's report thereon; (b) the election of each of the directors of the Corporation, who will serve until the end of the next annual meeting of the Shareholders or until their successors are appointed; (c) the appointment of the independent auditors of the Corporation for the forthcoming year and to authorize the directors to fix the independent auditors' compensation; (d) the annual shareholder advisory non-binding vote on the Corporation's approach to executive compensation policies; and (e) the consideration of such other business, if any, that may properly come before the Meeting or any adjournment thereof.

As a Shareholder, you have the right to vote your Shares on all items that come before the Meeting. The management information circular dated March 28, 2019 will provide you with information about these items and how to exercise your right to vote. It will also tell you about the nominee directors, the proposed independent auditors, the compensation of directors and certain executive officers of the Corporation and its subsidiaries, and our corporate governance practices.

We look forward to seeing you at our Meeting. If you are unable to attend the Meeting in person, we encourage you to complete, sign, date and return the enclosed proxy by the date indicated on your form. You can also submit your voting instructions online or over the telephone as described in this management information circular.

Yours very truly,

Alexandre L'Heureux
President and Chief Executive Officer

Christopher Cole
Chairman of the Board of Directors

Notice of annual meeting of shareholders and of availability of proxy materials

NOTICE IS HEREBY GIVEN THAT the annual meeting (the "**Meeting**") of holders (the "**Shareholders**") of common shares (the "**Shares**") of WSP Global Inc. (the "**Corporation**") will be held at the Holiday Inn & Suites, Room Stanley A, situated at 1390 René-Lévesque Blvd. West, Montreal, Quebec on May 15, 2019 at 10:00 a.m. (Montreal time) for the following purposes:

(a) **to receive the audited consolidated financial statements of the Corporation for the fiscal year ended December 31, 2018 and to receive the independent auditor's report thereon** (for details, see subsection "Presentation of the Financial Statements" under the "Business of the Meeting" section of the management information circular of the Corporation dated March 28, 2019);

(b) **to elect each of the directors of the Corporation to hold office until the end of the next annual meeting of the Shareholders or until their successors are appointed** (for details, see subsection "Election of Directors" under the "Business of the Meeting" section of the management information circular of the Corporation dated March 28, 2019);

(c) **to appoint the independent auditors of the Corporation for the forthcoming year and to authorize the directors to fix the auditors' remuneration** (for details, see subsection "Appointment of Auditors" under the "Business of the Meeting" section of the management information circular of the Corporation dated March 28, 2019);

(d) **to consider and approve, in a non-binding, advisory capacity, the Corporation's approach to executive compensation policies** (for details, see subsection "Non-Binding Advisory Vote on Executive Compensation" under the "Business of the Meeting" section of the management information circular of the Corporation dated March 28, 2019); and

(e) **to consider such other business, if any, that may properly come before the Meeting or any adjournment thereof.** Information respecting the use of discretionary authority to vote on any such other business may be found in the subsection "Completing the Form of Proxy" under the "General Proxy Matters" section of the management information circular of the Corporation dated March 28, 2019.

Notice-and-access

As permitted by Canadian securities regulators, you are receiving this notification as the Corporation has decided to use the "notice-and-access" mechanism for delivery to the Shareholders of this notice of annual meeting of Shareholders, the management information circular of the Corporation dated March 28, 2019 prepared in connection with the Meeting and other proxy-related materials (the "**Meeting Materials**") as well as the annual audited consolidated financial statements of the Corporation for the financial year ending December 31, 2018, together with the independent auditor's report thereon, and related management's discussion and analysis (together, the "**Financial Statements**"). This year, the Corporation has adopted notice-and-access for both registered and non-registered Shareholders. Notice-and-access is a set of rules that allows issuers to post electronic versions of proxy-related materials online, via SEDAR and one other website, rather than mailing paper copies of such materials to Shareholders. Under notice-and-access, Shareholders still receive a proxy form or voting instruction form enabling them to vote at the Meeting. However, instead of paper copies of the Meeting Materials and of the Financial Statements, Shareholders receive this notice which contains information on how they may access the Meeting Materials and the Financial Statements online and how to request paper copies of such documents. The use of notice-and-access will directly benefit the Corporation by substantially reducing our printing and mailing costs and is more environmentally friendly as it reduces paper use. For non-registered Shareholders who had given instructions to receive a printed copy of the Financial Statements, the Corporation will mail a printed copy of same to such non-registered Shareholders.

How To Access The Meeting Materials and the Financial Statements

On our website: www.wsp.com under "Investors"/"Financial and Annual Reports".
On SEDAR: www.sedar.com under the Corporation's profile.

Shareholders are reminded to read the management information circular of the Corporation dated March 28, 2019 and other Meeting Materials carefully before voting their Shares.

How To Request A Paper Copy Of The Meeting Materials and of the Financial Statements

Before the Meeting

If your name appears on a share certificate, you are considered as a "registered Shareholder". If your Shares are listed in an account statement provided to you by an intermediary, you are considered as a "non-registered Shareholder". Whether you are a registered Shareholder or a non-registered Shareholder, you may request paper copies of the Meeting Materials and of the Financial Statements at no cost to you by calling AST Trust Company (Canada) ("**AST**") at 1-888-433-6443 (toll free in Canada and the United States) or 1-416-682-3801 (other countries) or by email at fulfilment@astfinancial.com.

Please note that you will not receive another form of proxy or voting instruction form; please retain your current one to vote your Shares.

In any case, requests for paper copies should be received at least five (5) business days prior to the proxy deposit date and time, which is set for May 13, 2019 at 5:00 p.m. (Montreal time) in order to receive the Meeting Materials and the Financial Statements in advance of such date and the Meeting date. To ensure receipt of the paper copies in advance of the voting deadline and Meeting date, we estimate that your request must be received by no later than 5:00 pm (Montreal time) on May 3, 2019.

After the Meeting

By telephone at 438-843-7548 or by email at corporatecommunications@wsp.com. Paper copies of the Meeting Materials and of the Financial Statements will be sent to you within ten (10) calendar days of receiving your request.

VOTING

The record date (the "**Record Date**") for determination of Shareholders entitled to receive notice of and to vote at the Meeting is April 1, 2019. Only Shareholders whose names have been entered in the register of Shares on the close of business on the Record Date will be entitled to receive notice of and to vote at the Meeting. Shareholders who acquire Shares after the Record Date will not be entitled to vote such Shares at the Meeting.

A Shareholder may attend the Meeting in person or may be represented by proxy. Shareholders who are unable to attend the Meeting or any adjournment thereof in person are requested to complete, sign, date and return the enclosed form of proxy by mail or submit an Internet or telephone proxy by following the instructions starting on page 6 of the management information circular of the Corporation dated March 28, 2019 or as set out in the enclosed form of proxy.

Non-registered Shareholders whose Shares are registered in the name of an intermediary should carefully follow the voting instructions provided by the intermediary or as described elsewhere in the management information circular of the Corporation dated March 28, 2019.

QUESTIONS

If you have any questions regarding this notice, the notice-and-access mechanism or the Meeting and you are a registered Shareholder, please call AST at 1-800-387-0825, and if you are a non-registered Shareholder, please call Broadridge Investor Communication Solutions at 1-855-887-2244.

DATED at the City of Montreal, in the Province of Quebec, this 5th day of April, 2019.

BY ORDER OF THE BOARD OF DIRECTORS

Alexandre L'Heureux
President and Chief Executive Officer

Christopher Cole
Chairman of the Board of Directors

Table of contents

Management Information Circular 5
General Information 5
Shares and Quorum 5
Principal Shareholders 5

General Proxy Matters 6
Proxy Solicitation 6
Notice-and-access 6
Your vote is important 6
Voting 6
Completing the Form of Proxy 9
Changing your vote 10
Voting Requirements 10

Business of the Meeting 11
Presentation of the Financial Statements 11
Election of Directors 11
Appointment of Auditors 11
Non-Binding Advisory Vote on Executive Compensation 12
Consideration of other business 12

Nominees for Election to the Board of Directors 13
Description of the Nominee Directors 13
Board and Committee Attendance 21
Director Independence 21
Directorships of Other Reporting Issuers 22
Additional Disclosure relating to Directors 23

Director Compensation 24
DSU Plan 25
Non-Executive Director Minimum Share Ownership Requirement 25
Non-Executive Nominee Director Share Ownership 26
Director Compensation Table 27
Upcoming Changes to Director Compensation in 2019 29

Disclosure of Corporate Governance Practices 30
Ethical Business Behaviour and Code of Conduct 30
Shareholder Engagement 31
Composition of the Board of Directors 32
Role and Duties of the Board of Directors 39
Committees of the Board of Directors 41

Compensation Discussion & Analysis 43
Letter from the Chair of the Governance, Ethics and Compensation Committee on Executive Compensation 43
Executive Pay Program and Practices 45
Description of Compensation paid to NEOs in 2018 57
Termination and Change of Control Benefits 62
Key Compensation Tables 65

Other Important Information 70
Directors' and Officers' Liability Insurance 70
Aggregate Indebtedness of Directors and Officers 70
Interest of Management and Others in Material Transactions 70
Mail Service Interruption 71
How to Request More Information 71
Shareholder Proposals for our Next Annual Shareholder Meeting 71

Approval of Directors 71

Glossary of Terms 72

SCHEDULE A - Board of Directors Charter A-1

SCHEDULE B - Position Descriptions B-1

SCHEDULE C - Long-Term Incentive Plans C-1
LTI Plan C-1
PSU Plan C-4
DSU Plan C-6
RSU Plan C-7

Management information circular

General Information

This management information circular (the "Circular") is provided in connection with the solicitation of proxies by and on behalf of the management (the "Management") of WSP Global Inc. (the "Corporation" or "WSP") for use at the annual meeting (the "Meeting") of holders (the "Shareholders") of common shares (the "Shares") of the Corporation, and any adjournment thereof, to be held at the time and place and for purposes set forth in the accompanying notice of annual meeting of shareholders (the "Notice"). No person has been authorized to give any information or make any representation in connection with any other matters to be considered at the Meeting other than those contained in this Circular and, if given or made, any such information or representation must not be relied upon as having been authorized.

In this Circular, unless otherwise noted or the context otherwise indicates, references to "**WSP**" or the "**Corporation**" refer to WSP Global Inc. Where the context requires, these terms also include subsidiaries and associated companies to which WSP is the successor public issuer.

References in this Circular to the "**Board of Directors**" or "**Board**" refer to the board of directors of the Corporation. References to the "**Shares**" and to the "**Shareholders**" respectively refer to the common shares of the Corporation and to the shareholders of the Corporation.

The information provided in this Circular is given as of March 28, 2019, unless otherwise indicated.

Shares and Quorum

The record date for determination of Shareholders entitled to receive notice of and to vote at the Meeting is April 1, 2019 (the "**Record Date**"). As of March 28, 2019, there were 104,768,837 Shares issued and outstanding. Each Share carries the right to one vote on all matters which come before the Meeting. Shareholders of record are entitled to receive notice of and vote at the Meeting. The list of Shareholders entitled to vote at the Meeting will be available for inspection after April 1, 2019, during usual business hours at the office of the Corporation's transfer agent, AST, located at 2001 Robert-Bourassa Blvd., Suite 1600, Montreal, Quebec, H3A 2A6 and at the Meeting.

Pursuant to the by-laws of the Corporation, a quorum of Shareholders is present at the Meeting if the holders of not less than 25% of the Shares entitled to vote at the Meeting are present in person or represented by proxy, and at least two persons entitled to vote at the Meeting are actually present at the Meeting.

Principal Shareholders

As at March 28, 2019, to the knowledge of the directors and executive officers of the Corporation based on publicly available filings, the only persons who beneficially owned, directly or indirectly, or exercised control or direction over Shares carrying 10% or more of the votes attached to all outstanding Shares are:

Name	Number of Shares beneficially owned, controlled or directed directly or indirectly	Percentage of Shares outstanding
Caisse de dépôt et placement du Québec	19,703,199	18.81%
Canada Pension Plan Investment Board	20,695,859	19.73%

General Proxy Matters

Proxy Solicitation

The solicitation of proxies by this Circular is being made by or on behalf of Management primarily by mail, but proxies may also be solicited via the Internet, by telephone, in writing or in person, by Directors, officers or regular employees of the Corporation who will receive no compensation therefor in addition to their regular remuneration. The cost of the solicitation is expected to be nominal and will be borne by the Corporation.

Notice-and-access

As permitted by Canadian securities regulators and as was done in connection with last year's annual meeting of shareholders of the Corporation, the Corporation uses the "notice-and-access" mechanism set out in National Instrument 54 101 – *Communication with Beneficial Owners of Securities of a Reporting Issuer* for delivery of the Meeting Materials as well as the annual audited consolidated financial statements of the Corporation for the financial year ending December 31, 2018, together with the independent auditor's report thereon, and related management's discussion and analysis to the Shareholders. The Corporation has adopted notice-and-access for both registered and non-registered Shareholders. Notice-and-access is a set of rules that allows issuers to post electronic versions of proxy-related materials online, via SEDAR and one other website, rather than mailing paper copies of such materials to Shareholders. Instead of receiving this Circular with the form of proxy or voting instruction form, Shareholders received a Notice with instructions on how to access the remaining Meeting Materials online. The Notice and proxy form or voting instruction form have been sent to both registered and non-registered Shareholders. Non-registered Shareholders are either "objecting beneficial owners" or "OBOs" who object that intermediaries disclose information about their ownership in the Corporation, or "non-objecting beneficial owners" or "NOBOs", who do not object to such disclosure. The Notice and voting instruction form are being sent by the Corporation to "OBOs" and "NOBOs" indirectly through intermediaries and the Corporation assumes the delivery costs thereof. The Circular and other relevant materials are available on the Internet at www.wsp.com under "Investors"/"Financial and Annual Reports" and on the Canadian Securities Administrators' website at www.sedar.com. For non-registered Shareholders who had given instructions to receive a printed copy of the annual audited consolidated financial statements of the Corporation for the financial year ending December 31, 2018, together with the independent auditor's report thereon, and related management's discussion and analysis, the Corporation will mail a printed copy of same to such non-registered Shareholders.

Your vote is important

As a Shareholder, it is very important that you read the following information on how to vote your Shares and then vote your Shares, either by proxy or in person, at the Meeting.

Voting

You can attend the Meeting or you can appoint someone else to vote for you as your proxyholder. A Shareholder entitled to vote at the Meeting may by means of a proxy appoint a proxyholder or one or more alternate proxyholders, who are not required to be Shareholders, to attend and act at the Meeting in the manner and to the extent authorized by the proxy and with the authority conferred by the proxy. Voting by proxy means that you are giving the person named on your form of proxy (the "**Proxyholder**") the authority to vote your Shares for you in accordance with your instructions at the Meeting or any adjournment thereof.

Alexandre L'Heureux and Bruno Roy, who are named on the form of proxy or voting instruction form ("**Named Proxyholders**"), are executive officers of the Corporation and will vote your Shares for you in accordance with your instructions. **As a Shareholder, you have the right to appoint a person or company to be your Proxyholder at the Meeting other than the Named Proxyholders by filling in the name of the person voting for you in the blank space provided on the form of proxy.** If you appoint someone else, he or she must attend the Meeting to vote your Shares, otherwise your vote will not be taking into account.

How to Vote – Registered Shareholders

You are a registered Shareholder if your name appears on your share certificate.

If you are not sure whether you are a registered Shareholder, please contact the Corporation's transfer agent, AST, at 1-800-387-0825.

By Proxy

By Mail

Complete your form of proxy and return it in the business reply envelope provided or by delivery to one of AST's principal offices in Montreal, Toronto, Calgary or Vancouver **for receipt before 5:00 p.m. (Montreal time) on May 13, 2019 or by the Corporate Secretary prior to commencement of the Meeting on the day of the Meeting or on the day of any adjournment or postponement thereof.** A list of addresses for the principal offices of AST is set forth at the end of this Circular.

If you return your proxy by mail, you can appoint a person other than the Named Proxyholders as your Proxyholder. This person does not have to be a Shareholder. Fill in the name of the person you are appointing in the blank space provided on the form of proxy. Complete your voting instructions, and date and sign the form. Make sure that the person you appoint is aware that he or she has been appointed and attends the Meeting, otherwise your vote will not be taken into account.

Please refer to the section of this Circular "Completing the Form of Proxy" on page 9 for further details.

By the Internet

Go to the website www.astvotemyproxy.com and follow the instructions on the screen. Your voting instructions are then conveyed electronically over the Internet.

You will need your 13-digit Control Number. You will find this number on your form of proxy.

If you return your proxy via the Internet, you can appoint a person other than the Named Proxyholders as your Proxyholder. This person does not have to be a Shareholder. Make sure that the person you appoint is aware that he or she has been appointed and attends the Meeting, otherwise your vote will not be taken into account.

The cut-off time for voting over the Internet is 5:00 p.m. (Montreal time) on May 13, 2019.

By Telephone

Voting by proxy using the telephone is only available to Shareholders located in Canada or the United States.

Call 1-888-489-7352 (toll-free in Canada and the United States) from a touchtone telephone and follow the instructions. Your voting instructions are then conveyed by using touchtone selections over the telephone.

You will need your 13-digit Control Number. You will find this number on your form of proxy.

If you choose to convey your instructions by telephone, you cannot appoint as your Proxyholder any person other than the Named Proxyholders.

The cut-off time for voting over the telephone is 5:00 p.m. (Montreal time) on May 13, 2019.

In Person at the Meeting

You do not need to complete or return your form of proxy. You will only need to register at the registration desk.

How to Vote – Non-Registered Shareholders

You are a non-registered Shareholder if your Nominee holds your Shares for you. If you are not sure whether you are a non-registered Shareholder, please contact your Nominee, person servicing your account or other intermediary.

By Proxy

Your Nominee is required to ask for your voting instructions before the Meeting. Please contact your Nominee if you did not receive a request for voting instructions.

In most cases, non-registered Shareholders will receive a voting instruction form which allows them to provide their voting instructions by mail, the Internet or by telephone.

By Mail

You may vote your Shares by completing the voting instruction form as directed on the form and returning it in the business reply envelope provided **for receipt before 5:00 p.m. (Montreal time) on May 13, 2019.**

By the Internet

Go to the website at www.proxyvote.com and follow the instructions on the screen. Your voting instructions are then conveyed electronically over the Internet.

You will need the 16-digit Control Number found on your voting instruction form.

If you vote online, you can appoint a person other than the Named Proxyholder indicated on the voting instruction form as your Proxyholder. This person does not have to be a Shareholder. Make sure that the person you appoint is aware that he or she has been appointed and attends the Meeting, otherwise your vote will not be taken into account.

The cut-off time for voting over the Internet is 5:00 p.m. (Montreal time) on May 13, 2019.

By Telephone

Voting by proxy using the telephone is only available to Shareholders located in Canada or the United States.

Call 1-800-474-7493 or 1-800-474-7501 (toll-free in Canada in English or French, respectively) and 1-800-454-8683 (toll-free in the United States) from a touchtone telephone and follow the instructions. Your voting instructions are then conveyed by using touchtone selections over the telephone.

You will need the 16-digit Control Number found on your voting instruction form.

If you choose to convey your instructions by telephone, you cannot appoint as your Proxyholder any person other than the Named Proxyholders.

The cut-off time for voting over the telephone is 5:00 p.m. (Montreal time) on May 13, 2019.

In Person at the Meeting

You can vote your Shares in person at the Meeting if you have instructed your Nominee to appoint you as Proxyholder.

To do this, write your name in the blank space provided on the voting instruction form and otherwise follow the instructions of your Nominee.

How to Vote – Employees Holding Shares under the ESPP

Employee Shares purchased by employees of the Corporation or its subsidiaries under the ESPP are registered in the name of Sun Life. Sun Life holds the Employee Shares as trustee, in accordance with the provisions of the ESPP unless the employees have withdrawn their Employee Shares from the plan. If you are not sure whether you are an employee holding your Shares through Sun Life, please contact AST at 1-800-387-0825.

If you hold Employee Shares, you can direct your Proxyholder to vote your Employee Shares as you instruct. Instructions are given to your Proxyholder by proxy in the manner described below.

In the event that an employee holds any Shares other than Employee Shares, he or she must also complete a second form of proxy or voting instruction form with respect to such additional Shares in the manner indicated above for registered Shareholders or non-registered Shareholders, as applicable.

Please refer to the section of this Circular entitled “Completing the Form of Proxy” on page 9 for additional details.

By Proxy

By Mail

You may vote your Employee Shares by completing your voting instruction form and returning it in the business reply envelope provided or by delivery to one of AST’s principal offices in Montreal, Toronto, Calgary or Vancouver **for receipt before 5:00 p.m. (Montreal time) on May 13, 2019**. A list of addresses for the principal offices of AST is set forth at the end of this Circular.

If you return your proxy by mail, you can appoint a person other than the Named Proxyholders as your Proxyholder. This person does not have to be a Shareholder. Fill in the name of the person you are appointing in the blank space provided on the voting instruction form. Complete your voting instructions, and date and sign the form. Make sure that the person you appoint is aware that he or she has been appointed and attends the Meeting, otherwise your vote will not be taken into account.

By the Internet

Go to the website at www.astvotemyproxy.com and follow the instructions on the screen. Your voting instructions are then conveyed electronically over the Internet.

You will need your 13-digit Control Number. You will find this number on your voting instruction form.

If you return your proxy via the Internet, you can appoint a person other than the Named Proxyholders as your Proxyholder. This person does not have to be a Shareholder. Make sure that the person you appoint is aware that he or she has been appointed and attends the Meeting, otherwise your vote will not be taken into account.

The cut-off time for voting over the Internet is 5:00 p.m. (Montreal time) on May 13, 2019.

By Telephone

Voting by proxy using the telephone is only available to Shareholders located in Canada or the United States.

Call 1-888-489-7352 (toll-free in Canada and the United States) from a touchtone telephone and follow the instructions. Your voting instructions are then conveyed by using touchtone selections over the telephone.

You will need your 13-digit Control Number. You will find this number on your voting instruction form.

If you choose to convey your instructions by telephone, you cannot appoint as your Proxyholder any person other than the Named Proxyholders.

The cut-off time for voting over the telephone is 5:00 p.m. (Montreal time) on May 13, 2019.

In Person at the Meeting

You can vote your Employee Shares in person at the Meeting if you have instructed your Nominee to appoint you as Proxyholder.

To do this, enter your name in the appropriate box on the website or write your name in the blank space provided on the voting instruction form.

Completing the Form of Proxy

You can choose to vote "FOR" or "WITHHOLD" with respect to the election of each of the proposed nominee directors, namely, Louis-Philippe Carrière, Christopher Cole, Linda Galipeau, Alexandre L'Heureux, Birgit Nørgaard, Suzanne Rancourt, Paul Raymond and Pierre Shoiry (the "**Nominee Directors**"), and the appointment of the independent auditors, and vote "FOR" or "AGAINST" with respect to the approval of an advisory, non-binding resolution in respect of the Corporation's approach to executive compensation. If you are a non-registered Shareholder voting your Shares, please follow the instructions provided in the voting instruction form provided.

When you sign the form of proxy without appointing an alternate Proxyholder, you authorize the Named Proxyholders, to vote your Shares for you at the Meeting in accordance with your instructions.

If you have NOT specified how to vote on a particular matter, your Proxyholder is entitled to vote your Shares as he or she sees fit. Please note that if you return your proxy without specifying how you want to vote your Shares and if you have authorized the Named Proxyholders as your Proxyholder, the Named Proxyholders will vote your Shares FOR each item scheduled to come before the Meeting and as he or she sees fit on any other matter that may properly come before the Meeting.

Management is not aware of any other matters which will be presented for action at the Meeting. **If, however, other matters properly come before the Meeting, the Named Proxyholders will vote in accordance with their best judgment, pursuant to the discretionary authority conferred by the proxy with respect to such other matters.**

You have the right to appoint a person or company other than the Named Proxyholders to be your Proxyholder. If you are appointing someone else to vote your Shares for you at the Meeting, fill in the name of the person voting for you in the blank space provided on the form of proxy or voting instruction form (as applicable).

A Proxyholder has the same rights as the Shareholder by whom he or she was appointed to speak at the Meeting in respect of any matter, to vote by way of ballot at the Meeting and, except where the Proxyholder has conflicting instructions from more than one Shareholder, to vote at the Meeting in respect of any matter by way of any show of hands.

If you are an individual Shareholder, you or your authorized attorney must sign the form of proxy. If you are a corporation or other legal entity, an authorized officer or attorney must sign the form of proxy.

Changing your vote

In addition to revocation in any other manner permitted by law, a Shareholder giving a proxy and submitting it by mail may revoke it by an instrument in writing executed by the Shareholder or the Shareholder's authorized attorney and deposited either at the Montreal office of the Corporation's transfer agent, AST, located at 2001 Robert-Bourassa Blvd., Suite 1600, Montreal, Quebec, H3A 2A6 or at the Corporation's registered office, 1600 René-Lévesque Blvd. West, 11th Floor, Montreal, Quebec, H3H 1P9, if you are a Shareholder holding Employee Shares, at any time **before 5:00 p.m. (Montreal time) on May 13, 2019**, and if you are a Shareholder other than a Shareholder holding Employee Shares, **at any time up to and including the last business day preceding the day of the Meeting, or any adjournment thereof, at which the proxy is to be used, or with the Chairman of the Meeting on the day of the Meeting, or any adjournment thereof.**

If the voting instructions were conveyed online, by telephone or by mail, conveying new voting instructions online, by telephone or by mail prior to the applicable cut-off times will revoke the prior instructions. If you are a registered Shareholder, voting in person at the meeting will automatically cancel any proxy you completed and submitted earlier.

Voting Requirements

The election of the Nominee Directors, the appointment of the independent auditors of the Corporation and the approval of an advisory, non-binding resolution on executive compensation policies will each be determined by a majority of votes cast by Shareholders at the Meeting by proxy or in person. AST will count and tabulate the votes.

Business of the Meeting

The following items will be covered at the Meeting:

(1) Presentation to the Shareholders of the audited consolidated financial statements of the Corporation for the fiscal year ended December 31, 2018 and the independent auditor's report thereon;

(2) Election of each of the Nominee Directors who will serve until the end of the next annual meeting of the Shareholders or until their successors are appointed;

(3) Appointment of the independent auditors of the Corporation for the forthcoming year and the authorization of the Directors to fix the independent auditors' remuneration;

(4) Consideration and approval, in a non-binding, advisory capacity, of the approach to executive compensation policies; and

(5) Consideration of such other business, if any, that may properly come before the Meeting or any adjournment thereof.

As at the date of this Circular, Management is not aware of any changes to these items, and does not expect any other items to be brought forward at the Meeting. If there are changes or new items, your Proxyholder can vote your Shares on these items as he or she sees fit.

Presentation of the Financial Statements

The audited consolidated financial statements of the Corporation for the fiscal year ended December 31, 2018 and the report of the independent auditors thereon will be presented to Shareholders at the Meeting, and are available on our website at www.wsp.com or on SEDAR at www.sedar.com. Copies of such financial statements will also be available at the Meeting.

Election of Directors

Number of Directors

The articles of the Corporation provide for a minimum of three and a maximum of ten Directors. The Board of Directors has fixed at eight the number of Directors to be elected at the Meeting. All of the Nominee Directors are currently members of the Board of Directors, with the exception of Paul Raymond, and six of them were elected as such by the Shareholders of the Corporation at the annual meeting of Shareholders held on May 10, 2018. Ms. Galipeau was appointed as a member of the Board of Directors effective January 1, 2019. Each Director so elected at the Meeting will hold office until the end of the next annual meeting of Shareholders or until his or her successor is appointed, unless his or her office is vacated at an earlier date. Please see the section of this Circular entitled "Nominees for Election to the Board of Directors" on page 13 for additional information on each of the Nominee Directors. Pierre Fitzgibbon resigned from the Board of Directors effective October 3, 2018 following his election as a Member of the National Assembly of Quebec. Josée Perreault resigned from the Board of Directors effective December 31, 2018. We thank them for their dedication and contribution to the Corporation.

If you have not specified how you want your Shares voted and if you have authorized the Named Proxyholders as your proxyholder, the Named Proxyholders will vote FOR the election of each of the Nominee Directors. Shareholders should note that the form of proxy or voting instruction form, as applicable, provides for voting for individual Director as opposed to voting for Directors as a slate.

Appointment of Auditors

The Board of Directors, on the advice of the Audit Committee, recommends that PricewaterhouseCoopers LLP, Chartered Professional Accountants, be reappointed as independent auditors of the Corporation. The auditors appointed at the Meeting will serve until the next annual meeting of the Shareholders, or until their successors are appointed, at a remuneration to be fixed by the Board.

If you have not specified how you want your Shares voted and if you have authorized the Named Proxyholders as your proxyholder, the Named Proxyholders will vote FOR the appointment of PricewaterhouseCoopers LLP as independent auditors of the Corporation and FOR authorizing the Board to determine their remuneration.

Pre-Approval Policy for External Auditor Services

The Audit Committee has adopted procedures for the pre-approval of engagement for services of its external auditors, which require pre-approval of all audit and non-audit services provided by the external auditors. Moreover, the Board of Directors, upon recommendation of the Audit Committee, approves, on an annual basis, the fees charged to the Corporation by PricewaterhouseCoopers LLP.

External Auditor Service Fee

For the years ended December 31, 2018 and December 31, 2017, the following fees were billed to the Corporation by its external auditors, PricewaterhouseCoopers LLP and its affiliates:

	Year ended December 31, 2018	Year ended December 31, 2017
Audit Fees[1]	$4,822,120	$4,170,854
Audit-Related Fees[2]	$470,676	-
Tax Fees[3]	$181,506	$167,619
All Other Fees[4]	$141,272	$204,117
Total Fees Paid	**$5,615,574**	**$4,542,590**

(1) "Audit Fees" include fees necessary to perform the annual audit of the Corporation's consolidated financial statements, as well as the annual audits of certain subsidiaries of the Corporation.

(2) "Audit-Related Fees" include fees for assurance and related services that are reasonably related to the performance of the audit or review of the financial statements and are not reported under "Audit Fees". For the year ended December 31, 2018, this category included fees related to advisory services in connection with the Corporation's compliance with National Instrument 52-109.

(3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax advice and tax planning.

(4) "All Other Fees" include fees for products and services provided by the auditors other than those described above, including mainly professional fees for translation of quarterly and annual financial statements and management's discussion and analysis as well as Canadian Public Accountability Board (CPAB) fees and subscription to publications.

Non-Binding Advisory Vote on Executive Compensation

The purpose of the annual Shareholder non-binding advisory vote on executive compensation is to provide Shareholders with a formal opportunity to provide their views on the disclosed objectives of the executive compensation plans, and on the plans themselves, for past, current and future fiscal years. While Shareholders will provide their collective advisory vote, the Directors remain fully responsible for their compensation decisions and are not relieved of these responsibilities by a positive advisory vote by Shareholders.

At the annual meeting of Shareholders held on May 10, 2018, the Corporation's approach to executive compensation was approved by 98.54% of the Shares voted on the non-binding, advisory resolution on executive compensation.

The Board proposes that you indicate your support for the Corporation's approach to executive compensation disclosed in this Circular by voting in favor of the following advisory resolution:

"Resolved, on an advisory basis and not to diminish the role and responsibilities of the Board of Directors, that the Shareholders accept the approach to executive compensation disclosed in the Corporation's Circular delivered in advance of the 2019 annual meeting of Shareholders."

As this is an advisory vote, the results will not be binding upon the Board. The Board will, however, take the results of the vote into account, as appropriate, when considering future compensation policies, procedures, and decisions and in determining whether there is a need to significantly increase their engagement with Shareholders on compensation and related matters.

The Corporation will disclose the results of the Shareholder advisory vote as a part of its report on voting results for the Meeting. The Board will disclose to Shareholders in the management proxy circular for its next annual meeting, or earlier and by other means if advisable, any changes to the compensation plans made or to be made (or why no such changes were made) by the Board as a result of its engagement with Shareholders.

If you have not specified how you want your Shares voted and if you have authorized the Named Proxyholders as your proxyholder, the Named Proxyholders will vote FOR the above non-binding, advisory resolution on executive compensation.

Consideration of Other Business

Following the conclusion of the formal business to be conducted at the Meeting, we will consider such other business, if any, that may properly come before the Meeting or any adjournment thereof.

Nominees for Election to the Board of Directors

Description of the Nominee Directors

The following tables set out information as at March 28, 2019, unless otherwise indicated, with respect to each of the Nominee Directors. All of the Nominee Directors are currently members of the Board of Directors, with the exception of Paul Raymond, and six of them were elected as such by the Shareholders of the Corporation at the annual meeting of Shareholders held on May 10, 2018. Ms. Galipeau was appointed as a member of the Board of Directors effective January 1, 2019. For further detailed information on director independence, Board and Committee attendance, compensation and share ownership, please refer to the tables and narratives following this section.

Louis-Philippe Carrière, FCPA

Louis-Philippe Carrière acts as senior advisor for Saputo Inc. and was elected to its board of directors on August 1, 2017 following his retirement as Chief Financial Officer and Secretary the same day, a position he had held since 1997. From 1986 to 1996, he held various management positions in finance and administration within Saputo Inc. His responsibilities over the years included oversight of various functions such as accounting, internal audit, taxation, legal, financing and information technology, as well as mergers and acquisitions. Mr. Carrière holds a bachelor's degree in management from the École des hautes études commerciales of Montréal and has been a member of the Ordre des comptables professionnels agréés du Québec since 1985. He was also appointed Fellow of the Ordre des comptables professionnels agréés du Québec (Quebec CPA Order) in 2007.

Current Principal Occupation: Senior advisor, Saputo Inc.

Age: 58

Independent
Director since: 2017

Quebec, Canada

WSP Board and Committee Memberships for 2018	Attendance for 2018[1]		Compensation Received for 2018[2]
Board	9 of 9	100%	$195,000
Audit Committee	6 of 6	100%	

Past Years' Voting Results

YEAR	FOR	WITHHELD
2018	99.98%	0.02%
2017	99.96%	0.04%

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
Saputo Inc.	None	None

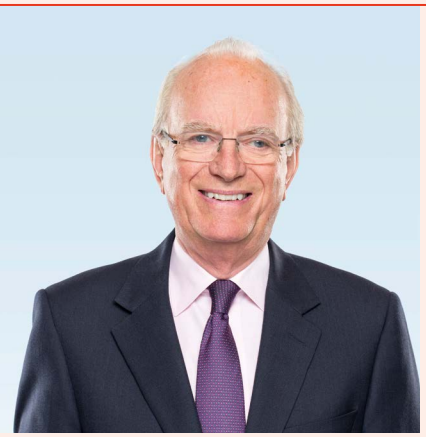
Securities Held or Controlled[3]

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET
3,100	None	None	None	5,476	$625,190	Yes

(1) See section entitled "Board and Committee Attendance" on page 21.

(2) Mr. Carrière elected to receive 100% of his 2018 annual compensation in equity-based awards; consequently, all Director compensation received by him in 2018 was paid in DSUs. See section entitled "Director Compensation" on page 24.

(3) See section entitled "Non-Executive Nominee Director Share Ownership" on page 26. The value of at risk holdings for Directors represents the total value of Shares and DSUs, including Dividend Equivalents earned on DSUs but not yet credited thereto. The value of the Shares and DSUs has been calculated based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90.



Christopher Cole

Christopher Cole has over 40 years of experience in the engineering and consulting services fields. He is a Chartered Engineer who joined WSP as a partner at its inception, becoming Managing Director in 1987. Under his leadership, WSP was the first engineering consultant firm to become a fully-listed public company in 1990, growing organically and through acquisitions from a single-discipline U.K. consultant firm of 200 people to a 9,000-strong multi-disciplinary global player with two-thirds of its business outside the U.K. prior to the historic 2012 merger with the Corporation. He has chaired the Board of the Corporation since that merger. He was non-executive Chairman of Ashtead Group plc from March 2007, stepping down in September 2018 after 11 successful years. In 2014 he became non-executive Chairman of Applus Services SA and is also currently a director of Tracsis plc and Redcentric plc.

Age: 72

Current Principal Occupation: Professional Non-Executive Director

London, United Kingdom

Independent
Director since: 2012

WSP Board and Committee Memberships for 2018	Attendance for 2018[1]		Compensation Received for 2018[2]
Board	9 of 9	100%	$350,095
Governance, Ethics and Compensation Committee	2 of 2	100%	

Past Years' Voting Results

YEAR	FOR	WITHHELD
2018	97.63%	2.37%
2017	98.09%	1.91%

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
Applus Services SA	None	None
Tracsis plc	None	None
Redcentric plc	None	None

Securities Held or Controlled[3]

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET
22,835	None	None	None	None	$1,664,672	Yes

(1) See section entitled "Board and Committee Attendance" on page 21.

(2) Mr. Cole's retainer is GBP 200,000 and is paid in GBP in four instalments. The amount shown above is the amount in Canadian dollars converted on the basis of the actual exchange rate used to pay the Chairman's retainer. The average exchange rate for 2018 was $1.7505 to GBP 1. Mr. Cole elected to receive the equity-based portion of his 2018 annual compensation in cash; consequently, all Director compensation received by him in 2018 was paid in cash. See section entitled "Director Compensation" on page 24.

(3) See section entitled "Non-Executive Nominee Director Share Ownership" on page 26. The value of at risk holdings for Directors represents the total value of Shares and DSUs, including Dividend Equivalents earned on DSUs but not yet credited thereto. The value of the Shares and DSUs has been calculated based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90.

Linda Galipeau

Linda Galipeau was CEO of Randstad North America and served as executive board member of Randstad Holding N.V., one of the world's largest HR services companies until March 26, 2019. Ms. Galipeau oversaw Randstad's operations in the U.S. and Canada as well as Randstad Digital Ventures, which includes Monster and RiseSmart. Ms. Galipeau also chaired the Randstad Innovation Fund, a strategic corporate venture fund that invests in early stage HR technology companies. Prior to assuming this role in 2012, Ms. Galipeau served as president of Randstad U.S. staffing division for four years. She founded Randstad's Canadian operation in 1997, growing it organically into one of the country's leading staffing firms. Ms. Galipeau holds an MBA from McGill University in Marketing and Managerial Economics.

Current Principal Occupation: Professional Non-Executive Director

Age: 55

Independent
Director since: 2019

Wisconsin, USA

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
None	None	None

Securities Held or Controlled

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET
None	None	None	None	None	$0	N/A

Alexandre L'Heureux, FCPA, FCA, CFA

Alexandre L'Heureux is the President and CEO of the Corporation. Mr. L'Heureux joined the Corporation as Chief Financial Officer in July 2010, and held this role until transitioning to the role of President and CEO in October 2016. Before joining WSP, from 2005 to 2010, Mr. L'Heureux was a Partner and Chief Financial Officer at Celtic Therapeutics L.L.P. (now known as Auven Therapeutics) and a Partner at Celtic Pharma Management L.P. Prior to that, he developed extensive knowledge of the alternative investments industry as the Vice President of Operations at BISYS Hedge Fund Services (now known as Citibank - Hedge Fund Services). He is a member of the Canadian Institute of Chartered Accountants and of the Chartered Financial Analysts Institute. Mr. L'Heureux was also appointed Fellow of the Ordre des comptables professionnels agréés du Québec (Quebec CPA Order) in 2017.

Age: 46

Current Principal Occupation: President and CEO of the Corporation

Quebec, Canada

Non-Independent Director since: 2016

WSP Board and Committee Memberships for 2018	Attendance for 2018[1]		Compensation Received for 2018[2]
Board	9 of 9	100%	None

Past Years' Voting Results

YEAR	FOR	WITHHELD
2018	99.70%	0.30%
2017	99.38%	0.62%

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
None	None	None

Securities Held or Controlled[3]

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET[4]
26,714	319,795	129,365	0	46,921	$19,817,429	Yes

(1) See section entitled "Board and Committee Attendance" on page 21.

(2) Mr. L'Heureux does not receive an annual retainer or any other fees in respect of his role as a Director or participation in Board of Directors' meetings as Mr. L'Heureux is the President and CEO of the Corporation. Please see the section entitled "Compensation Discussion & Analysis" on page 43 for a discussion on the compensation paid to Mr. L'Heureux.

(3) Mr. L'Heureux's value of at risk holdings represents the total value of Shares ($1,947,450), vested Options (138,760 Options representing $4,659,770), vested and unvested PSUs ($9,789,668) and DSUs ($3,420,541), including Dividend Equivalents earned on PSUs and DSUs but not yet credited thereto, but does not include the value of Shares underlying unvested Options. The value of the Shares and DSUs is based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90. The value of vested Options is calculated based on the difference between the closing price of the Shares on the TSX on March 28, 2019 of $72.90 and the Option exercise price, multiplied by the number of unexercised Options. The value of unvested PSUs has been calculated based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90 and assuming the Corporation had achieved all performance targets and 100% of the PSUs had vested on March 28, 2019. Subject to the attainment of the performance measure and targets of the award as set out under "Compensation Discussion and Analysis – Description of Compensation paid to NEOs in 2018 – Long-Term Incentive Plans", the number of PSUs that will actually vest will be between 0% and 150% of the award granted. Furthermore, the actual value realized upon the future vesting and payment of such awards may be greater or less than the grant date fair value. Please see the section entitled "Compensation Discussion and Analysis" on page 43 for a discussion on securities held or controlled by Mr. L'Heureux.

(4) For the purpose of assessing ownership levels only, the value of Shares, vested Options and DSUs is included while the potential value of unvested Options, RSUs and PSUs is not included.

Birgit Nørgaard

Birgit Nørgaard is a professional board member with extensive experience in consulting and management. Ms. Nørgaard was CEO of Grontmij | Carl Bro A/S, as well as COO of Grontmij N.V., Europe's third largest engineering consultancy firm, from 2006 to 2010. From 2003 to 2006, she was CEO of the Carl Bro Group A/S and was the executive director of that company from 2001 to 2003. She has previously been a consultant at McKinsey from 1984 to 1990 and has held executive positions at Danisco from 1990 to 2000 and TDC Mobile International in 2000 and 2001. Ms. Nørgaard has held several board positions since 1994. Since 2010, Ms. Nørgaard has been a full-time director for various public and private entities, including companies in the engineering business. She is currently a director of IMI plc, DSV A/S, NCC AB, Danish Growth Capital and RGS Nordic A/S. Ms. Nørgaard is also currently chairman of Norisol A/S, vice chairman of the board of NNE A/S and the Danish State's IT Council. She has a MSc. from the Copenhagen Business School and an MBA from INSEAD, a well-known international business school.

Current Principal Occupation: Professional Non-Executive Director

Age: 60

Independent Director since: 2013

Gentofte, Denmark

WSP Board and Committee Memberships for 2018	Attendance for 2018[1]		Compensation Received for 2018[2]
Board	8 of 9	89%	$180,398
Governance, Ethics and Compensation Committee	5 of 5	100%	

Past Years' Voting Results

YEAR	FOR	WITHHELD
2018	99.89%	0.11%
2017	98.65%	1.35%

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
IMI Plc	Audit committee, remuneration committee (chair) and nomination committee	None
DSV A/S	Nomination committee	None
NCC AB	None	None

Securities Held or Controlled[3]

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET
3,000	None	None	None	None	$218,700	Minimum Annual Requirement Met

(1) See section entitled "Board and Committee Attendance" on page 21.

(2) Ms. Nørgaard elected to receive the equity-based portion of her 2018 annual compensation in cash; consequently, all Director compensation received by her in 2018 was paid in cash. See section entitled "Director Compensation" on page 24. Ms. Nørgaard received compensation as Chair of the Governance, Ethics and Compensation Committee from January 1, 2018 to May 10, 2018 and as a member of the Governance, Ethics and Compensation Committee from May 10 to December 31, 2018.

(3) See section entitled "Non-Executive Nominee Director Share Ownership" on page 26. The value of at risk holdings for Directors represents the total value of Shares and DSUs, including Dividend Equivalents earned on DSUs but not yet credited thereto. The value of the Shares and DSUs has been calculated based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90.

Suzanne Rancourt, CPA, CGA, ICD.D

Suzanne Rancourt is a corporate director with more than 30 years of business experience, mainly at CGI, one of the largest independent information technology and business process services companies in the world. Ms. Rancourt was Vice-President, Internal Audit and Enterprise Risks at CGI from 2006 to 2016. Starting in 1985, Ms. Rancourt held various management positions within CGI specifically in high-end IT and business consulting and project management. From 2006 to 2016, she developed and led the internal audit and enterprise risks function in an international environment. Prior to her time at CGI, Ms. Rancourt worked in accounting and audit in the finance, distribution and retail sectors. She holds a bachelor's degree in Business Administration from Université du Québec in Montréal and is a member of the Ordre des comptables professionnels agréés du Québec. She also holds an ICD.D designation from the Institute of Corporate Directors. Ms. Rancourt currently serves on the board of directors of Aéroports de Montréal and Solmax. She also serves as a member of the advisory board of Groupe FairPlay, and of the board of directors of Forces Avenir.

Age: 60

Current Principal Occupation: Professional Non-Executive Director

Quebec, Canada

Independent
Director since: 2016

WSP Board and Committee Memberships for 2018	Attendance for 2018[1]		Compensation Received for 2018[2]
Board	9 of 9	100%	$180,000
Audit Committee	6 of 6	100%	

Past Years' Voting Results

YEAR	FOR	WITHHELD
2018	99.99%	0.01%
2017	99.95%	0.05%

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
None	None	None

Securities Held or Controlled[3]

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET
4,928	None	None	None	1,117	$440,681	Yes

(1) See section entitled "Board and Committee Attendance" on page 21.

(2) Ms. Rancourt elected to receive 20% of her 2018 annual compensation in equity-based awards and 80% of her 2018 annual compensation in cash. See section entitled "Director Compensation" on page 24.

(3) See section entitled "Non-Executive Nominee Director Share Ownership" on page 26. The value of at risk holdings for Directors represents the total value of Shares and DSUs, including Dividend Equivalents earned on DSUs but not yet credited thereto. The value of the Shares and DSUs has been calculated based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90.

Paul Raymond

Paul Raymond has been President and CEO of Alithya since 2012 and oversees Alithya's strategy, organizational development and accelerated growth. Mr. Raymond has been a member of the Board of Directors of Alithya since April 2011. Prior to joining Alithya, Mr. Raymond was previously president of Direxion in 2011 and held several key senior management positions at CGI, a major information technology firm from 1993 until 2010 and served as an officer in the Canadian Armed Forces. Mr. Raymond is currently the Chairman of the Board of Directors of the Québec Technology Association, serves on the Board of Directors of Optimum Assurance, is a Governor of the Conseil du patronat du Québec and serves as President of the Board of Directors for the Québec chapter of the Make-A-Wish Foundation. Mr. Raymond is a Computer Engineering graduate from the Royal Military College of Canada and a member of the Ordre des ingénieurs du Québec and the Institute of Corporate Directors.

Current Principal Occupation: President and CEO of Alithya

Age: 55

Independent
Not Currently a Director

Quebec, Canada

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
Alithya Group Inc.	None	None

Securities Held or Controlled

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET
None	None	None	None	None	$0	N/A

Pierre Shoiry

Pierre Shoiry is the former President and CEO of the Corporation and transitioned to his current role of Vice Chairman of the Corporation in 2016. Mr. Shoiry has more than 35 years of experience in the engineering services industry. Employed by the Corporation since 1989, he was previously Senior Associate Engineer in Municipal Infrastructure and Vice-President of Business Development. He was the President and Chief Executive Officer of the Corporation from 1995 to 2016. During these years, the predecessor company GENIVAR grew through organic growth and acquisitions to become one of the largest multidisciplinary firms in the province of Quebec. After listing the company as the GENIVAR Income Fund in 2006 on the Toronto Stock Exchange, the company continued its expansion across Canada through the merger and integration of over 80 consulting engineering firms before the historic acquisition and merger with WSP, a 9,000-person multidisciplinary global firm in 2012. In 2014, the strategic acquisition of Parsons Brinckerhoff, a 14,000-person global champion, further strengthened the Corporation. Under his leadership the Corporation grew from a regional firm of 300 employees to one of the leading international consulting firms with 34,000 employees across 40 countries at the time of implementation of his succession plan in 2016. Mr. Shoiry holds a bachelor's degree in applied science with a major civil engineering, as well as a Master's degree in applied science from Laval University.

Age: 61

Current Principal Occupation: Vice Chairman of the Board

Quebec, Canada

Non-Independent
Director since: 2006

WSP Board and Committee Memberships for 2018	Attendance for 2018[1]		Compensation Received for 2018[2]
Board	9 of 9	100%	$250,000
Audit	1 of 1	100%	

Past Years' Voting Results

YEAR	FOR	WITHHELD
2018	98.61%	1.39%
2017	98.64%	1.36%

Other Public Board Memberships	Other Committee Memberships	Interlocking Relationships
None	None	None

Securities Held or Controlled[3]

SHARES	OPTIONS	PSUs	RSUs	DSUs	VALUE OF AT RISK HOLDINGS	DIRECTOR SHARE OWNERSHIP REQUIREMENT MET[4]
632,202	307,184	32,458	0	8,930	$59,595,466	Yes

(1) See section entitled "Board and Committee Attendance" on page 21.

(2) This includes only the compensation received by Mr. Shoiry as a Director. Mr. Shoiry elected to receive 100% of his 2018 annual compensation in equity-based awards; consequently, all Director compensation received by him in 2018 was paid in DSUs. For the fiscal year ended December 31, 2018, Mr. Shoiry also received compensation from the Corporation for his work up until March 31, 2018 with the Chief Executive Officer and management team in respect of acquisition activities and other strategic opportunities. Please see the section entitled "Director Compensation Table" on page 24 for information on all compensation paid to Mr. Shoiry.

(3) See section entitled "Non-Executive Nominee Director Share Ownership" on page 26. Mr. Shoiry's value of at risk holdings represents the total value of Shares ($46,087,526), vested Options (307,184 Options representing $9,993,868), vested PSUs ($2,863,075) and DSUs ($650,997), including Dividend Equivalents earned on PSUs and DSUs but not yet credited thereto. The value of the Shares and DSUs is based on the closing price of the Shares on the TSX on March 28, 2019 of $72.90. The value of vested Options is calculated based on the difference between the closing price of the Shares on the TSX on March 28, 2019 of $72.90 and the Option exercise price, multiplied by the number of unexercised Options.

(4) For the purpose of assessing ownership levels only, the value of Shares, vested Options and DSUs is included while the potential value of unvested Options, RSUs and PSUs is not included.

Board and Committee Attendance

The following table summarizes the attendance of the Directors and Committee members of the Board of Directors for the period from January 1, 2018 to December 31, 2018:

Directors	Board	Audit Committee	Governance, Ethics and Compensation Committee	Committees (Total)	Overall Attendance
Louis-Philippe Carrière	9 of 9	6 of 6	-	6 of 6	15 of 15 (100%)
Christopher Cole[1]	9 of 9	-	2 of 2	2 of 2	11 of 11 (100%)
Pierre Fitzgibbon[2]	5 of 5	4 of 5	3 of 3	7 of 8	12 of 13 (92%)
Alexandre L'Heureux	9 of 9	-	-	-	9 of 9 (100%)
Birgit Nørgaard	8 of 9	-	5 of 5	5 of 5	13 of 14 (93%)
Josée Perreault[3]	9 of 9	-	4 of 5	4 of 5	13 of 14 (93%)
Suzanne Rancourt	9 of 9	6 of 6	-	6 of 6	15 of 15 (100%)
Pierre Shoiry[4]	9 of 9	1 of 1	-	1 of 1	10 of 10 (100%)

(1) Mr. Cole was appointed to the Governance, Ethics and Compensation Committee as the interim chair effective October 3, 2018.
(2) Mr. Fitzgibbon resigned from the Board of Directors effective October 3, 2018.
(3) Ms. Perreault resigned from the Board of Directors effective December 31, 2018.
(4) Mr. Shoiry was appointed to the Audit Committee on an interim basis effective October 3, 2018.

Director Independence

The charter of the Board of Directors provides that the Board of Directors must at all times be constituted of a majority of individuals who are independent. Based on the information received from each Nominee Director and having taken into account the independence criteria set forth below, the Board of Directors concluded that all Nominee Directors, including the Chairman whose role is separate from that of the President and CEO of the Corporation, with the exception of Alexandre L'Heureux and Pierre Shoiry, are independent within the meaning of the CSA Audit Committee Rules.

All other Nominee Directors, namely Louis-Philippe Carrière, Christopher Cole, Linda Galipeau, Birgit Nørgaard, Suzanne Rancourt and Paul Raymond are "independent" Directors within the meaning of the CSA Audit Committee Rules in that each of them has no direct or indirect material relationship with the Corporation and, in the reasonable opinion of the Board of Directors, is independent under the applicable laws, regulations and listing requirements to which the Corporation is subject.

The following table sets forth the relationship of the Nominee Directors:

Name	Independent	Non-Independent	Reason for Non-Independence
Louis-Philippe Carrière	✓		
Christopher Cole	✓		
Linda Galipeau	✓		
Alexandre L'Heureux		✓	Mr. L'Heureux is President and CEO of the Corporation.
Birgit Nørgaard	✓		
Suzanne Rancourt	✓		
Pierre Shoiry		✓	Mr. Shoiry has been within the last three years (until October 31, 2016) the President and CEO of the Corporation and since his transition to Vice Chairman, up until March 31, 2018, had worked with the CEO and Management in respect of acquisition activities and other strategic opportunities (see section "Director Compensation" on page 24 for more details).
Paul Raymond	✓		

To ensure the Directors exercise independent judgment in considering transactions, agreements or decisions in respect of which a Director has a material interest, the Directors are required to disclose all actual or potential conflicts of interest and refrain from voting on such matters in accordance with applicable law. Directors are also required to excuse themselves from any discussion or decision on any matter in which they are precluded from voting as a result of a conflict of interest or which otherwise affects their personal, business or professional interests.

To facilitate the ability of the Board to function independently of Management, the following structures and processes have also been put into place:

- no more than two employees of the Corporation can serve as Directors at any time;
- when appropriate, members of Management, including the President and CEO, are not present for the discussion and determination of certain matters at meetings of the Board and Committees;
- under the by-laws of the Corporation, any one Director may call a meeting of the Board;
- the President and CEO's compensation is considered, in his absence, by the Governance, Ethics and Compensation Committee and by the Board;
- in addition to the standing committees of the Board, independent committees may be appointed from time to time, when appropriate; and
- the non-executive Directors of the Board have the opportunity to meet in camera at the end of each regularly scheduled Board and Committee meeting.

Directorships of Other Reporting Issuers

As at March 28, 2019, some Nominee Directors are directors of other public entities, as shown in the following table:

Name	Public Entity	Committee(s)
Louis-Philippe Carrière	Director of Saputo Inc.	None
Christopher Cole	Non-Executive Chairman and Director of Applus Services SA Non-Executive Chairman and Director of Tracsis plc Non-Executive Chairman and Director of Redcentric plc	None None None
Birgit Nørgaard	Director of IMI Plc Director of DSV A/S Director of NCC AB	Audit committee, remuneration committee (chair) and nomination committee Nomination committee None
Paul Raymond	Director of Alithya Group Inc.	None

Board Interlocks

In addition to the independence requirements, the Corporate Governance Guidelines provide that there shall be no more than two board interlocks at any given time. A board interlock occurs when two Directors also serve together on the board of another for-profit organization. As of the date of this Circular, there are no board interlocks.

Limitations on other Board Service

The Corporate Governance Guidelines also contain limitations on the number of other directorships that Directors and the CEO may hold. Generally, Directors should limit their service as directors on publicly-held company and investment company boards to no more than five (including the Board) and the CEO may not serve on more than two public company boards (including the Board). Service on the boards of subsidiary companies with no publicly traded stock is not included in these calculations. Furthermore, no Director is permitted to serve as director, officer or employee of a direct competitor of the Corporation. In all cases, prior to accepting an appointment to the board of directors of any company, a Director must first request the permission of the Chairman of the Board. Should it be the Chairman of the Board who wishes to join any other board of directors, then the request must be made with the Chair of the Governance, Ethics and Compensation Committee.

Additional Disclosure relating to Directors

As at the date hereof, to the best knowledge of the Corporation and based upon received information provided by each Nominee Director, no such nominee is or has been, within the past 10 years, a director or executive officer of any company that, while such person was acting in that capacity or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, except for the following:

In April 2012, Ms. Nørgaard was appointed Chairman of the Danish privately held company E. Pihl & Son A.S. at the request of the company's major creditors. E. Pihl & Son A.S. was a general contractor operating in the Nordic markets as well as abroad. Prior to Ms. Nørgaard's involvement, E. Pihl & Son A.S. was already in financial difficulty and in August 2013, E. Pihl & Son A.S. filed for bankruptcy.

Director Compensation

The compensation program of the Board of Directors is designed to attract and retain highly talented and experienced directors, leading to the long-term success of the Corporation. This requires that Directors be adequately and competitively compensated.

Directors' compensation is based on a fixed annual retainer with no additional "per meeting" fees. Apart from Mr. Shoiry, who, following his transition to the role of Vice Chairman of the Corporation and up until March 31, 2018, had worked with the Chief Executive Officer and the management team in respect of acquisition activities and other strategic opportunities, no director compensation is paid to Directors who are employees of the Corporation. Mr. Cole and Mr. Shoiry continue to receive medical coverage following their transition to Chairman in 2013 and Vice Chairman in 2016, respectively.

The compensation of the Chairman and the Vice Chairman is 45% cash-based and 55% equity-based consisting of DSU awards, while the compensation of the other non-executive Directors is 40% cash-based and 60% equity-based consisting of DSU awards. To the extent that the Minimum Annual Requirement of a Director under the Director Share Ownership Requirements for any particular year is met, a Director is entitled to elect to receive the equity-based portion of his or her annual compensation in cash. To the extent that the Minimum Annual Requirement of a Director for any particular year has not been met, the Director will receive 100% of the equity portion of his or her annual compensation in DSUs for such year. In addition, the Corporation reimburses Directors for reasonable travel and out-of-pocket expenses relating to Directors' duties.

The following table displays the annual retainers for the year ended December 31, 2018 of all non-executive Directors. All Directors are paid in Canadian dollars, except for the Chairman, who is paid in GBP. No changes to non-executive Director compensation have been made since 2015.

Director Position	Annual Retainer[1]
Chairman of the Board	$350,095[2]
Vice Chairman of the Board	$250,000
Chair of the Audit Committee	$195,000
Chair of the Governance, Ethics and Compensation Committee	$190,000
Member of the Audit Committee	$180,000
Member of the Governance, Ethics and Compensation Committee	$175,000
Director	$170,000

(1) A non-executive Director who holds more than one position will receive the higher of the retainer amount corresponding to any of such positions such that no duplicative amount will be paid.

(2) The Chairman's retainer is GBP 200,000 and is paid in GBP in four instalments. The amount shown above is the amount in Canadian dollars converted on the basis of the actual exchange rate used to pay the Chairman's retainer. The average exchange rate for 2018 was $1.7505 to GBP 1.

DSU Plan

The DSU Plan was initially adopted in 2015 to allow the payment of a portion of the compensation of non-executive Directors in the form of equity-based DSUs. The DSU Plan was designed to enhance the Corporation's ability to attract and retain talented individuals to serve as members of the Board, to promote alignment of interests between Directors and the Shareholders and to assist Directors in fulfilling the Director Share Ownership Requirements.

Unless otherwise determined, DSUs vest immediately upon being granted. However, no director who is holder of DSUs has any right to receive any payment under the DSU Plan until he or she ceases to be an Eligible Director (and is not at that time an employee of the Corporation) including by death, disability, retirement or resignation (a "**Termination Date**"). Unless they have met the Minimum Annual Requirement under the Director Share Ownership Requirements for a given fiscal year and made an election to receive the equity-based portion of their annual compensation in cash, Eligible Directors receive part of their compensation in DSUs, the exact number of which is calculated using the Market Value of the Shares at the time of the grant.

In accordance with the terms of the DSU Plan, a Dividend Equivalent is to be computed in the form of additional DSUs calculated as of each dividend payment date in respect of which normal cash dividends are paid on the Shares and vesting on each such date, unless otherwise determined. The settlement of such additional DSUs will occur in accordance with the same terms as the underlying DSUs.

Detailed information on the DSU Plan is included in *Schedule C* of this Circular.

Non-Executive Director Minimum Share Ownership Requirement

The Corporation believes that the economic interests of Directors should be aligned with those of Shareholders. As such, the Governance, Ethics and Compensation Committee has established minimum share ownership requirements applicable to non-executive Directors whereby non-executive Directors were required to own Shares or equity based awards such as DSUs having an aggregate value equivalent to, up until December 31, 2018, three (3) times the Cash-Based Component of their respective annual retainer (the "**Director Share Ownership Requirement**"). Such ownership requirements were to be progressively achieved over a period of five (5) years from their appointment to the Board, or prior to December 31, 2019, whichever was later. Consequently, a non-executive Director was expected to meet 20% of the aggregate Director Share Ownership Requirement by the end of the first year starting from December 31, 2014 or of his or her appointment as a Director, whichever was later, 40% by the end of the second year, 60% by the end of the third year, 80% by the end of the fourth year and the aggregate threshold by the end of the five-year period (the "**Minimum Annual Requirement**"). The Director Share Ownership Requirement can be fulfilled through the ownership of equity based awards such as DSUs paid as part of the annual director compensation or through the purchase of Shares on the open market or a combination of both. To the extent that the Minimum Annual Requirement of a Director for any particular year has not been met, the Director will receive 100% of the equity portion of his or her annual compensation in DSUs for such year. To the extent that the Minimum Annual Requirement of a Director for any particular year is met, a Director will be entitled to elect to receive the equity-based portion of his or her annual compensation in cash. Some Directors, regardless of having met their Minimum Annual Requirement, chose to receive 100% of their 2018 compensation in the form of DSUs.

Directors may not purchase financial instruments to hedge or offset a decrease in the market value of Shares held for the purpose of the Director Share Ownership Requirement. As the President and CEO, Alexandre L'Heureux is required to comply with the Executive Share Ownership Requirement (see section entitled "Executive Minimum Share Ownership Requirement" on page 52 for additional details).

Non-Executive Nominee Director Share Ownership

The following table presents share ownership information for non-executive Nominee Directors as at December 31, 2018.

Name[1]	Number of Shares	Number of Equity-Based Awards[2]	Total Number of Shares and Equity-Based Awards	Value of at Risk Holdings of Shares and Equity-Based Awards[3]	Date by which the Minimum Annual Requirement for Director Ownership Requirement must be Met[4]	Date by which the aggregate Director Share Ownership Requirement must be Met
Louis-Philippe Carrière	3,100	5,476	8,576	$503,154	May 10, 2019 Requirement is met	May 10, 2022 Requirement is met
Christopher Cole	22,835	-	22,835	$1,339,729	December 31, 2018 Requirement is met	December 31, 2019 Requirement is met
Linda Galipeau	-	-	-	$0	January 1, 2020 N/A	January 1, 2024 Requirement is not met
Birgit Nørgaard	3,000	-	3,000	$176,010	December 31, 2018 Requirement is met	December 31, 2019 Requirement is not met
Suzanne Rancourt	4,928	1,117	6,045	$354,660	May 19, 2019 Requirement is met	May 19, 2021 Requirement is met
Paul Raymond	-	-	-	$0	May 15, 2020 N/A	May 15, 2024 Requirement is not met
Pierre Shoiry	632,202	316,114	948,316	$43,237,855	December 31, 2018 Requirement is met	December 31, 2019 Requirement is met

(1) As the President and CEO, Alexandre L'Heureux is required to comply with the Executive Share Ownership Requirement (see section entitled "Executive Minimum Share Ownership Requirement" on page 52 for additional details).

(2) Consist of DSUs issued under the DSU Plan including Dividend Equivalents earned on those DSUs but not yet credited thereto and, in the case of Mr. Shoiry, DSUs and vested Options.

(3) The value of at risk holdings for Directors represents the total value of Shares, vested Options and DSUs, including Dividend Equivalents earned on DSUs but not yet credited thereto. The value of the Shares and DSUs has been calculated based on the closing price of the Shares on the TSX on December 31, 2018 of $58.67. In the case of Mr. Shoiry, the value of the vested Options is calculated based on the difference between the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and the Option exercise price, multiplied by the number of unexercised Options.

(4) On May 10, 2019, the Minimum Annual Requirement for Mr. Carrière will be $93,600. On May 19, 2019, the Minimum Annual Requirement for Ms. Rancourt will be $129,600. As of December 31, 2018, the Minimum Annual Requirement for Ms. Nørgaard was $168,000, and for Mr. Shoiry it was $270,000. As of December 31, 2018, the Minimum Annual Requirement for Mr. Cole was $373,572 on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.7295 to GBP 1. There was no Minimum Annual Requirement applicable to Linda Galipeau and Paul Raymond since each of them was not a Director at the time.

Director Compensation Table

The table below shows the total compensation earned by each non-executive Director as of December 31, 2018, for services rendered in the fiscal year ended December 31, 2018. All fees are paid in Canadian dollars, except for fees paid to the Chairman, which are paid in GBP. Apart from DSUs, and apart from Mr. Cole and Mr. Shoiry who continue to receive medical coverage following their transition to Chairman in 2013 and Vice Chairman in 2016, respectively, and Mr. Shoiry who during the year ended December 31, 2018 received compensation from the Corporation for his work with the Chief Executive Officer and management team, up until March 31, 2018, in respect of acquisition activities and other strategic opportunities following his transition to the role of Vice Chairman in 2016, non-executive Directors do not benefit from any other equity-based awards, option-based awards, non-equity incentives, pension plan or any other form of compensation. Amounts shown are yearly, but are paid quarterly.

Name	Cash Fees Earned ($)	Equity-Based Awards[1] ($)	Option-Based Award ($)	Non-equity Incentive Plan Compensation ($)	Pension Value ($)	All Other Compensation ($)	Total Compensation ($)
Louis-Philippe Carrière[2]	0	195,000	—	—	—	0	195,000
Christopher Cole[3]	350,095	0	—	—	—	7,155	357,250
Pierre Fitzgibbon[4]	69,451	69,451	—	—	—	0	138,902
Birgit Nørgaard[5]	180,398	0	—	—	—	0	180,398
Josée Perreault[6]	175,000	0	—	—	—	0	175,000
Suzanne Rancourt[7]	144,000	36,000	—	—	—	0	180,000
Pierre Shoiry[8]	0	250,000	—	—	—	61,014	311,014

(1) Consist of DSUs issued under the DSU Plan.

(2) Mr. Carrière is the Chair of the Audit Committee.

(3) Mr. Cole's annual retainer is GBP 200,000 and is paid in GBP in four instalments. The amount shown above is the amount in Canadian dollars converted on the basis of the actual exchange rate used to pay the Chairman's retainer, which has been on average $1.7505 to GBP 1 in 2018. Mr. Cole continues to receive medical coverage following his transition to Chairman on July 1, 2013 (see under "All Other Compensation" in the table above). Such benefits are paid in GBP although the amount shown above is in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.7295 GBP 1.

(4) Mr. Fitzgibbon resigned from the Board of Directors effective October 3, 2018.

(5) Ms. Nørgaard was the Chair of the Governance, Ethics and Compensation Committee up until May 10, 2018 and a member of the Governance, Ethics and Compensation Committee thereafter.

(6) Ms. Perreault resigned from the Board of Directors effective December 31, 2018.

(7) Ms. Rancourt is a member of the Audit Committee.

(8) Mr. Shoiry received compensation ($53,846) in the fiscal year ended December 31, 2018 for his work, up until March 31, 2018, with the Chief Executive Officer and management team in respect of acquisition activities and other strategic opportunities. Also related to such work with the Corporation was his eligibility, up until March 31, 2018, under the Corporation's benefit plans, which include medical coverage and employer contributions from the ESPP ($1,000 per year) and the Savings Plan (at a rate of 6% of his earnings for his work with the CEO and management team in respect of acquisition activities and other strategic opportunities) (see under "All Other Compensation" in the table above). Following March 31, 2018, Mr. Shoiry's medical coverage was maintained.

Incentive Plan Awards Table

The following table summarizes for each non-executive Director the number of option-based award and/or share-based awards, as applicable, outstanding as at December 31, 2018.

	Option-based Awards					Share-based Awards		
Name	Date of Grant	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price ($)	Option Expiration Date	Value of Unexercised In-the-Money Options ($)[1]	Number of Shares or Units of Shares that Have Not Vested (#)	Market or Payout Value of Share-Based Awards that Have Not Vested ($)	Market or Payout Value of Vested Share-Based Awards Not Paid Out or Distributed[2] ($)
Louis-Philippe Carrière		—	—	—	—	—	—	321,277
Christopher Cole		—	—	—	—	—	—	—
Pierre Fitzgibbon[3]		—	—	—	—	—	—	132,770
Birgit Nørgaard		—	—	—	—	—	—	—
Josée Perreault[4]		—	—	—	—	—	—	—
Suzanne Rancourt		—	—	—	—	—	—	65,534
Pierre Shoiry	March 26, 2014 March 27, 2015 January 1, 2016	91,304 105,690 110,190	35.45 41.69 43.17	March 25, 2024 March 26, 2025 December 31, 2025	2,120,079 1,794,616 1,707,945	—	—	2,828,129

(1) Value of the unexercised in-the-money Options at fiscal year-end is calculated based on the difference between the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and the Option exercise price, multiplied by the number of unexercised Options.

(2) Consist of DSUs and, in the case of Mr. Shoiry, PSUs, including DSUs and PSUs issued as Dividend Equivalents earned during 2018, but not yet credited thereto. The value of DSUs that have vested but not been paid out at fiscal year-end is determined by multiplying the number of vested DSUs held as at December 31, 2018 by the closing price of the Shares on the TSX on December 31, 2018 of $58.67. The value of PSUs that have vested but not been paid out at fiscal year-end is determined by multiplying the number of vested PSUs held as at December 31, 2018 by the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and based on a payout of 121%.

(3) Mr. Fitzgibbon resigned from the Board of Directors effective October 3, 2018.

(4) Ms. Perreault resigned from the Board of Directors effective December 31, 2018.

Incentive Plan Awards – Value Vested or Earned During the Year

The following table provides a summary of the value of vested share-based awards compensation earned by each non-executive Director during the Corporation's fiscal year ended December 31, 2018.

Name	Options-Based Awards – Value Vested During the Year ($)	Share-Based Awards – Value Vested During the Year ($)[1]	Non-Equity Incentive Plan Compensation – Value Earned During the Year ($)
Louis-Philippe Carrière	—	201,515	—
Christopher Cole	—	—	—
Pierre Fitzgibbon[2]	—	71,284	—
Birgit Nørgaard	—	—	—
Josée Perreault[3]	—	—	—
Suzanne Rancourt	—	37,232	—
Pierre Shoiry[4]	—	2,565,241	—

(1) The value of DSUs that have vested during the year is determined by multiplying the number of units that have vested during 2018 by the closing price of the Shares on the TSX on each grant date. DSUs are paid quarterly. The amounts shown in this column include DSUs issued as Dividend Equivalents earned during 2018, but not yet credited thereto. Vested DSUs become payable once employment with the Corporation is terminated for any reason other than for cause.

(2) Mr. Fitzgibbon resigned from the Board of Directors effective October 3, 2018.

(3) Ms. Perreault resigned from the Board of Directors effective December 31, 2018.

(4) In the case of Mr. Shoiry, the value of share-based awards that have vested during the year also include PSUs that have vested on December 31, 2018. The value of such vested PSUs has been calculated based on the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and a payout of 121%. Mr. Shoiry's amount shown in this column also include PSUs issued as Dividend Equivalents earned during 2018, but not yet credited thereto.

Upcoming Changes to Director Compensation in 2019

On December 11, 2018, the Board, upon recommendation from the Governance, Ethics and Compensation Committee, approved a revised compensation program for non-executive Directors effective as of January 1, 2019. Following a benchmarking exercise conducted by Hugessen, it was recommended to increase the a) Director Share Ownership Requirement; and b) compensation paid to the non-executive Directors to be around the median of the Peer Group.

a) 2019 Director Share Ownership Requirement

Effective as of January 1, 2019, non-executive Directors will be required to own Shares or equity based awards, such as DSUs, having an aggregate value equivalent to five (5) times the Cash-Based Component of their respective annual retainer (the "**2019 Director Share Ownership Requirement**"), whereas non-executive Directors were previously required to own Shares or equity based awards, such as DSUs, having an aggregate value equivalent to three (3) times the Cash-Based Component of their respective annual retainer. A one-year additional transition period for those Directors who do not meet their minimum shareholding requirement as at December 31, 2019 was granted, therefore the 2019 Director Share Ownership Requirement is to be progressively achieved over a period of five (5) years from their appointment to the Board, or prior to December 31, 2020, whichever is later.

b) 2019 Compensation Program for Non-Executive Directors

The following table displays the annual retainers, effective January 1, 2019, for all non-executive Directors. All Directors are paid in Canadian dollars, except for the Chairman, who is paid in GBP.

Director Position	Annual Retainer for 2019
Chairman of the Board	GBP 240,000
Vice Chairman of the Board	$300,000
Chair of the Audit Committee	$210,000
Chair of the Governance, Ethics and Compensation Committee	$205,000
Member of the Audit Committee	$190,000
Member of the Governance, Ethics and Compensation Committee	$185,000
Director	$180,000

Disclosure of Corporate Governance Practices

We consider strong and transparent corporate governance practices to be an important factor in the overall success of the Corporation and we are committed to adopting and adhering to the highest standards in corporate governance. The Corporation's corporate governance guidelines (the "**Corporate Governance Guidelines**") adopted by the Board on December 11, 2015 and as amended from time to time, which are available on our website at www.wsp.com, reflect this commitment. The Corporation revises the Corporate Governance Guidelines on an ongoing basis in order to respond to regulatory changes and the evolution of best practices.

As a Canadian reporting issuer with securities listed on the TSX, the Corporation complies with all applicable rules adopted by the Canadian Securities Administrators (the "**CSA**"). The Corporation also complies with the CSA Audit Committee Rules. The CSA Audit Committee Rules include requirements regarding audit committee composition and responsibilities, as well as reporting obligations with respect to audit related matters. Reference is made to the section entitled "About the Audit Committee" of the Corporation's AIF available on www.sedar.com and on our website at www.wsp.com, and which may be obtained free of charge, on request, from the Senior Vice President, Investor Relations and Communications of the Corporation.

The Corporation also complies with National Instrument 58-101 - *Disclosure of Corporate Governance Practices* (the "**CSA Disclosure Instrument**") and National Policy 58-201 - *Corporate Governance Guidelines* (the "**CSA Governance Policy**"). The Corporation believes that its corporate governance practices meet and exceed the requirements of the CSA Disclosure Instrument and the CSA Governance Policy, as reflected in the disclosure made hereunder.

The Board of Directors has two permanent committees: the Audit Committee and the Governance, Ethics and Compensation Committee. The following descriptions of the Corporate Governance Guidelines, the Board of Directors, the Committees, and other matters reflect the Corporation's compliance with the CSA Disclosure Instrument, the CSA Governance Policy and Canadian corporate governance best practices.

The Board of Directors has approved the disclosure of the Corporation's corporate governance practices described below, on the recommendation of the Governance, Ethics and Compensation Committee.

Ethical Business Behaviour and Code of Conduct

Sound, ethical business practices are fundamental to the Corporation's business. The Corporation has a Code of Conduct and ancillary policies related to ethical business practices, including an Anti-Corruption Policy, a Gifts, Entertainment and Hospitality Policy, and a Working with Third Parties Policy (collectively, the "**Code**"). The Code applies to the Corporation's Directors and officers, employees and contract workers. The Code requires strict compliance with legal requirements and sets the Corporation's standards for ethical business conduct. Topics addressed in the Code include, among others, business integrity, conflicts of interest, insider trading, use of corporate assets, fraudulent or dishonest activities, personal and confidential information, fair dealings with other people and organizations, employment policies, and reporting suspected non-compliance with the Code.

The Code is introduced by way of an ongoing structured training and communications program. This namely ensures that, on a regular basis, the Corporation's Directors and officers, employees and contract workers review the most current policies of the Corporation and underlying guidelines in place. Training is notably aimed at recognizing issues and escalating them in the organization for effective measures to be implemented in a timely fashion. As for new-hires, the training has been incorporated into the induction process. Additional specialized training is provided for specific employees, where it is determined that such training would be beneficial.

The Governance, Ethics and Compensation Committee has the responsibility of overseeing the interpretation of the Code. The Chief Ethics and Compliance Officer is responsible for the day-to-day interpretation and application of the Code, for proposing adjustments to the Code and for ensuring that the associated training program is duly implemented throughout the Corporation. The Code is regularly reviewed and updated. The Chief Ethics and Compliance Officer reports on this process on an annual basis and proposes any changes for review to the Governance, Ethics and Compensation Committee.

The Code provides that each of the Corporation's Directors and officers, employees and contract workers has an obligation to report violations or suspected violations of the Code. The Corporation will ensure that there is no retaliation against anyone for making a report in good faith. In addition, the Corporation's Business Conduct Hotline provides a means to raise issues of concern confidentially and anonymously with a third-party service provider. Any information received is processed by an independent party, the Chief Ethics and Compliance Officer, or the Vice President, Internal Audit who are required to advise the Chair of the Governance, Ethics and Compensation Committee or the Audit Committee, as applicable. Pursuant to the Code, the Chief Ethics and Compliance Officer is charged with the responsibility for maintaining the Business Conduct Hotline and ensuring that all alleged Code violations are investigated. The Code is available on the Corporation's website at www.wsp.com and on SEDAR at www.sedar.com.

Shareholder Engagement

Reaching out to stakeholders and listening to their opinions is an important value of the Corporation and is crucial in understanding our investors' concerns and sentiment. As such, the Board seeks to engage, primarily through its Chairman, Vice Chairman and CEO, in ongoing constructive dialogue with Shareholders and other stakeholders on a wide range of topics, including executive compensation and governance matters.

The Corporation engages with Shareholders through a variety of channels, including the Corporation's website at www.wsp.com, quarterly conference calls and periodic investor day meetings or similar events (breakfasts, site visits) (see page 32 for additional details).

WSP's communications with Shareholders and the investment community generally is primarily under the responsibility of our Senior Vice President, Investor Relations and Communications, who can be contacted by mail, phone or email at:

Investor Relations
WSP Global Inc.
1600 René-Lévesque Blvd. West
11th Floor
Montreal, Quebec, H3H 1P9
Attn: Isabelle Adjahi, Senior Vice President, Investor Relations and Communications
438-843-7548
isabelle.adjahi@wsp.com

Shareholders may also communicate directly with members of the Board, including the Chairman, through the Corporate Secretary (being the Board's designated agent to receive and review communications addressed to it or to an individual Director), by directing communications by mail to WSP Global Inc., c/o Corporate Secretary, 1600 René-Lévesque Blvd. West, 11th Floor, Montreal, Quebec, Canada, H3H 1P9, marking the envelope "Confidential". All topics that are appropriate for the Board to address will be forwarded to the indicated addressee.

The Chairman and other Directors are also available to answer Shareholders' questions at the Meeting and at any other meeting of Shareholders.

Continuous Disclosure and Disclosure Policy

The Corporation has adopted a Disclosure Policy to provide guidelines with respect to the dissemination and disclosure of information to the investment community and Shareholders. The objectives of the Disclosure Policy seek to ensure that communications are timely, accurate and broadly disseminated in accordance with applicable legislation, and sound disclosure practices which maintain the confidence of the investment community, including investors, in the integrity of the Corporation's information.

Sound disclosure practices are the most valuable means of communicating with Shareholders, and the Corporation believes that through its annual and ad hoc disclosure documents, including, among others, this Circular, the Corporation's financial statements and accompanying management's discussion and analysis, annual information form, annual report, quarterly interim reports and conference calls, periodic press releases, as well as the Corporation's website, it effectively communicates its commitment to not only meet but exceed governance standards, be they imposed by legislation or encouraged as best practices. The Corporation is committed to providing timely, accurate, and balanced disclosure of material information consistent with legal and regulatory requirements.

The Corporation has established a public disclosure committee to support the CEO and CFO in identifying material information and determining how and when to disclose that material information and to seek to ensure that all material

disclosures comply with relevant securities legislation. The public disclosure committee is composed of the CEO, the CFO, the Chief Legal Officer and the Senior Vice President, Investor Relations and Communications of the Corporation and reviews and evaluates disclosures and potential disclosures prior to the release of the Corporation's quarterly, annual and other disclosure documents. Dissemination to the public of material information, both financial and non-financial, which was previously undisclosed, must be reviewed and approved in advance by the public disclosure committee.

Say on Pay

The Corporation has adopted a "say on pay" policy, the purpose of which is to provide appropriate Director accountability to the Shareholders for the Board's compensation decisions, by giving Shareholders a formal opportunity on an annual basis to provide their views on the disclosed objectives of the executive compensation plans of the Corporation and on the plans themselves.

The Governance, Ethics and Compensation Committee carefully considers Shareholder feedback on the Corporation's executive compensation programs, and works to continue the design and implementation of compensation programs that promote the creation of Shareholder value and further our executive compensation philosophy in a challenging economic environment.

As this is an advisory vote, the results are not binding upon the Board; however, the Board will take the results of the vote into account, as appropriate, when considering future compensation policies, procedures, and decisions and in determining whether there is a need to significantly increase their engagement with Shareholders on compensation and related matters. The Corporation discloses the results of the Shareholder non-binding advisory vote as part of its report on voting results for the Meeting. The Board discloses to Shareholders, no later than in the management proxy circular for its next annual meeting, the changes to the compensation plans made or to be made (or why no such changes were made) by the Board as a result of its engagement with Shareholders.

At the 2018 annual meeting of Shareholders held on May 10, 2018, the non-binding advisory vote on executive compensation received significant Shareholder support with 98.54% of affirmative votes. The Board and the Governance, Ethics and Compensation Committee greatly value the Shareholder feedback on executive compensation and, after considering the 2018 results, worked to continue the design and implementation of compensation programs that promote the creation of Shareholder value and align the interests of executive officers with those of Shareholders.

Majority Voting Policy

The Board of Directors has adopted a Majority Voting Policy that provides that, in an uncontested election of Directors, a nominee director who receives less than a majority of the votes cast with respect to his or her election must immediately tender his or her resignation to the Board. The Board of Directors will accept the resignation absent exceptional circumstances and will announce its decision in a press release within 90 days following the meeting of Shareholders resulting in the resignation.

Investor Days and Related Events

The Corporation holds "investor days" or similar events (breakfasts, site visits) on a periodic basis at which Management can exchange with Shareholders and other stakeholders of the Corporation. During these meetings, Management provides an update to Shareholders and other stakeholders on the Corporation's operations, performance and outlook while making sure to respect its disclosure obligations and avoid any selective disclosure. These meetings also provide Shareholders and stakeholders with the opportunity to raise questions and concerns to Management regarding the Corporation's business and affairs.

Composition of the Board of Directors

Board Size

The Board of Directors is currently comprised of seven members and has fixed at eight the number of Directors to be elected at the Meeting, being Louis-Philippe Carrière, Christopher Cole, Linda Galipeau, Alexandre L'Heureux, Birgit Nørgaard, Suzanne Rancourt, Paul Raymond and Pierre Shoiry. All of the Nominee Directors are currently members of the Board of Directors, with the exception of Paul Raymond, and six of them were elected as such by the Shareholders of the Corporation at the annual meeting of Shareholders held on May 10, 2018. Ms. Galipeau was appointed as a member of the Board of Directors effective January 1, 2019.

Board and Committee Organization

The Board of Directors and Committee meetings are generally organized as follows:

- five regularly scheduled Board meetings each year, including a one-day meeting to consider and approve the Corporation's strategy;
- five regularly scheduled Audit Committee meetings per year and five regularly scheduled Governance, Ethics and Compensation Committee meetings per year;
- special Board or Committee meetings are held when deemed necessary; and
- members of Management and certain other key employees are regularly called upon to give presentations at the Board and Committee meetings.

The Board and the Committees each have a one-year working plan of items for discussion. These working plans are reviewed and adapted at least annually to ensure that all of the matters reserved to the Board and the Committees, as well as other key issues, are discussed at the appropriate time.

The Chairman sets Board agendas with the President and CEO and works together with the CFO and Corporate Secretary to make sure that the information communicated to the Board and the Committees is accurate, timely and clear. This applies in advance of regularly scheduled meetings and, in exceptional circumstances, between these meetings. In addition, Directors are provided with Board and Committee materials electronically in advance of each meeting.

The Board reviews reports from each of the Committees and receives, from time to time, reports from members of Management, other key employees, the Corporate Secretary, as well as outside consultants as deemed necessary. The Board and the Committees may also seek independent professional advice to assist them in their duties, at the Corporation's expense.

Independence of Directors

The charter of the Board of Directors provides that the Board of Directors must at all times be constituted of a majority of individuals who are independent within the meaning of the CSA Audit Committee Rules. Please refer to the section entitled "Director Independence" on page 21 of this Circular for the determination of the Board on the independence of the Directors.

Non-Executive Directors' Meetings

The agenda for each Board and Committee meeting provides for non-executive Directors to have the opportunity to meet in camera without Management present at the end of each regularly scheduled meeting of the Board or Committees. The in camera portion of such meetings encourages open and candid discussions among non-executive Directors and provides them with an opportunity to express their views on key topics before decisions are taken. During the fiscal year ended December 31, 2018, the non-executive Directors either met or determined that it was not necessary to hold an in camera meeting following each regularly scheduled Board, Audit Committee and Governance, Ethics and Compensation Committee meeting.

Position Descriptions

The Board of Directors has developed written position descriptions for the Chairman, the CEO and the Chair of each of the Audit Committee and the Governance, Ethics and Compensation Committee. Summaries of the foregoing position descriptions are attached to this Circular as *Schedule B*, and the complete text of the position descriptions can be found on the Corporation's website at www.wsp.com. These descriptions are reviewed annually by the Governance, Ethics and Compensation Committee and are updated as required.

Directors' Attendance Policy

The Corporate Governance Guidelines provide that each Director must have a combined attendance rate of 75% or more at Board and Committee meetings to stand for re-election, unless exceptional circumstances arise such as illness, death in the family or other similar circumstances.

Non-attendance at Board and Committee meetings is rare, and typically occurs when an unexpected commitment arises, a special meeting is convened on short notice or when there is a prior conflict with a meeting which had been scheduled and could not be rearranged. Given that Directors are provided with Board and Committee materials in advance of the meetings, Directors who are unable to attend are encouraged to provide comments and feedback to either the Chairman, the Chair of the relevant Committee or the Corporate Secretary, who then seek to ensure those comments and views are raised at the meeting. In addition, Directors who are unable to attend a particular meeting are encouraged to contact the Corporate Secretary as soon as practicable thereafter to be provided with an update and a briefing of discussions and resolutions passed at the meeting. Please see the section entitled "Board and Committee Attendance" on page 21.

Nomination Process and Skills Matrix

The Governance, Ethics and Compensation Committee is composed entirely of independent Directors and its responsibilities include among other things:

- planning succession for the Board of Directors, including for the Chair of the Board of Directors and the Chair of Committees;
- identifying and recommending to the Board of Directors suitable director candidates;
- determining the composition of the Board of Directors;
- implementing and conducting a process to assess, on an annual basis, the effectiveness of the Board of Directors, the Committees, and the individual performance of each Director; and
- nominating and evaluating, as well as planning succession for, the CEO and other executive officers of the Corporation.

As part of this process, the Governance, Ethics and Compensation Committee considers what competencies, skills and personal attributes the Board of Directors, as a whole, should possess, then assesses the skill sets and personal attributes of current Directors and identifies any additional skills sets or personal attributes deemed to be beneficial. Ultimately, candidates are assessed on their individual qualifications, diversity, breadth of experience, expertise, integrity and character, sound and independent judgment, insight and business acumen. Directors are expected to display these personal qualities and apply sound business judgment to help the Board make wise decisions and provide thoughtful and informed counsel to Management.

The Governance, Ethics and Compensation Committee uses a skills matrix to identify those areas which are necessary for the Board to carry out its mandate effectively and to regularly consider board composition and anticipated board vacancies in light of its stated objectives and policies. The skills matrix was updated by the Governance, Ethics and Compensation Committee in the fiscal year ended December 31, 2016 and remained the same for the fiscal year ended December 31, 2017 and the fiscal year ended December 31, 2018. The following table reflects the diverse skill set of the Nominee Directors and identifies the specific experience, expertise and personal attributes brought by each individual Nominee Director.

		Louis-Philippe Carrière	Christopher Cole	Linda Galipeau	Alexandre L'Heureux	Birgit Nørgaard	Suzanne Rancourt	Paul Raymond	Pierre Shoiry
Industry Experience	Engineering and Construction		✓		✓	✓		✓	✓
	Professional Services		✓	✓	✓	✓	✓	✓	✓
	Project Management		✓		✓	✓	✓	✓	✓
	Transportation	✓	✓		✓	✓		✓	✓
	Natural Resources and Energy		✓		✓	✓			✓
	Financial Services	✓	✓	✓	✓	✓	✓	✓	✓
	Technology / I.T.	✓	✓	✓		✓	✓	✓	
Business Expertise	Business Experience in a Global Organization	✓	✓	✓	✓	✓	✓	✓	✓
	Acquisition / M&A	✓	✓	✓	✓	✓	✓	✓	✓
	International Strategy Planning	✓	✓	✓	✓	✓	✓	✓	✓
	Capital Structuring and Capital Markets	✓	✓	✓	✓			✓	✓
	Risk Management and Risk Mitigation	✓	✓	✓	✓	✓	✓	✓	
	Human Resources	✓	✓	✓		✓	✓	✓	
	Health, Safety and Sustainability		✓	✓		✓			✓
	Public Sector Experience		✓			✓	✓	✓	✓
	Public Company Board and Governance Experience	✓	✓	✓	✓	✓	✓	✓	✓
	CEO/Senior Executive Experience	✓	✓	✓	✓	✓	✓	✓	✓
	Executive Compensation	✓	✓	✓	✓	✓	✓	✓	✓
	Audit / Accounting	✓		✓	✓	✓	✓	✓	✓
	Financial Literacy	✓	✓	✓	✓	✓	✓	✓	✓
Diversity	Gender	M	M	F	M	F	F	M	M
	Age	58	72	55	46	60	60	55	61
	Geography	CDN	U.K.	USA	CDN	DEN	CDN	CDN	CDN

Diversity

The Corporation is committed to maintaining high standards of corporate governance in all aspects of the Corporation's business and affairs, including diversity and inclusion, and recognizes the importance and benefit of having a Board and Management comprised of highly talented and experienced individuals having regard to the need to foster and promote diversity among Directors and Management.

The Corporation has written policies in place with respect to the identification and nomination of women Directors. For instance, the Corporate Governance Guidelines provide that, when identifying candidates to nominate for election to the Board or in its review of executive officer succession planning and talent management, the Governance, Ethics and Compensation Committee considers objective criteria such as talent, experience and functional expertise, as well as criteria that promote diversity such as gender, ethnicity, age and other factors. The Committee also considers the level of representation of women on the Board and in executive officer positions in the search for and selection of candidates and, where necessary, seeks advice from qualified external advisors to assist in this search, and issues directives to such advisors to include qualified candidates of both genders when providing their recommendations. The Governance, Ethics and Compensation Committee, in collaboration with the Chairman of the Board, conducts periodic evaluations and assessment of individual board members as well as Committees and the Board as a whole to identify strengths and areas of improvement.

Moreover, the Corporation adopted a "Global Diversity and Inclusion Policy" that highlights the Corporation's view that diversity is critical in building a culture of innovation, engagement and performance. This policy applies across WSP and all employees and contractors. Pursuant to this policy, each region has or will develop a diversity actions plan in accordance with the local legislation and cultural requirement to comply with and fully embrace, support and promote the global diversity policy. WSP assesses on a continuous basis the effectiveness of this policy statement at achieving the organization's diversity objectives, monitors the implementation of these guidelines and reports annually to the Governance, Ethics and Compensation Committee.

Management views gender balance as a business and economic opportunity and is determined to enhance the Corporation's competitive edge by tapping into 100% of the market and 100% of the talent pool. We believe that in order to drive change, we must equip our leaders in all regions and cultures of the world with a strategic understanding and the management skills to work across genders. WSP held in 2017 and 2018 strategic sessions for leaders to build, debate and own the business case for gender balance, share and discuss the current situation and how to understand it, raise awareness on how to achieve sustainable improvements in balance in leadership, and be equipped with the skills and competencies to implement the requisite changes.

As set out in our 2019-2021 global strategic plan, we have an objective that 30% of management positions (which includes business leaders and middle management) be held by women by 2021. Moreover, in 2018, the CEO became a member of the 30% Club Canada and the Corporation joined Catalyst as a global member. The Board will therefore continue to promote its diversity objectives through the initiatives set out in, among other things, the Corporate Governance Guidelines and its 2019-2021 global strategic plan, with a view to identifying and fostering the development of a suitable pool of candidates for nomination or appointment over time. The Governance, Ethics and Compensation Committee, in its periodic review of the composition of the Board and executive officer appointments, assesses the effectiveness of the Board nomination process and senior management appointment process in achieving the Corporation's diversity objectives, and monitors the implementation of these guidelines.

As of March 28, 2019, three out of our eight Nominee Directors are women, representing 37.5% of our Directors. The Board believes the effectiveness of the current nomination process in achieving the Corporation's gender diversity objectives is demonstrated as all three women on the Board have been nominated after 2013. As of March 28, 2019, there are 7 women out of 26 members of WSP's senior management team, representing 26.9% of WSP's senior management team.

Geographic Location

As the Corporation is engaged in wide-ranging operations, conducts business in countries around the world with global partners and operates within complex political and economic environments, the Board attempts to recruit and select Board candidates that have global business understanding and experience. Many current Directors also have extensive international business experience.

The following table illustrates the geographic location of the Nominee Directors:

Country of Residence	Nominee Directors
Canada	Louis-Philippe Carrière Alexandre L'Heureux Suzanne Rancourt Paul Raymond Pierre Shoiry
England	Christopher Cole
Denmark	Birgit Nørgaard
U.S.	Linda Galipeau

Serving on the Board of Directors

Orientation

The Board of Directors considers that orienting and educating new Directors is an important element of ensuring responsible governance and is committed to the ongoing professional development of its Directors. Suitably-oriented and educated Directors support the Board's objective to provide strategic value and oversight to the President and CEO and to Management. The Corporation's Directors Orientation Plan and Development Program (the "**Orientation and Development Plan**") seeks to ensure that each new Director fully understands the Corporation's governance structure, the role of the Board and the Committees, the expectations in respect of individual performance and the Corporation's operations and working environment.

Pursuant to the Orientation and Development Plan, new Directors are provided with an extensive information package on the Corporation and its industry, including:

- the history of the Corporation, its articles, by-laws and corporate chart;
- the Corporation's current strategic plan and operating budget;
- the previous years' minutes, investor relations reports, annual reports and key continuous disclosure documents of the Corporation;
- the charters and work plans of the Board and the Committees, and the position descriptions of the Chairman, CEO, CFO, COO and the Chair of each of the Committees;
- the current executive and director compensation programs of the Corporation, and Directors and Officers insurance policy;
- the Corporation's current policies and procedures, including the Code; and
- information on the Corporation's business sectors and on the industry.

New members of the Board of Directors are also invited to attend orientation sessions with members of Management and other Directors to discuss the Corporation's business, industry, financial performance and comparative industry data, its strategic direction, key performance indicators and its current performance, challenges and opportunities, and the Corporation's major risks and risk management strategy. Within a year of the appointment of a new Director, the Chairman and Corporate Secretary will meet with such Director to obtain feedback on the orientation process, determine comfort level with the Director's role, and to determine if any additional information is required by such Director.

Continuing Education

In accordance with the Orientation and Development Plan, the Board of Directors, in consultation with the Governance, Ethics and Compensation Committee, encourages professional development and continuing education of Directors.

The development program is tailored to the specific needs, skills and competencies of the Board, the Committees and each individual Director and customized to the strategic environment of the Corporation. The Corporation also provides quarterly reports on the operations and finance of the Corporation to the Directors as well as analyst studies, industry studies, investor relations reports and legislative updates that are relevant to the Corporation's operations and benchmarking information. Moreover, Directors receive various presentations from Management at each regularly scheduled meeting on a variety of subjects relevant to the Corporation's business, industry, and legal or other environment, in addition to being provided with updates and short summaries of relevant information. Directors also receive presentations from external sources on a variety of topics impacting the Corporation's business and on global economic environment. Directors are also invited to attend site visits which are generally organized on a yearly basis, as appropriate. Documentation and selected presentations are also provided to the Directors to ensure that their knowledge and understanding of the Corporation's business remains current. Moreover, Directors are encouraged to attend seminars and other educational programs and the Corporation undertakes to assume the costs of such courses.

In 2018, members of the Board and the Committees participated in the following presentations and events:

Date	Topic	Presenters	Attendees
March 14, 2018	South America business and market overview presentation	Ali Ettehadieh, Executive Vice President	All Directors
May 8, 2018	Global Clients and Global Property & Buildings business presentation	Tom Smith, Global Director, Property and Buildings	All Directors
August 7, 2018	Nordics business and market overview presentation	Magnus Meyer, Managing Director, Nordics	All Directors
August 7, 2018	UK business and market overview presentation	Mark Naysmith, CEO, UK and South Africa	All Directors
August 8, 2018	Global Operational review presentation	Paul Dollin, COO	All Directors
November 6, 2018	Australia and New Zealand business and market overview presentation	Guy Templeton, President and CEO, Australia and New Zealand	All Directors
November 6, 2018	Global Environment business presentation	André-Martin Bouchard, Global Director, Environment & Resources	All Directors
November 6, 2018	Asia and Canada business and market overview presentation	Paul Dollin, COO	All Directors
November 6, 2018	Executive compensation programs presentation	Hugessen	All Directors
November 6, 2018	Global Economic Trends	Stéfane Marion, Chief Economist and Strategist for National Bank	All Directors
December 10, 2018	Canadian market overview and budget presentation	Paul Dollin, COO	All Directors
December 10, 2018	USA market overview and budget presentation	Greg Kelly, CEO, USA	All Directors

Mechanisms for Board Renewal

Term Limits and Mandatory Retirement

The Board does not believe in term limits or mandatory retirement, nor does it believe that Directors should necessarily expect to be re-nominated annually. On an ongoing basis, a balance must be struck between ensuring that there are fresh ideas and viewpoints available to the Board while not losing the insight, experience and other benefits of continuity contributed by longer serving Directors. As such, the Board has determined that the tenure of Directors will not be subject to a mandatory retirement age or a maximum term limit.

To provide for adequate board renewal, the Governance, Ethics and Compensation Committee conducts the Director assessments described below, the results of which are used to assess the performance of the Board and determine improvements to Board composition. The Board has demonstrated the effectiveness of its approach as a mechanism for Board renewal as only three out of the eight Nominee Directors, representing 37.5% of the Nominee Directors, were Directors of the Corporation in 2013 and the composition of the Board has changed at every annual meeting of Shareholders between 2011 and 2017, inclusively.

Assessments

The Governance, Ethics and Compensation Committee has developed a process in order to assess the effectiveness and performance of the Board, its Chairman, the Committees and their respective Chairs, as well as to appraise such member's own participation on the Board of Directors. The Board conducts a comprehensive survey of all of the Directors annually to this effect. During 2018, the Directors completed a Director self-evaluation questionnaire as well as an evaluation of the effectiveness of the Board and Committees and Chairman evaluation questionnaires, and the Chairman conducted peer assessment interviews with each individual Director. This provides an opportunity for Directors to provide their feedback on the effectiveness and performance of the Board and the Committees. The results from this assessment were collated and discussed by the Chairman at a meeting of the Board of Directors, in addition to being discussed individually with Directors.

Role and Duties of the Board of Directors

Board Mandate

The Board of Directors is responsible for the stewardship of the Corporation. To carry out this role, the Board oversees the conduct, direction, and results of the business. In turn, Management is mandated to conduct the day-to-day business and affairs of the Corporation and is responsible for implementing the strategies, goals, and directions approved by the Board.

The duties and responsibilities of the Board are to supervise the management of the business and affairs of the Corporation and to act with a view towards the best interests of the Corporation. In discharging its mandate, the Board is responsible for the oversight and review of the development or approval of, among other things, the following matters:

- the strategic planning process of the Corporation;
- a strategic plan for the Corporation that takes into consideration, among other things, the longer-term opportunities and risks of the business;
- annual capital and operating budgets that support the Corporation's ability to meet its strategic objectives;
- the entering into, or withdrawing from, lines of business that are, or are likely to be, material to the Corporation;
- material acquisitions and divestitures;
- succession planning, including the appointment of the CEO and CFO;
- a communications policy for the Corporation to facilitate communications with investors, other interested parties and the investment community more generally;
- a reporting system that accurately measures the Corporation's performance against its strategic plan; and
- the integrity of the Corporation's internal control and management information systems.

The Board also has the responsibility of managing the risks to the Corporation's business and must:

- confirm that Management identifies the principal risks of the Corporation's business and implements appropriate systems to manage these risks; and
- evaluate and assess information provided by Management and others about the effectiveness of the Corporation's risk management systems.

The Board also has the mandate to assess the effectiveness of the Board as a whole, the Committees and the contribution of individual Directors.

The Board discharges its responsibilities directly and through its Committees, currently consisting of the Audit Committee and the Governance, Ethics and Compensation Committee.

The Board of Directors has adopted a written charter which sets out, among other things, its role and responsibilities. The charter of the Board of Directors, as amended from time to time, is attached as *Schedule A* of this Circular.

Strategic Planning

The Board participates directly or through the Committees in developing and approving the mission of the Corporation's business, its objectives and goals and the strategy for their achievement.

Management is responsible for developing a strategic plan for the Corporation, which it presents to the Board each year either for approval or to update the Directors on the existing strategic plan, as the case may be. A one-day meeting is scheduled annually to discuss strategic issues such as corporate opportunities and the main risks faced by the Corporation's business and to consider and approve, as applicable, the Corporation's strategic plan for the next few years. The implementation of corporate strategy and important strategic issues are reviewed and discussed regularly at Board meetings and Management presents any important changes to strategy to the Board as the need arises throughout the year. Furthermore, the Board oversees the implementation of the strategic plan on a quarterly basis and monitors the Corporation's performance against the strategic plan using key performance metrics.

In connection with the 2019-2021 global strategic planning, the Board elaborated the tenets and key objectives for the next three years and worked with Management to develop the Corporation's strategy. The 2019-2021 global strategic plan, approved by the Board in December 2018, is the result of this exercise.

Enterprise Risk Management

The Board provides oversight and carries out its risk management mandate primarily through the Audit Committee. The Audit Committee's oversight role is designed to seek to ensure that Management has designed appropriate methods for identifying, evaluating, mitigating and reporting on the principal risks inherent to the Corporation's business and strategic direction and further that the Corporation's systems, policies and practices are appropriate and address the Corporation's principal risks. The Audit Committee is not involved in the day-to-day risk management activities; rather, it is tasked with ensuring that Management has an appropriate risk management system which allows Management to bring to the Board's attention the Corporation's principal risks. Finally, the Audit Committee is responsible for reviewing the Corporation's risk appetite, risk tolerance and risk retention philosophy.

Succession Planning

The Board of Directors is responsible for seeking to ensure that the Corporation is supported by an appropriate organizational structure, including a President and CEO and other executives who have complementary skills and expertise to provide for the sound management of the business and affairs of the Corporation and its long-term profitability.

To provide for the foregoing, the Board of Directors delegates this function to the Governance, Ethics and Compensation Committee that advises the Board and Management in relation to its succession planning including the appointment and monitoring of senior Management. To limit the risk that the Corporation's operations suffer from a succession gap, succession planning is reviewed annually to facilitate talent renewal and smooth leadership transitions for key strategic roles and to identify areas of improvement.

The Corporation has a succession plan for the President and CEO and other key members of senior Management, including potential talent to act as emergency replacement. The CEO emergency succession plan provides for replacement alternatives for specific competencies, skills and readiness to act as CEO for a short term (less than 90 days) and long term (more than 90 days) absence. Given that the CEO of the Corporation was appointed in 2016, the long-term succession plan is still in the process of being clearly defined. The Corporation aims to maintain a succession plan listing, for each critical position, a pool of "ready now", "short-term ready within two years", "long-term ready in more than two years", and "ready long term" candidates, both internally and externally. The succession plan fits into the Corporation's overall talent management framework and is the subject of an increased focus by Management, the Board and its Committees. The succession plan is used within the Corporation to identify succession pipeline across sectors and geographies but is intrinsically a continuous and evolving process.

Committees of the Board of Directors

The Board of Directors has an Audit Committee and a Governance, Ethics and Compensation Committee. The roles and responsibilities of each of the Audit Committee and the Governance, Ethics and Compensation Committee are set out in formal written charters which are available on the Corporation's website at www.wsp.com. These charters are reviewed annually so that they reflect best practices as well as applicable regulatory requirements.

The following section includes reports from each of the Committees, which describe its members, responsibilities and activities.

Audit Committee

The Audit Committee is currently composed of three members: Louis-Philippe Carrière (Chair) and Suzanne Rancourt, who have both been members of the Audit Committee since at least the last annual meeting of Shareholders held on May 10, 2018, and Pierre Shoiry, who was appointed as an interim member of the Audit Committee in replacement of Pierre Fitzgibbon on October 3, 2018. Louis-Philippe Carrière and Suzanne Rancourt are each independent from the Corporation as required the CSA Audit Committee Rules, whereas Pierre Shoiry is not independent from the Corporation as he was until October 31, 2016 the President and Chief Executive Officer of WSP and has also been working with the Chief Executive Officer and the Management team in respect of acquisition activities and other strategic opportunities. He was appointed as an interim member of the Audit Committee in reliance on the exemption provided for in section 3.5 of National Instrument 52-110 – *Audit Committees*, which allows the appointment of an audit committee member who is not independent for a period ending on the later of (i) the next annual meeting of the Corporation and (ii) the date that is six months from the day the vacancy was created. Thus, due to the unexpected resignation of Mr. Fitzgibbon and interim appointment of Mr. Shoiry, two out of three members of the Audit Committee are independent. Following the Meeting, it is expected that Paul Raymond, who is independent from the Corporation, will be appointed as a member on the Audit Committee to replace Mr. Shoiry, therefore the Audit Committee will be then again comprised only of independent directors. The Board has determined that the reliance on the exemption did not materially adversely affect the ability of the Audit Committee to act independently and to satisfy the other requirements of National Instrument 52-110 – *Audit Committees*. In addition, each of the members of the Audit Committee is "financially literate" within the meaning of the CSA Audit Committee Rules. For more information regarding the relevant education and experience of each member of the Audit Committee, please refer to the "Description of the Nominee Directors" section of this Circular on page 13.

The Board of Directors has adopted a written charter for the Audit Committee, which sets out the Audit Committee's key responsibilities, including, without limitation, the following:

- overseeing the quality, integrity and timeliness of the Corporation's financial statements;
- ensuring that adequate procedures are in place for the review of the Corporation's public disclosure documents;
- overseeing the Corporation's risk management systems;
- overseeing the work and reviewing the independence of the external auditors of the Corporation; and
- reviewing the Corporation's internal control system.

The Audit Committee met six times in 2018. In accordance with its internal work plan and its charter, the Audit Committee executed the following key projects throughout the course of the year:

- conducted a review of the services rendered by the Corporation's external auditors;
- conducted a review of the pre-approval policy for external auditors which provides for the pre-approval by the Audit Committee of all audit and non-audit services prior to engagement;
- conducted a review of the Financial Risk Management Policy and Public Disclosure Policy of the Corporation;
- approved a policy for the hiring of current or former external auditors employees; and
- oversaw the Corporation's Enterprise Risk Management program.

Please refer to the section of the Corporation's AIF entitled "About the Audit Committee" for additional information on the Audit Committee. The AIF is available on the Corporation's website at www.wsp.com and on SEDAR at www.sedar.com. The written charter of the Audit Committee is also available on the Corporation's website at www.wsp.com.

Governance, Ethics and Compensation Committee

The Governance, Ethics and Compensation Committee is currently composed of three members: Linda Galipeau (Chair), who was appointed as of January 1, 2019 to the Governance, Ethics and Compensation Committee in replacement of Josée Perreault, Birgit Nørgaard, who has been a member of the Governance, Ethics and Compensation Committee since the annual meeting of Shareholders held on May 10, 2013 and Christopher Cole, who was appointed to the Governance, Ethics and Compensation Committee in replacement of Pierre Fitzgibbon on October 3, 2018 as member and interim chair. Each of these individuals is independent from the Corporation within the meaning of the CSA Audit Committee Rules. The Governance, Ethics and Compensation Committee members have several years' experience in negotiating executive compensation and in managing governance, ethics and compensation in large businesses. For more information regarding the professional backgrounds of the Governance, Ethics and Compensation Committee members, please refer to the "Description of the Nominee Directors" section of this Circular on page 13.

The Board of Directors has adopted a written charter for the Governance, Ethics and Compensation Committee, which sets out the Committee's key responsibilities. The written charter of the Governance, Ethics and Compensation Committee is available on the Corporation's website at www.wsp.com.

The Governance, Ethics and Compensation Committee's key responsibilities include, among others, the following:

- develop a set of corporate governance guidelines for the Board's overall stewardship responsibility and the discharge of its obligations to the Corporation's stakeholders;
- review, report and, when appropriate, provide recommendations to the Board annually on the Corporation's policies, programs and practices relating to business conduct, including the Code;
- propose new candidates for election or appointment to the Board of Directors, and develop and review, as appropriate, an orientation and continuing education program for Directors;
- develop appropriate qualifications and criteria for the selection of Directors;
- conduct reviews of Director remuneration for Board and Committee services in relation to current industry practices;
- conduct periodic evaluations and assessment of individual board members and the Chairman, as well as the Committees and the Board as a whole, to identify strengths and areas of improvement;
- consider and recommend for approval by the Board of Directors the appointment of the CEO (in collaboration with the Chairman and Vice Chairman) and the CFO (in collaboration with the Chairman, Vice Chairman and CEO);
- together with the Chairman, review the performance of the CEO against pre-set specific performance criteria relevant to the compensation of the CEO and make recommendations to the Board on the compensation of the CEO based on these evaluations;
- together with the CEO, review the performance of the other executive officers of the Corporation against pre-set specific performance criteria relevant to their compensation and make recommendations to the Board on the compensation of these executive officers based on such evaluations;
- oversee the design, implementation and administration of any executive long-term or short-term incentive plans and the establishment of guidelines for any director or executive share ownership requirements; and
- conduct an annual review and approval of compensation disclosure.

The Governance, Ethics and Compensation Committee met five times in 2018. In accordance with its internal work plan and its charter, the Governance, Ethics and Compensation Committee executed the following key projects throughout the course of the year:

- in collaboration with Hugessen, conducted a review of the Directors' compensation and Director Share Ownership Requirement effective in 2019;
- in collaboration with Hugessen, conducted a review of the executive compensation program effective in 2019;
- conducted a review of the Code and Corporate Governance Guidelines; and
- in collaboration with the Chairman and Management, identified a new potential director and Chair of the Governance, Ethics and Compensation Committee who was appointed as a Director of the Corporation effective January 1, 2019 (Linda Galipeau).

Compensation Discussion & Analysis

Linda Galipeau

Letter from the Chair of the Governance, Ethics and Compensation Committee on Executive Compensation

The Governance, Ethics and Compensation Committee is pleased to provide you with an overview of the Corporation's executive compensation framework and its relationship to the long-term performance of the Corporation and to value creation for our Shareholders. Compensation of NEOs and other executives is closely tied to the performance of the Corporation through the Short Term Incentive Plan (STIP), which pays out on the basis of performance targets mainly related to consolidated and regional adjusted EBITDA[1], total and organic sales growth and DSO[2] performance, through grants of PSUs under the Long Term Incentive Plan (LTIP) which also vest on the basis of earnings per share growth and relative TSR, and through grants of RSUs and Options under the LTIP which are tied to WSP's share performance. In addition, the Corporation provides certain executives with the option to substitute their RSU awards with DSUs and to receive a portion of their STIP in the form of DSUs, increasing the long-term alignment of their interests with those of our shareholders.

We strongly believe in the transparent disclosure of all facets of our executive pay programs which we have sought to reflect in this Compensation Discussion & Analysis. In 2018, the "say on pay" advisory vote received 98.54% support from Shareholders signaling that the Shareholders support our executive pay programs. We believe we have the right balance between offering pay programs that reward short- and long-term performance appropriately while ensuring that pay remains fair in comparison to benchmarks and Shareholder expectations as WSP continues to grow and expand internationally.

WSP performance in 2018 and impact on pay outcomes[3]

2018 marked another milestone year with record net revenues[4] for the year ended December 31, 2018 of $6,020.6 million, an increase of 12.4% over the previous year. Despite challenges encountered in certain regions, WSP achieved global organic growth in net revenues of 3.5%, on a constant currency basis, in line with the Corporation's 2018 outlook, and delivered improvements in its adjusted EBITDA margin, which was 11.0% for the year ended December 31, 2018 compared to 10.4% in the previous year. During 2018, the Corporation also acquired four professional services firms representing approximately 5,395 employees, the largest one being the acquisition of Berger Group Holdings, Inc. For more information on WSP's performance, we invite you to review the 2018 Annual Report, which is available on the Corporation's website at www.wsp.com.

Ambitious STIP targets were set at the beginning of 2018 in light of the Corporation's prospects at such time and we are largely pleased with the level of achievement in respect of acquisition contributions, organic sales growth, adjusted EBITDA and DSO. The outlook on long-term incentive plans is positive with payouts remaining closely tied to the creation of shareholder value. The three-year earnings per share growth and relative TSR performance conditions for the 2016 PSU awards were met at 121% and the corresponding units have been valued and will be paid after March 31, 2019.

Evaluation of our compensation program

Given the considerable growth of WSP in recent years and in connection with the preparation and launch of the 2019-2021 global strategic plan, the Governance, Ethics and Compensation Committee performed a thorough review of executive compensation in 2018 and retained independent consultants to assist it in this task. Certain aspects were identified where we could improve our market competitiveness and changes to the executive compensation programs were implemented in 2018, effective 2019. Such changes will reflect an evolution of the existing executive compensation practices rather than a fundamental revamp and will be more fully described in the Corporation's management information circular in respect of the 2020 annual meeting of shareholders.

As always, we welcome your feedback on our compensation programs and disclosure.

Sincerely,

Linda Galipeau

Linda Galipeau
Chair of the Governance, Ethics and Compensation Committee

(1) Adjusted EBITDA is defined as earnings before financial expenses, income tax expenses, depreciation and amortization and acquisition and integration costs. Shareholders are cautioned that adjusted EBITDA should not be considered an alternative to net earnings for the period (as determined in accordance with IFRS) as an indicator of the Corporation's performance, or an alternative to cash flows from operating, financing and investing activities as a measure of the liquidity and cash flows.

(2) DSO (days sales outstanding) represents the average number of days to convert the Corporation's trade receivables (net of sales taxes) and costs and anticipated profits in excess of billings into cash, net of billings in excess of costs and anticipated profits. DSO is a non-IFRS measure.

(3) Net revenues, adjusted EBITDA and DSO are non-IFRS measures and, as such, do not have any standardized meaning prescribed under IFRS and may differ from similar computations as reported by other issuers, and accordingly may not be comparable. See the management discussion & analysis for the year ended December 31, 2018 included in the annual report of the Corporation, for explanations of these measures and reconciliations to the nearest IFRS measures.

(4) Net revenues are defined as revenues less direct costs for sub-consultants and other direct expenses that are recoverable directly from clients. Shareholders are advised that net revenues should not be construed as an alternative to revenues for the period (as determined in accordance with IFRS) as an indicator of the Corporation's performance.

Executive Pay Program and Practices

Our Named Executive Officers in 2018

The following discussion describes the elements of the executive compensation program of the Corporation, with particular emphasis on the process for determining compensation awarded to, earned by, paid to or payable to the President and CEO, the CFO and each of the three other most highly compensated executive officers of the Corporation, including any of its subsidiaries, in the Corporation's most recently completed fiscal year (collectively, the "**NEOs**"). For the Corporation's fiscal year ended December 31, 2018, the NEOs are:

Alexandre L'Heureux, President and CEO

Alexandre L'Heureux is the President and Chief Executive Officer of the Corporation. Mr. L'Heureux joined the Corporation as Chief Financial Officer in July 2010, and held this role until transitioning to the role of President in October 2016. Before joining WSP, from 2005 to 2010, Mr. L'Heureux was a Partner and Chief Financial Officer at Celtic Therapeutics L.L.L.P. (now known as Auven Therapeutics) and a Partner at Celtic Pharma Management L.P. Prior to that, he developed extensive knowledge of the alternative investments industry as the Vice President of Operations at BISYS Hedge Fund Services (now known as Citibank - Hedge Fund Services). He is a member of the Canadian Institute of Chartered Accountants and of the Chartered Financial Analysts Institute. Mr. L'Heureux was also appointed Fellow of the Ordre des comptables professionnels agréés du Québec (Quebec CPA Order) in 2017.

Bruno Roy, CFO

Bruno Roy is the Corporation's Chief Financial Officer. He was appointed in October 2016 and joined from McKinsey & Company, where he was a Senior Partner in the Hong Kong office and Co-Leader of the Private Equity Service Line in the Asia Pacific region. He joined McKinsey in Montreal in 1999 and worked for the firm in Greater China from 2009 to 2016. He holds an MBA from the London Business School and a Bachelor's degree from Laval University in Quebec City. Prior to joining McKinsey, he worked for Schroders in London and AXA in Montreal. He is a co-founder and advisory council member of the Banff Forum and a Board member of the Foundation of the Montreal Heart Institute.

Paul Dollin, COO

Paul is a chartered engineer and has a PhD in material science which led to an early career in the nuclear power industry working for British Energy. In 1999, after a short break from the nuclear industry working in the financial services sector, Paul joined Atkins, the engineering consultant, where he held numerous roles leading businesses focused on the Energy and broader Design and Engineering markets. Paul joined WSP Group PLC in 2010 as a main Board Director with responsibility for all operations in the UK, Middle East, Africa and India. Paul has held the role of Chief Operating Officer for WSP since 2014 with responsibility for day-to-day operations worldwide.

Greg Kelly, President and CEO, U.S.

Gregory A. Kelly directs WSP operations and strategy in the United States, across diverse end markets, including advisory, energy, property and buildings, transportation and infrastructure as well as water and environment. He has more than 30 years of experience in the engineering services industry, encompassing expertise in executive management, engineering, project management and construction. Mr. Kelly was previously Global Chief Operating Officer for Parsons Brinckerhoff. An established leader in the infrastructure services industry, Mr. Kelly frequently speaks on engineering and construction issues and participates on the executive boards of many leading industry organizations. He serves as Chairman of the Design Professional's Coalition, an organization consisting of CEOs of leading design and engineering companies, and a member of the Construction Industry Roundtable. He was also elected to the National Academy of Construction and The Moles, which recognize leaders in engineering and heavy construction in the U.S. Mr. Kelly received a Bachelor of Science degree from Temple University and a Master of Science from the New Jersey Institute of Technology and is a registered professional engineer in several states.

Guy Templeton, President and CEO, Australia and New Zealand

Guy Templeton is President and CEO in Australia and New Zealand. He was previously President and Chief Operating Officer of Parsons Brinckerhoff's Australia Pacific/Asia and southern Africa operating company. His earlier career was in engineering and consulting in the electricity, transportation, and telecommunications industries. He previously served as Chief Executive Officer of Minter Ellison Lawyers, the largest law firm in the Asia-Pacific region, whose specializations include infrastructure, energy, and resources industries. He received a Master of Business Administration degree from the University of Technology, Sydney, and a Bachelor's degree in electrical engineering from the University of New South Wales. Based in Sydney, Mr. Templeton is a Fellow of the Australian Institute of Company Directors and an honorary Fellow of Engineers Australia.

Executive Compensation Program

Philosophy

The Corporation's compensation program is designed to attract, retain and incentivize executives to achieve performance objectives aligned with the Corporation's vision and strategic orientation consistent with Shareholders' value creation. It also allows the Corporation to reward those executives that stand out by delivering superior financial performance.

The Governance, Ethics and Compensation Committee is responsible for defining, reviewing and monitoring the Corporation's compensation policy and guidelines with respect to the NEOs and other executives of the Corporation. To achieve its goals, the Corporation maintains a balance between Shareholders' interests and the remuneration and conditions of its executives. Compensation mix and levels are driven by business strategy and take into account the competitiveness of total compensation among international organizations with similar economic and business profiles. By linking NEOs' and Shareholders' interests through performance-related compensation, the compensation strategy contributes to the achievement of profitable growth for Shareholders. For more information on Shareholders' involvement in the executive compensation program, please refer to the "Say on Pay" section of this Circular on page 32.

The Governance, Ethics and Compensation Committee reviews executive compensation annually (see "Annual Compensation Review Process" on page 50).

Compensation Positioning

To accomplish its goals of attracting, retaining and incentivizing executives to achieve performance objectives aligned with the Corporation's vision and strategic orientation, the Corporation sets target total compensation in line with the median of the Peer Group used for the purposes of executive compensation benchmarking. Please refer to the section entitled "Benchmarking" on page 53 for a description of the Peer Group. More specifically:

- base salary is generally reviewed annually and set at around the median of the Peer Group, but may be set above or below median to reflect experience, individual contribution and performance, changes in scope or responsibilities, attract new executives and other specific circumstances;
- while STIP targets are set at the median of the Peer Group, actual payment may exceed market median when results exceed objectives or fall below median (possibly zero) when results are below expectations;
- LTIP grants of PSUs take into account the performance and contribution to the Corporation's overall results of Participants while striving to ensure the competitiveness of total compensation with the median of the Peer Group;
- LTIP grants of RSUs and Options promote retention and are aligned with long-term performance objectives;
- LTIP grants of DSUs ensure good long-term alignment with Shareholders; and
- savings plans, benefits and other perquisites are aligned with regional practices in the countries where the Corporation operates and are generally aligned with the market median value.

General Description of the 2018 Compensation Elements

The following chart outlines the Corporation's compensation elements for 2018, which together, aim to provide a competitive compensation package to the Corporation's executives. In addition to base salary, the Corporation's executive compensation includes a mix of annual and long-term variable compensation, which is also known as "at-risk" compensation since payment is not guaranteed. The Corporation believes this links the interests of the Corporation's executives and those of the Shareholders by rewarding executives for creating Shareholder value.

Compensation element	Description	Objectives
Base salary	Competitive fixed rate of pay	Attract and retain executives with the required skills and experience to successfully achieve the Corporation's short-term business plan and longer term strategic goals
Annual Short-term Incentive Plan (STIP)	Annual cash bonus defined as a percentage of base salary Payment can be higher or lower (down to zero) than target percentage depending on individual, regional and corporate performance	Reward executives for their contribution to the achievement of the Corporation's annual financial results
Long-term Incentive Plans (LTIPs)	Long-term incentives tied to growth and performance of the Share price	Incentivize executives to achieve the longer term objectives set forth in the Corporation's strategic plan
PSUs	PSUs fully vest at the end of a three-year Performance Period only if performance conditions are met	Encourage executives to pursue initiatives that will increase Shareholder value over the long run
Options	Options vest three years after grant date (time-vested only)	Promote retention
RSUs	RSUs generally vest three years after grant date	Promote retention
DSUs	DSUs vest immediately upon being granted but are only settled (paid) after the date on which service as an employee or as a Director (if applicable) ceases	Promote retention and alignment with long-term performance objectives
Savings Plans	Annual employer-paid contribution generally defined as a percentage of base salary and invested in a pension plan or savings plan	Attract and retain high-performing executives by providing an adequate source of income at retirement
Health benefits and other perquisites	Health, dental, life and disability insurance plans	Invest in employee health and well-being and provide financial assistance in case of personal hardship or illness
	Other benefits	Attract high-performing executives by providing locally competitive benefits and other advantages

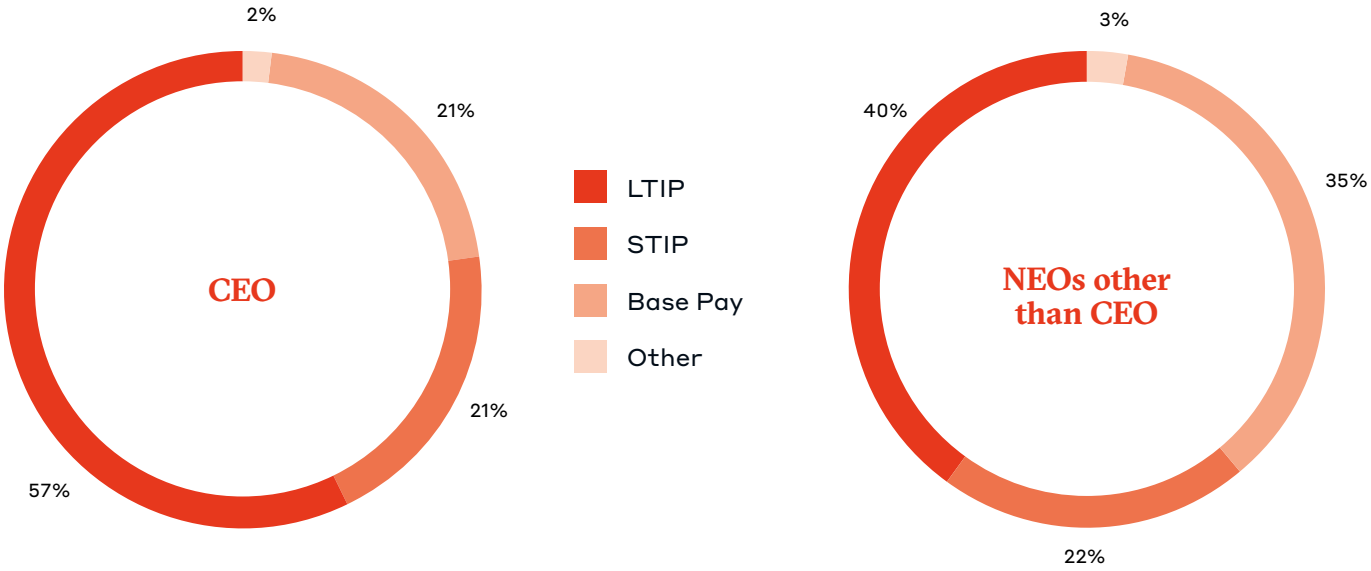
Compensation Mix

In determining the appropriate mix of compensation elements, the Governance, Ethics and Compensation Committee considers market practices including the compensation mix for similar positions in the Corporation's Peer Group as well as the Corporation's pay-for-performance philosophy.

As illustrated in the chart below, a significant portion of NEO compensation is performance-based. In total, approximately 78% of the target compensation of Alexandre L'Heureux, the President and CEO of the Corporation and 62% of the average target compensation of the other NEOs was "at-risk" in 2018.

Mix of Compensation Elements

(The figures in the charts are based on the target compensation mix for 2018)



Annual Compensation Review Process

Role of the Governance, Ethics and Compensation Committee

On an annual basis, the Governance, Ethics and Compensation Committee:

- reviews all elements of executive compensation so that it continues to be aligned with the Corporation's business strategy;
- validates the elements of executive compensation and their value with market practices so they remain competitive and enable the Corporation to effectively attract and retain talent;
- seeks to ensure that the performance objectives for each NEO and other executives of the Corporation are derived from and generally in line with the Corporation's annual business plan objectives and reviews and recommends for approval to the Board of Directors the design of, and targets for, the annual bonus program;
- reviews and recommends for approval to the Board of Directors the design and performance targets of the long-term incentive plans and seeks to ensure that the long-term incentive compensation arrangements for the NEOs and other executives of the Corporation are structured to align their interests with those of Shareholders and reward long-term performance that creates additional Shareholder value, but without encouraging excessive risk;
- reviews and recommends for approval to the Board of Directors the CEO's salary, short-term and long-term incentive award levels and performance objectives for the upcoming year, as well as the other NEOs' respective salaries, short-term and long-term incentive award levels and performance objectives for the upcoming year based on the recommendation of the CEO;
- reviews the CEO's performance against objectives and, based on the Corporation's financial performance and the Governance, Ethics and Compensation Committee's assessment of the CEO's contribution, formulates its recommendation to the Board of Directors with respect to the appropriate bonus to be awarded to the CEO; and
- reviews and recommends for approval to the Board of Directors the compensation of the other NEOs and other executives of the Corporation following recommendations from the CEO, including appropriate bonus to be awarded.

Role of the Compensation Consultants

Independent Consultants

As part of the 2018 executive compensation review, the Governance, Ethics and Compliance Committee retained the services of Hugessen. In 2018, Hugessen was mandated by the Corporation to provide recommendations on: 1) the composition of the Peer Group for 2019; 2) a broad review of the Corporation's incentive plans 3) the compensation of the NEOs including the analysis of the positioning compared with our Peer Group; and 4) Director compensation.

Decisions related to executive compensation remain the responsibility of the Governance, Ethics and Compensation Committee and the Board, who, in determining executive compensation for 2018, considered the analysis and advice of Hugessen provided in 2017 and 2016 and of Mercer (Canada) Limited provided as part of the 2016 executive compensation review, as well as any other Corporation-specific factors.

Executive Compensation-Related Fees

Hugessen billed the Corporation an aggregate of $240,257 for services rendered in 2018 and an aggregate of $6,718 for services rendered in 2017 in connection with executive compensation related services.

All Other Fees

Hugessen did not provide services to the Corporation in 2018 or 2017 other than executive compensation related services described above.

Upcoming Changes in Executive Compensation in 2019

During 2018, the Governance, Ethics and Compensation Committee engaged Hugessen to conduct an assessment and review of the Corporation's executive compensation practices and policies and to benchmark these against best practices and ensure alignment with the Corporation's 2019-2021 global strategic plan. Following this analysis, in December 2018, the Governance, Ethics and Compensation Committee approved certain enhancements to the Corporation's executive executive compensation practices, to be applied for the 2019 long-term and short-term executive compensation programs. These include:

- revised performance levels and vesting percentage used in the calculation of the PSU performance;
- amendment to the vesting schedule for Options to be amended to a three-year vesting period, at a rate of 1/3 at each anniversary of the grant, with a 10-year term;
- amendments to the LTIPs to allow for the changes contemplated above; and
- increase of base salaries and STIP and LTIPs targets for certain executives.

These changes will be more fully described in the Corporation's management information circular in respect of the 2020 annual meeting of Shareholders.

Managing Compensation Related Risk

Monitoring Risks

The Board of Directors and the Governance, Ethics and Compensation Committee use internal and external resources to determine whether or not there are risks associated with the Corporation's compensation policies and practices. The Corporation's compensation programs are continuously reviewed to align the pay outcomes with the Corporation's risk management strategies and to discourage inappropriate risk taking by Management.

The Corporation uses, among other things, the following practices to discourage or mitigate excessive risk taking:

- the Board approves the Corporation's strategic plan, annual budgets, and financial and other targets, which are considered in the context of assessing performance and awarding incentives;
- there is an appropriate mix of pay, including fixed and performance-based compensation with short and longer term performance conditions and vesting periods;
- base salaries are established to provide regular income, regardless of Share price;
- annual bonus awards are capped and based on the achievement of a number of financial performance objectives;
- long-term equity-based incentive grants, if and when granted, are approved by the Board of Directors;
- when considering the approval of bonus payout and long-term incentive grants, if any, the Board of Directors seeks to ensure that their anticipated costs are reasonable relative to the Corporation's projected and actual income, and amounts are not paid under the Corporation's annual incentive plans until achievement of the relevant financial results have been confirmed by audited financial statements of the Corporation;
- the Corporation's performance-based LTIPs are comprised of PSUs which fully vest after three years only if performance criteria are met, ensuring that executives remain exposed to the risks of their decisions and that vesting periods align with risk realization periods, as well as RSUs and Options which also vest after three years of their issuance and whose intrinsic value lies in the long term performance of the Share price, thereby aligning interests of the executives with those of the Shareholders;
- the Corporation has an Executive Share Ownership Requirement for the NEOs and other key executive officers of the Corporation;
- the Corporation's insider trading policy prohibits Directors and officers of the Corporation from engaging in trading or entering into arrangements involving derivative instruments securities or other arrangements that are designed to hedge or offset a decrease in market value of any equity securities related to the Corporation;
- the executives may not purchase financial instruments to hedge a decrease in the market value of the Shares held for the purpose of the share ownership requirements;
- the Corporation has adopted an executive compensation clawback policy (the "**Clawback Policy**") which allows it to require repayment of incentive compensation under certain circumstances (see section entitled "Executive Compensation Clawback Policy" on page 52 for additional details on this policy); and
- the Governance, Ethics and Compensation Committee maintains overall discretion to adjust annual incentive payouts to take into account both unexpected and extraordinary events.

The Board of Directors and the Governance, Ethics and Compensation Committee believe the Corporation's compensation plans are designed and administered with the appropriate balance of risk and reward, do not encourage excessive risk-taking behaviours and are not likely to have a material adverse effect on the Corporation.

Executive Compensation Clawback Policy

Under the Clawback Policy, which applies to all awards made under the Corporation's STIP and LTIPs from the date of the adoption of such policy and to all executive officers of the Corporation, including NEOs, the Board of Directors may, in its sole discretion, to the fullest extent permitted by law and to the extent it determines it is in the best interests of the Corporation to do so, require reimbursement of all or a portion of the STIP or LTIPs compensation received by an executive or former executive officer of the Corporation in situations in which:

(a) the amount of a bonus or incentive compensation was calculated based upon, or contingent on, the achievement of certain financial results that were subsequently the subject of or affected by a restatement of all or a portion of the Corporation's financial statements;

(b) such executive or former executive officer of the Corporation engaged in gross negligence, intentional misconduct or fraud that caused or partially caused the need for the restatement; and

(c) the amount of the bonus or incentive compensation that would have been awarded to or the profit realized by such executive or former executive officer of the Corporation had the financial results been properly reported would have been lower than the amount actually awarded or received.

Executive Minimum Share Ownership Requirement

To increase the alignment of executives' and Shareholders' interests, the Corporation initially adopted minimum Share ownership requirements for the CEO and CFO in 2012, which remained unchanged since their adoption. In 2015, 2016 and 2017, the Governance, Ethics and Compensation Committee extended the minimum Share ownership requirements to a larger group of executives (the "**Executive Share Ownership Requirement**"). Under the Executive Share Ownership Requirement, the President and CEO is required to hold at least 4-times his base salary, the CFO and COO are required to hold at least 2-times their base salary and certain other key executive officers of the Corporation are required to hold at least 1-time their base salary in Shares or designated equity-based award at the end of a five-year period. The Executive Share Ownership Requirement is to be progressively achieved over such five-year period, starting on January 1, 2017 or from the date of appointment to an executive position or upon their being subject to the Executive Share Ownership Requirement. Consequently, an executive is expected to meet 20% of the aggregate Executive Share Ownership Requirement by the end of the first year, 40% by the end of the second year, 60% by the end of the third year, 80% by the end of the fourth year and the aggregate threshold by the end of the five-year period. Since 2016, to help them achieve their Executive Share Ownership Requirement, NEOs and other executives of the Corporation who are subject to the Executive Share Ownership Requirement can elect to receive DSUs instead of RSUs.

For the purpose of assessing the Executive Share Ownership Requirement, the value of Shares, vested Options and DSUs are included while the potential value of unvested Options, RSUs and PSUs is not included. Shares are valued at the greatest of the Share price on the day they were acquired or as at the date the share ownership levels are assessed. The executives may not purchase financial instruments to hedge a decrease in the market value of the Shares held for the purpose of the share ownership requirements.

Executive Share Ownership Requirement calculated as at January 1, 2019

Name and Principal Position	2018 Annual Base Salary	Executive Share Ownership Requirement (Multiple of Base Salary)	Minimum Annual Requirement for Executive Share Ownership Requirement met (✓) or (X)[1]	Date by which the Aggregate Executive Share Ownership Requirement must be met	Percentage of the Executive Share Ownership Requirement already met[2]
Alexandre L'Heureux President and CEO	$1,100,000	4 times base salary ($4,400,000)	✓	January 1, 2022	159%
Bruno Roy CFO	$650,000	2 times base salary ($1,300,000)	✓	January 1, 2022	75%
Paul Dollin COO	$717,745[3]	2 times base salary ($1,435,486)	✓	January 1, 2022	86%
Greg Kelly President and CEO, U.S.	$809,563[4]	1 time base salary ($809,563)	✓	January 1, 2022	108%
Guy Templeton President and CEO, Australia and New Zealand	$600,051[5]	1 time base salary ($600,076)	✓	January 1, 2023	155%

(1) As of January 1, 2019, the minimum annual requirement for Mr. L'Heureux was $1,760,000, for Mr. Roy it was $520,000, for Mr. Dollin it was $574,194, for Mr. Kelly it was $323,825 and for Mr. Templeton it was $240,030.

(2) For the purpose of assessing ownership levels only, the value of Shares, vested Options and DSUs is included while the potential value of unvested Options, RSUs and PSUs is not included.

(3) Mr. Dollin is paid in GBP. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.7295 to GBP 1.

(4) Mr. Kelly is paid in USD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.2953 to USD 1.

(5) Mr. Templeton is paid in AUD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $0.9682 to AUD 1.

Benchmarking

As part of its annual compensation review, the Governance, Ethics and Compensation Committee reviews the comparator group used to benchmark executive compensation so that it represents the most appropriate group of comparator companies in light of the Corporation's size, breadth of services and geographic scope.

The Governance, Ethics and Compensation Committee determined the Corporation's group of comparator companies in 2015 using selection criteria based on geography, industry, involvement in international projects, revenue size and talent pool. The Governance, Ethics and Compensation Committee decided not to make any changes to the peer group determined in 2015 for benchmarking executive compensation for 2016 but approved minor changes which became effective in 2017, which peer group was then maintained to benchmark executive compensation in 2018. The peer group was however reviewed in 2018 and a new peer group will be used by the Corporation to benchmark compensation in 2019.

The peer group used for the purposes of benchmarking executive compensation in 2018 is composed of 20 companies. These companies, senior issuers like WSP and primarily headquartered in North America, offer professional consulting services in engineering, architecture, construction, environment and information technology with operations in markets such as buildings, transportation, infrastructure, energy, environment and industry, and with whom WSP competes for executive talent (the "**Peer Group**").

Peer Group

Company Name	Revenue[1]	Market Capitalization[2]	Sector[3]	Location
AECOM	$26,290	$5,667	Construction & Engineering	United States
Jacobs Engineering Group Inc.	$21,102	$11,182	Construction & Engineering	United States
Quanta Services Inc.	$14,481	$5,786	Construction & Engineering	United States
CGI Group Inc.	$11,654	$23,006	IT Consulting	Canada
EMCOR Group Inc.	$10,539	$4,553	Construction & Engineering	United States
SNC-Lavalin Group Inc.	$10,084	$8,061	Construction & Engineering	Canada
MasTec, Inc.	$8,956	$4,200	Construction & Engineering	United States
WSP[4]	$7,908	$6,128	Construction & Engineering	Canada
Finning International Inc.	$6,996	$3,912	Trading Companies & Distributors	Canada
Waste Connection, Inc.	$6,381	$26,619	Environmental & Facilities Services	United States
KBR, Inc.	$6,368	$2,914	Construction & Engineering	United States
Tutor Perini Corporation	$5,774	$1,088	Construction & Engineering	United States
Arcadis NV	$4,982	$1,459	Construction & Engineering	Netherlands
Stericycle, Inc.	$4,519	$4,534	Environmental & Facilities Services	United States
Granite Construction Inc.	$4,301	$2,561	Construction & Engineering	United States
Clean Harbors, Inc.	$4,278	$3,755	Environmental & Facilities Services	United States
Russel Metals Inc.	$4,165	$1,325	Trading Companies & Distributors	Canada
Stantec Inc.	$3,522	$3,346	Research & Consulting Services	Canada
Aecon Group Inc.	$3,266	$1,065	Construction & Engineering	Canada
CAE Inc.	$3,063	$6,649	Aerospace & Defense	Canada
Tetra Tech Inc.	$2,863	$3,902	Environmental & Facilities Services	United States
75th percentile	$10,198	$6,002		
50th percentile	$6,071	$4,056		
25th percentile	$4,250	$2,826		
Average	$8,179	$6,279		

(1) All figures are in millions of Canadian dollars (converted at average 2018 foreign exchange rates) and, except for the Corporation, are for the last twelve months ended on December 31, 2018 as reported on Bloomberg.

(2) All figures are in millions of Canadian dollars (converted at December 31, 2018 foreign exchange rates) and, except for the Corporation, are as reported on Bloomberg.

(3) Based on S&P/JP Morgan Chase Global Industry Classification Code (GICS) as of December 31, 2018.

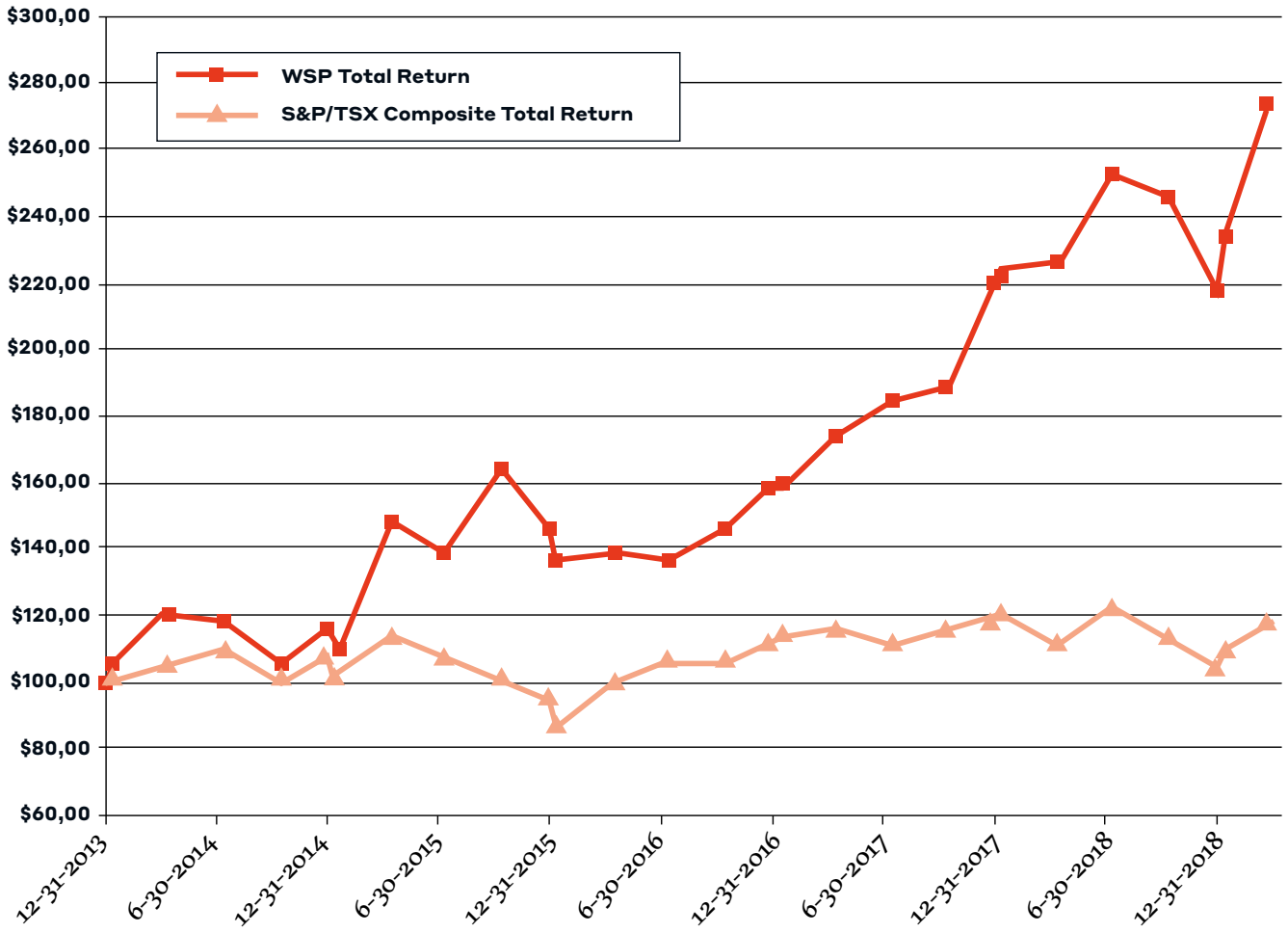
(4) The Corporation's revenue as reported in the annual consolidated financial statements of the Corporation for the fiscal year ended December 31, 2018 and market capitalization is based on the closing price of the Shares on the TSX on December 31, 2018 of $58.67.

Executive Pay and Performance

Performance Graph

The following performance graph compares the cumulative total return of a $100 investment on the TSX in the common shares of WSP from January 1, 2014 until December 31, 2018 with the cumulative total return on the S&P/TSX Composite Index, assuming reinvestment of all distributions and dividends, for the period from January 1, 2014 to December 31, 2018.

Comparison of Total Shareholder Return with S&P Index



Fiscal Year Ended

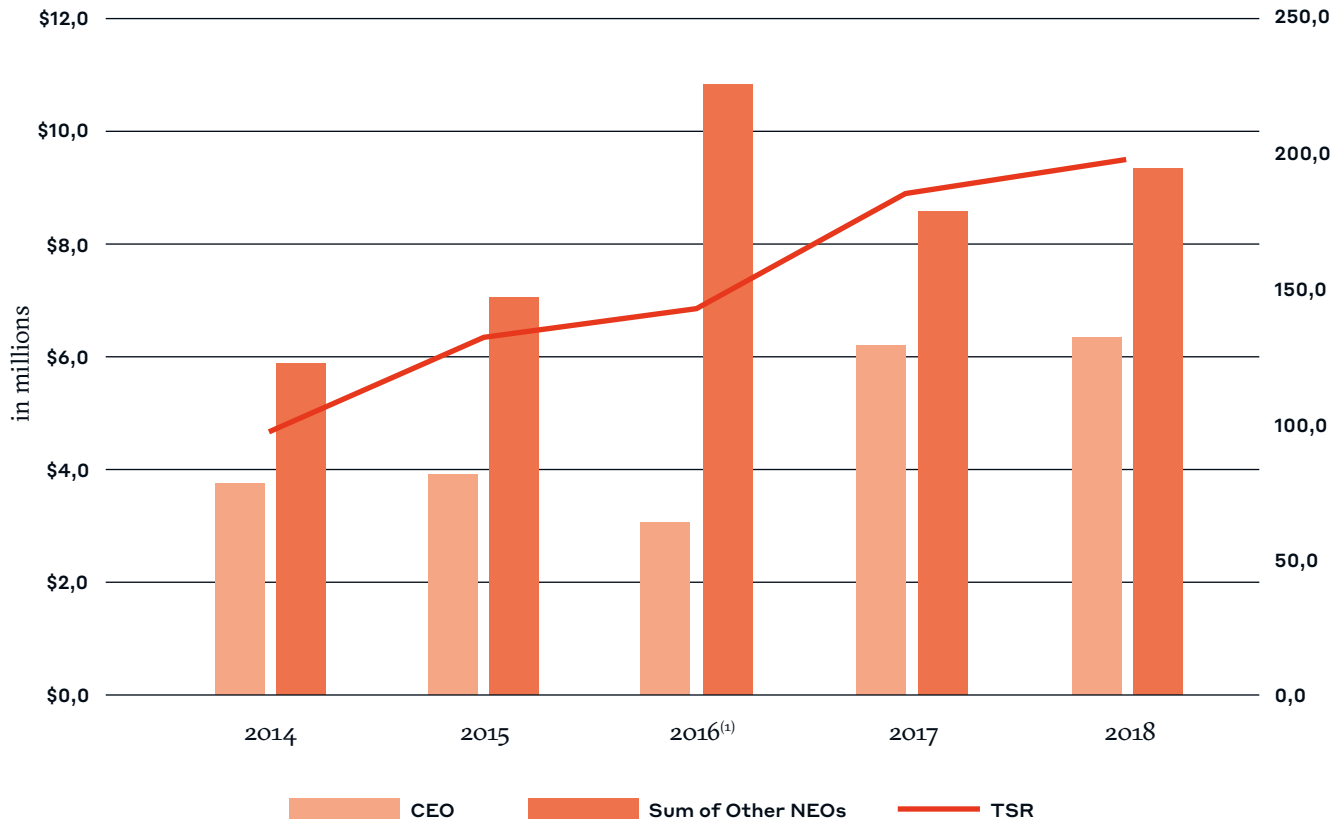
	Dec. 31, 2013	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2018
WSP	$100.00	$115.38	$145.69	$158.53	$218.37	$218.22
S&P/TSX Composite	$100.00	$107.42	$95.51	$112.23	$119.00	$105.15

The above performance graph and table show both a strong increase in the Corporation's total shareholder return (the "**Total Shareholder Return**"), as well as a solid performance by the Corporation as the Total Shareholder Return exceeded the S&P/TSX Composite Total Return by approximately 108% over the period from January 1, 2014 to December 31, 2018.

Trends in Compensation

The following graph illustrates the relationship between the total compensation of the CEO and aggregate compensation paid to other NEOs relative to the Corporation's performance and Total Shareholder Return over the period from January 1, 2014 to December 31, 2018:

Trends in Total Compensation[1]



(1) There were four NEOs in addition to the CEO in 2014, 2015, 2017 and 2018 and there were five NEOs in addition to the CEO in 2016 given that Mr. Alexandre L'Heureux transitioned from the role of CFO to the role of President and CEO during 2016. The total compensation for the CEO in 2016 represents Mr. L'Heureux's compensation for that year (partly as CFO and partly as CEO) and Mr. Pierre Shoiry's total compensation is included in the sum of the other NEOs.

The trend demonstrates a strong relationship between the changes in the total compensation granted to the NEOs and the increase in the Corporation's cumulative Total Shareholder Return. Following a period of rapid growth for the Corporation, significant changes were made in 2013, 2014, 2015 and 2016 to the compensation plans offered to NEOs, namely the redesign of the STIP and the introduction of long-term incentives. These changes contributed to the implementation of a pay-for-performance philosophy and increased alignment of executive compensation with Shareholder interests.

Description of Compensation paid to NEOs in 2018

Base Salary

The base salaries of the NEOs and other executives of the Corporation are generally reviewed annually and set at around the median of the Peer Group, but may be set above or below median to reflect experience, individual contribution and performance, changes in scope or responsibilities, attract new executives and other specific circumstances.

Comparison of Aggregate Base Salaries from 2017 to 2018

	2017	2018	% Change
All NEOs (1)(2)(3)(4)	$3,796,447	$3,877,359	+2.1%

(1) Aggregate base salaries of all NEOs for 2017 and 2018.

(2) Mr. Dollin is paid in GBP. His annual salary for each of 2017 and 2018 was converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements for the fiscal years ended December 31, 2017 and December 31, 2018, which were, respectively, $1.6722 to GBP 1 in 2017 and $1.7295 to GBP 1 in 2018.

(3) Mr. Kelly is paid in USD. His annual salary for each of 2017 and 2018 was converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements for the fiscal years ended December 31, 2017 and December 31, 2018, which were, respectively, $1.2976 to USD 1 in 2017 and $1.2953 to USD 1 in 2018.

(4) Mr. Templeton is paid in AUD. His annual salary for 2017 and 2018 was converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements for the fiscal years ended December 31, 2017 and December 31, 2018, which were, respectively, $0.9943 to AUD 1 in 2017 and $0.9682 to AUD 1 in 2018.

Annual Short-Term Incentive Plan

NEOs are entitled to receive STIP awards for achieving or exceeding pre-determined goals derived from the annual business plan. The Governance, Ethics and Compensation Committee aligned the Corporation's STIP metrics with the Corporation's strategic plan and Peer Group practices.

The following table describes the relative weight of the various performance metrics in determining STIP awards:

2018 Performance Metrics Weightings

Executive Position	Corporate Objectives	Regional Objectives
President and CEO, CFO, COO	100%	0%
Regional CEOs	20%	80%

In determining the various metrics of the 2018 STIP, the Governance, Ethics and Compensation Committee selected financial performance indicators that are part of the Corporation's annual business plan and long term strategic plan and are highly correlated with value creation for Shareholders.

The Governance, Ethics and Compensation Committee focused the STIP for 2018 on the same performance metrics as in 2017. Revenue-based metrics were set in terms of Acquisition Growth and organic sales growth, profitability was measured using adjusted EBITDA and DSO was used to measure cash conversion efficiency. For each metric, targets were set either at the regional level or at the consolidated level depending on each NEO's managerial scope, and were approved by the Governance, Ethics and Compensation Committee.

For each NEO, a minimum financial threshold expressed in consolidated or regional adjusted EBITDA, as applicable, was also set and must be met in order to trigger the payment of a STIP bonus.

For 2018, the Governance, Ethics and Compensation Committee reviewed the Corporation's results and assessed the CEO's performance against his performance goals. The Governance, Ethics and Compensation Committee also analyzed and discussed with the CEO the performance of the other NEOs and executives of the Corporation in order to recommend their respective STIP payments to the Board for approval. The consolidated corporate performance metrics, weighting and actual results and payout under the STIP for 2018 are set out in the following table:

2018 Corporate Performance Measures, Results and Related Payout

Performance Measures	Relative Weight[1]	Consolidated Threshold[2] (Payout = 0%)	Consolidated Target[3] (Payout = 100%)	Consolidated Maximum (Payout = 200%)	Achieved	Payout[4]
Acquisition Growth[5]	20%	$200 million	$300 million	$500 million	$675.2 million	200%
Organic Sales Growth[6]	20% or 40%	Global: 1% U.S.: 2.7%	Global: 2.5% U.S.: 6.0%	Global: 4.0% U.S.: 9.3%	Global: 3.5% U.S.: 7.0%	Global: 167% U.S.: 130%
Adjusted EBITDA[7]	20% to 40%	Global: $593.8 million U.S.: $229.0 million ANZ: $47.3 million	Global: $625.0 million U.S.: $237.0 million ANZ: $49.8 million	Global: $656.3 million U.S.: $245.0 million ANZ: $54.0 million	Global: $656.7 million U.S.: $247.5 million ANZ: $53.7 million	Global: 200% U.S.: 200% ANZ: 194%
DSO[8]	20% to 40%	Global: 87.2 U.S.: 84.0 ANZ: 63.0	Global: 83.0 U.S.: 80.0 ANZ: 60.0	Global: 78.9 U.S.: 76.0 ANZ: 57.0	Global: 76.5 U.S.: 77.1 ANZ: 54.3	Global: 200% U.S.: 173% ANZ: 200%
Adjusted EBITDA Margin[9]	ANZ: 20%	ANZ: 11%	ANZ: 12%	ANZ: 13%	ANZ: 12.3%	ANZ: 128%

(1) The relative weight of each corporate performance metric varies between NEOs. With respect to the CEO, the relative weight of the corporate performance metrics is 20% for Acquisition Growth, 20% for Organic Sales Growth, 40% for adjusted EBITDA and 20% for DSO. The performance measures are calculated on a consolidated basis for global executives (CEO, CFO and COO), and on a regional basis for the President and CEO, US and the President and CEO, Australia and New Zealand.

(2) No STIP award is payable below the minimum financial threshold expressed in adjusted EBITDA at the consolidated or regional level, as the case may be, except at the discretion of the Board of Directors.

(3) Performance levels indicated in this table are derived from the Corporation's annual business plan or budget. Performance goals for each metric and the various performance levels were recommended by the CEO and approved by the Governance, Ethics and Compensation Committee.

(4) The payout represents a percentage of the relative weight of the performance measures.

(5) Acquisition Growth is an internal compensation performance metric calculated based on the annualized net revenues derived from acquisition contributions to results. Acquisition Growth is a performance measure that applies only to the CEO and not the other NEOs.

(6) Organic sales growth is an internal compensation performance metric calculated based on sales growth excluding acquisition growth and foreign currency impacts over the previous fiscal year. It is calculated on a consolidated basis for global executives (CEO, CFO & COO) and on a regional basis for the President and CEO, U.S. This performance measure does not apply to the President and CEO, Australia and New Zealand.

(7) Adjusted EBITDA is an internal compensation performance metric calculated as earnings before financial expenses, income tax expenses, depreciation and amortization and acquisition and integration costs. Adjusted EBITDA is calculated on a consolidated basis for all NEOs, as well as on a regional basis for the President and CEO, U.S. and the President and CEO, Australia and New Zealand.

(8) DSO is an internal compensation metric representing the average number of days to convert the Corporation's trade receivables (net of sales taxes) and costs and anticipated profits in excess of billings into cash, net of billings in excess of costs and anticipated profits. DSO is a non-IFRS measures and, as such, does not have any standardized meaning prescribed under IFRS and may differ from similar computations as reported by other issuers, and accordingly may not be comparable. See the management discussion & analysis for the fiscal year ended December 31, 2018 included in the annual report of the Corporation, for additional information regarding such measure. DSO is calculated on a consolidated basis for global executives (CEO, CFO & COO) and on a regional basis for the President and CEO, U.S. and the President and CEO, Australia and New Zealand.

(9) Adjusted EBITDA margin is an internal compensation performance metric representing adjusted EBITDA expressed as a percentage of net revenues. Because of specific regional realities, this performance metric only applies to the President and CEO, Australia and New Zealand. Adjusted EBITDA Margin is calculated on a regional basis only and is not consolidated.

For 2018, each NEO's target bonus and actual payout under the STIP represented the following percentages of their respective annual base salary:

2018 STIP Targets and Actual Payout

NEOs	Threshold	Target	Maximum[1]	Actual Payout[2] (%)	Actual Payout[3] ($)
Alexandre L'Heureux President and CEO	0%	100%	200%	193.3%	$2,126,300
Bruno Roy CFO	0%	75%	150%	193.3%	$942,338
Paul Dollin[4] COO	0%	75%	150%	186.7%	$1,005,022
Greg Kelly[5] President and CEO, U.S.	0%	50%	100%	179.2%	$725,368
Guy Templeton[6] President and CEO, Australia and New Zealand	0%	50%	100%	183.5%	$550,761

(1) The maximum percentage represents a percentage of the NEO's base salary.

(2) The actual payout percentage represents the percentage of the STIP target.

(3) The actual payout amount represents the actual payout percentage of the STIP target, up to the maximum percentage of each NEO's base salary. For example, Mr. Roy's actual payout amount represents 193.3% (actual payout percentage) of 75% of his base salary (target) ($650,000 x 75% = $487,500), meaning 193.3% of $487,500, being $942,338.

(4) Mr. Dollin is paid in GBP. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.7295 to GBP 1.

(5) Mr. Kelly is paid in USD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.2953 to USD 1.

(6) Mr. Templeton is paid in AUD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $0.9682 to AUD 1.

Long-Term Incentive Plans

The following table describes the various types of grants made to NEOs under the LTIPs and their respective performance conditions:

Type of Equity Awards and Vesting Matrix

Type of Grant	Description and Vesting Matrix	Payment Characteristic and Valuation
PSUs	PSUs granted in 2016, 2017 and 2018 may vest at the end of a three-year Performance Period based on the Corporation's TSR relative to that of the Peer Group (50%) and EPS Growth targets (50%). *EPS Growth* — *% of PSUs that Vests* Less than 15% — 0% 22.5% — 60% 30% — 100% Higher than 37.5% — 150% *Relative TSR* — *% of PSUs that Vests* Lower than 25th percentile — 0% 25th percentile — 25% Median — 50% 75th percentile — 100% 100th percentile — 150%	The percentage of PSUs that may vest can vary from 0% up to a maximum of 150%. Vested PSUs can only be settled in cash. Value equal to the number of vested PSUs (including Dividend Equivalents earned thereon) multiplied by the Market Value of the units.
Options	Options issued generally vest three years after grant date (no partial vesting) and have a 10-year term.	Option Price shall not be less than the Market Value of Shares at the time of the grant. Options provide value only if the Share price increases above the Option Price prior the end of term. Value equal to the number of vested Options to be exercised multiplied by the difference (in $) between the Share price on the day Options are exercised and the Option Price.
RSUs	RSUs are time-vested only and vest at the end of a three-year period.	Vested RSUs can only be settled in cash. Value equal to the number of vested RSUs (including Dividend Equivalents earned thereon) multiplied by the Market Value, which is determined using the volume weighted average trading price of the Shares for the five (5) trading day-period ending on the last trading day before the day on which the payment is initiated.
DSUs	Subject to limited exceptions, DSUs vest immediately upon being granted but their settlement is deferred.	Vested DSUs can only be settled in cash. Vested DSUs become payable once employment with the Corporation is terminated for any reason other than for cause. Value equal to the number of vested DSUs (including Dividend Equivalents earned thereon) multiplied by the Market Value on the date a redemption notice is filed by the Participant (or at the latest, December 1 of the year following termination of employment).

Performance conditions selected in 2016, 2017 and 2018 are aligned with the Corporation's strategic plan and with the interests of Shareholders.

2018 LTIP Awards

The target award of PSUs, Options and/or RSUs for each NEO (and Eligible Participant) is defined as a percentage of their respective annual salary. When making decisions in determining the 2018 awards of PSUs, Options and/or RSUs to be granted to each NEO and Eligible Participant, the Governance, Ethics and Compensation Committee gave due consideration to the value of each NEO or Eligible Participant's present and potential future contribution to the Corporation's success, and considered other factors such as the Corporation's performance both in absolute terms and relative to the Peer Group and the degree to which previous long term incentive grants continue to incentivize executives to achieve the Corporation's long term objectives and pursue initiatives that will create value for the Shareholders over the long run.

Since 2016, DSUs to be settled in cash only may be issued to executives of the Corporation who are subject to the Executive Share Ownership Requirement as a long-term time-based retention incentive, and such NEOs and other executives can elect to receive DSUs instead of RSUs in an effort to help them achieve their Executive Share Ownership Requirement. RSUs may also be granted to executives as an inducement to employment with the Corporation and to promote retention of current executives.

The following table shows the various awards under the LTIPs for each NEO approved by the Governance, Ethics and Compensation Committee for the fiscal year ended December 31, 2018:

2018 LTIP Targets and Awards

NEOs	Target PSUs/ Options/ RSUs as a % of Salary	PSU/ Options/ RSU Target Mix[1]	PSU Award Value[2]	Option Award Value[3]	RSU Award Value[4]	DSU Award Value[5]	Total Award Value
Alexandre L'Heureux President and CEO	275%	60% PSUs + 20% Options + 20% RSUs	$1,814,966	$604,995	$0	$604,969	$3,024,930
Bruno Roy CFO	150%	60% PSUs + 20% Options + 20% RSUs	$584,953	$194,993	$0	$194,964	$974,910
Paul Dollin COO	125%	75% PSUs + 25% RSUs	$648,407	$0	$0	$216,116	$864,523
Greg Kelly President and CEO, U.S.	100%	75% PSUs + 25% RSUs	$610,287	$0	$0	$203,389	$813,676
Guy Templeton President and CEO, Australia and New Zealand	75%	75% PSUs + 25% RSUs	$348,223	$0	$116,035	$0	$464,258

(1) Since 2016, NEOs and other executives of the Corporation who are subject to the Executive Share Ownership Requirement can elect to receive DSUs instead of RSUs to help them meet the Executive Share Ownership Requirement. In 2018, certain Eligible Participants elected to replace their RSU grant with a DSU grant.

(2) Represents the Market Value of PSUs awarded pursuant to the PSU Plan.

(3) Represents the fair value per Option of Options granted on January 1, 2018 of $14.86, which was estimated using the Black-Scholes-Merton valuation model, a prevalent and commonly used valuation methodology, according to the following assumptions: an expected annual dividend of $1.50, a risk-free interest rate of 2.45%, an expected volatility of 22.97% and an expected duration of three to ten years.

(4) Represents the Market Value of RSUs awarded pursuant to the RSU Plan.

(5) Represents the Market Value of DSUs awarded pursuant to the DSU Plan.

In 2018, the NEOs received an aggregate of 53,835 Options, with an estimated value of $799,988 based on the Black-Scholes-Merton option valuation model and the NEOs received an aggregate of 67,060 PSUs for a value of $4,006,835, 1,942 RSUs for a value of $116,035 and 20,409 DSUs for a value of $1,219,438 based on the Market Value of Shares on the date of the grant. Please refer to the "Summary Compensation Table" on page 65 for a full description of how the Market Value is calculated.

Employee Share Purchase Plan

In 2011, the Corporation implemented the ESPP for its Canadian employees, including NEOs. The purpose of the ESPP is to facilitate access to Share ownership and build a sense of belonging to the Corporation. For each dollar invested by an eligible employee to purchase Shares, the Corporation contributes an amount corresponding to 50% of the employee's contribution, up to a maximum employer contribution of $1,000 per year per employee. The ESPP is managed by an external provider and the Shares are purchased from the market.

Retirement Plans and Other Benefits

Retirement and Savings Plans

The Corporation uses different retirement and savings plans based on the location of each NEO in order to provide a certain level of income security at retirement. The following table summarizes the various retirement and savings plans in place for NEOs:

Retirement and Savings Plans offered to NEOs in 2018

NEO	Type of Plan	Contribution formula
Alexandre L'Heureux President and CEO **Bruno Roy** CFO	Deferred Profit Sharing Plan + Group RRSP + Non-Registered Savings Plan	Corporation matches 100% of the NEO's contributions, up to a maximum amount equivalent to 10% of base salary, in the Group RRSP subject to the maximum permitted under the Income Tax Act (Canada) with any additional amounts in a non-registered savings plan.
Paul Dollin COO	Monthly allowance to be invested in a personal savings plan	Corporation contributes 15% of the base salary of the NEO.
Greg Kelly President and CEO, U.S	401(k) Plan + Non-Qualified Savings Plan	Corporation matches 50% of the NEO's contributions into the 401(k) plan up to US$2,200, and provides an additional company contribution of US$8,800 into the non-qualified deferred compensation plan, totaling to US$11,000, or 4% of the 2018 annual compensation limit.
Guy Templeton President and CEO, Australia and New Zealand	Australian Superannuation fund	Corporation contributes 9.5% of the NEO's base salary up to an annual maximum amount[1].

(1) The annual maximum amount changes in July of every year. For the year ended December 31, 2018, the first 6 months were at AUD 20,049 and the last 6 months were at AUD 20,532.

Please refer to the "Summary Compensation Table" on page 65 for more information on the individual value of these benefits for each NEO.

Benefits and Other Perquisites

The Corporation aims to offer an array of competitive benefits to its employees independent of their role in the organization and taking into consideration general practices in each of the regions where the Corporation operates. NEOs are covered under the same benefits programs applicable to all other employees in their respective region and which typically include life, medical, dental and disability insurance.

The aggregate value of other perquisites that were provided to each NEO for the year ended December 31, 2018 (and that are not typically offered to all other employees of the Corporation) did not exceed the lesser of $50,000 or 10% of the NEO's annual base salary. Please refer to the "Summary Compensation Table" on page 65 for more information.

Termination and Change of Control Benefits

The Corporation or its subsidiaries have employment agreements in place with each NEO, except for Mr. Kelly, that provide for termination and Change of Control benefits. All such employment agreements are for an indeterminate term and include confidentiality covenants which apply indefinitely.

The following table summarizes the non-solicitation and non-competition covenants, severance payable on a termination without cause and Change of Control provisions applicable to the NEOs as at December 31, 2018.

NEO	Non-solicitation covenant	Non-competition covenant	Payment in case of termination without cause	Payment in case of termination of employment following a change in control
Alexandre L'Heureux President and CEO	During employment and one year following termination	During employment and one year following termination	24 months of base salary and benefits and a lump sum payment equal to two times the amount of the average STIP payment in the last two completed financial years of the Corporation preceding termination	Same as termination without cause for 18 months following Change of Control[1]
Bruno Roy CFO	During employment and one year following termination	During employment and one year following termination	18 months of base salary and benefits and a lump sum payment equal to one and a half times the amount of the average STIP payment in the last two completed financial years of the Corporation preceding termination	Same as termination without cause for 18 months following Change of Control[1]
Paul Dollin COO	During employment and one year following termination	During employment and one year following termination	18 months of base salary and benefits and a lump sum payment equal to one and a half times the amount of the average STIP payment in the last two completed financial years of the Corporation preceding termination	Same as termination without cause for 18 months following Change of Control[1]
Greg Kelly[2] President and CEO, U.S.	During employment and one year following termination	None	Reasonable amount payable under applicable legislation taking into account length of service since January 1, 2015	Same as termination without cause
Guy Templeton President and CEO, Australia and New Zealand	None	During employment and 3 months following termination	3 months of notice period or greater amount as prescribed by law	Same as termination without cause

(1) Applies in the event of termination without cause or resignation for good reason following a change of control.

(2) In connection with the Parsons Brinckerhoff Acquisition, Mr. Kelly entered into an agreement pursuant to which he received a change of control bonus but waived his right to receive any severance benefits in connection with a termination of his employment, whether voluntary or involuntary, before October 31, 2016, and acknowledged and agreed that for the period from and after October 31, 2016, only his years of services as of January 1, 2015 would be recognized. Furthermore, his non-solicitation covenant has been agreed to pursuant to such agreement.

Incentive Compensation Payments in case of Termination

The STIP and LTIPs also provide for different payments to NEOs under various termination scenarios which are summarized below:

Compensation Element[1]	Voluntary Resignation	Retirement	Termination for Cause	Termination without Cause	Termination of Employment following a Change in Control
Current year STIP	No payment	No payment	No payment	No payment	No payment
PSUs	Unvested PSUs are cancelled	Unvested PSUs remain in effect and are payable at the end of the three-year term if performance conditions are met, prorated to the number of months worked during the performance period	Unvested PSUs are cancelled	Unvested PSUs remain in effect and are payable at the end of the three-year term if performance conditions are met, prorated to the number of months worked during the performance period	Immediate vesting on the date of the Change of Control
Options	Vested Options must be exercised within 30 days Unvested Options are cancelled	Options may be exercised as they vest in accordance with their terms Options must be exercised before the earlier of (i) expiry of the Options, or (ii) the third anniversary of the retirement date	All Options are cancelled	Vested Options must be exercised within 30 days Unvested Options are cancelled	Board has discretion to make such provision for the protection of the rights of the Participants
RSUs	Unvested RSUs are cancelled	Unvested RSUs remain in effect and are payable at the end of the three-year term if performance conditions are met, prorated to the period of employment during the restriction period	Unvested RSUs are cancelled	Unvested RSUs remain in effect and are payable at the end of the three-year term if performance conditions are met, prorated to the period of employment during the restriction period	Immediate vesting on the date of the Change of Control
DSUs	DSUs become payable upon delivery of a redemption notice by the Participant	DSUs become payable upon delivery of a redemption notice by the Participant	All DSUs are cancelled	DSUs become payable upon delivery of a redemption notice by the Participant	Board has discretion to make such provision for the protection of the rights of the Participants

(1) The RSU Plan, PSU Plan and LTI Plan include conditions that apply to receiving payments or benefits, such as non-compete and non-solicitation agreements, in certain types of termination. Under the PSU Plan and RSU Plan, these conditions are for an indefinite period of time and may be waived by the Governance, Ethics and Compensation Committee. Under the LTI Plan, these conditions apply for a maximum period of three (3) years.

Voluntary Resignation, Retirement, Termination Without Cause and Change of Control Payments

The following table summarizes the incremental payments which would be owed to each NEO in the event of a voluntary resignation, retirement, termination without cause or following a Change of Control of the Corporation, assuming a termination date of December 31, 2018. No incremental amounts are payable in connection with termination for cause.

NEO[1]	Voluntary Resignation	Retirement[2]	Termination without Cause	Termination following Change in Control[3]
Alexandre L'Heureux President and CEO	LTIPs: $6,343,704	LTIPs: $9,468,807	Pay, STIP and Benefits: $6,485,600 LTIPs: $8,613,295	Pay, STIP and Benefits: $6,485,600[4] LTIPs: $11,516,038
Bruno Roy CFO	LTIPs: $432,926	LTIPs: $1,468,534	Pay, STIP and Benefits: $2,219,129 LTIPs: $1,224,608	Pay, STIP and Benefits: $2,219,129[4] LTIPs: $2,151,171
Paul Dollin[5] COO	LTIPs: $1,994,811	LTIPs: $2,870,891	Pay, STIP and Benefits: $2,694,589 LTIPs: $2,870,891	Pay, STIP and Benefits: $2,694,589[4] LTIPs: $3,634,872
Greg Kelly[6][7] President and CEO, U.S.	LTIPs: $1,440,022	LTIPs: $2,180,809	Reasonable amount taking into account length of service to the Corporation starting as of January 1, 2015 and applicable legislation LTIPs: $2,180,809	Pay, STIP and Benefits: Reasonable Amount LTIPs: $2,858,017
Guy Templeton[8] President and CEO, Australia and New Zealand	LTIPs: $744,074	LTIPs: $1,303,942	Pay, STIP and Benefits: $154,931 LTIPs: $1,303,942	Pay, STIP and Benefits: $154,931 LTIPs: $1,817,324

(1) The values of the Options, PSUs, RSUs and DSUs have been calculated based on the closing price of the Shares on the TSX on December 31, 2018 of $58.67.

(2) The amounts payable pursuant to the LTIPs assume that all unvested Options vested on December 31, 2018.

(3) The amounts payable pursuant to the LTIPs assume that, upon the Change of Control, the Board uses its discretion in accordance with the LTI Plan and determines that all unvested Options shall vest immediately at 100% of the award (including all Dividend Equivalents earned). All PSUs and RSUs fully vest in the event of a change in control (including all Dividend Equivalents earned).

(4) Applies in the event of termination without cause or resignation for good reason following a Change of Control.

(5) Mr. Dollin is paid in GBP. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.7295 to GBP 1.

(6) In connection with the Parsons Brinckerhoff Acquisition, Mr. Kelly entered into an agreement pursuant to which he received a Change of Control bonus but waived his right to receive any severance benefits in connection with a termination of his employment, whether voluntary or involuntary, before October 31, 2016, and acknowledged and agreed that for the period from and after October 31, 2016, only his years of services as of January 1, 2015, would be recognized.

(7) Mr. Kelly is paid in USD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.2953 to USD 1.

(8) Mr. Templeton is paid in AUD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $0.9682 to AUD 1.

Key Compensation Tables

The following table summarizes the NEOs' total annual compensation for the years ended December 31, 2016, December 31, 2017 and December 31, 2018, as applicable.

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Share-Based Award ($)	Option-Based Award ($)	Non-Equity Incentive Plan Compensation: Short-term Incentive Plans[1][2] ($)	Non-Equity Incentive Plan Compensation: Long-term Incentive Plans ($)	Pension Value ($)	All Other Compensation[3] ($)	Total Compensation ($)
Alexandre L'Heureux President and CEO	2018	1,100,000	2,419,935	604,995	2,126,300	-	-	291,000	6,542,230
	2017	1,100,000	2,419,963	604,996	1,939,300	-	-	108,885	6,173,144
	2016[4]	800,674	1,370,697	243,819	572,408	-	-	36,226	3,023,824
Bruno Roy CFO	2018	650,000	779,917	194,993	942,338	-	-	110,710	2,677,958
	2017	575,000	689,958	172,499	586,500	-	-	57,394	2,081,351
	2016[5]	88,462	124,978	-	54,628	-	-	-	268,068
Paul Dollin[6] COO	2018	717,745	864,523	-	1,005,022	-	-	196,864	2,784,154
	2017	693,946	959,658	-	917,571	-	-	131,795	2,702,970
	2016	719,280	817,000	-	531,642	-	-	137,224	2,205,146
Greg Kelly[7] President and CEO, U.S.	2018	809,563	813,676	-	725,368	-	-	78,023	2,426,630
	2017	811,010	781,194	-	641,103	-	-	14,014	2,247,321
	2016	795,704	562,937	-	465,723	-	-	16,705	1,841,069
Guy Templeton[8] President and CEO, Australia and New Zealand	2018	600,051	464,258	-	550,761	-	-	59,834	1,674,904
	2017	616,490	441,683	-	481,787	-	-	19,720	1,559,680
	2016	582,157	432,995	-	481,529	-	-	18,670	1,515,351

(1) The amounts in this column show amounts awarded pursuant to the STIP for performance achieved in the year specified, but actually paid in the following year.

(2) As of January 1st, 2019, certain NEOs are entitled to defer up to 50% of their STIP payout into equity-based awards, on a voluntary basis, and the Corporation will match 25% of the deferred portion into an additional equity-based award, which additional equity-based award vests over a three-year period.

(3) The amounts in this column represent payments with regards to employee benefits, savings plans and other perquisites described under "Retirement Plans and Other Benefits" and additional compensation paid to NEOs described herein. Perquisites and other personal benefits that, in aggregate, are worth less than $50,000 or 10% of the total annual base salary of an NEO for the financial year, are not included. In 2018, Mr. L'Heureux received a savings allowance equivalent to $110,000 and an ESPP employer contribution of $1,000. In 2018, Mr. Roy received a savings allowance equivalent to $65,000 and an ESPP employer contribution of $886. In 2018, Mr. Dollin received a savings allowance equivalent to $107,662 and access to a private health and insurance benefit equivalent to $8,824. In 2018, Mr. Kelly received a savings allowance equivalent to $14,249. In 2018, Mr. Templeton received a savings allowance equivalent to $19,645. The amounts in this column also represent the Dividend Equivalents on PSUs, DSUs and RSUs earned in 2018 and assume vesting and payout at 100% using the closing price of the Shares on the TSX as at December 31, 2018 of $58.67. The amount of Dividend Equivalents on PSU and/or DSUs and/or RSUs credited to Mr. L'Heureux was $180,000, to Mr. Roy was $44,824, to Mr. Dollin was $80,378, to Mr. Kelly was $63,774 and to Mr. Templeton was $40,189.

(4) As Mr. L'Heureux transitioned from CFO to President and CEO during fiscal year ended December 31, 2016, the Governance, Ethics and Compensation Committee determined that the compensation initially determined for his role as CFO would be effective up to May 31, 2016 and revised compensation applicable to his new role of President and CEO would be effective as of June 1, 2016. As such, his compensation for 2016 reflects in part his compensation for his role as CFO and in part his compensation for his role as CEO.

(5) Mr. Roy joined the Corporation as CFO on October 31, 2016. Figure reflects compensation for Mr. Roy for the period from October 31, 2016 to December 31, 2016, representing approximately 15% of his annual base salary.

(6) Mr. Dollin is paid in GBP. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which was $1.7982 to GBP 1 in 2016, $1.6722 to GBP 1 in 2017 and $1.7295 to GBP 1 in 2018.

(7) Mr. Kelly is paid in USD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which was $1.3258 to USD 1 in 2016, $1.2976 to USD 1 in 2017 and $1.2953 to USD 1 in 2018.

(8) Mr. Templeton is paid in AUD. The amounts shown above are in Canadian dollars converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which was $0.9844 to AUD 1 in 2016, $0.9943 to AUD 1 in 2017 and $0.9682 to AUD 1 in 2018.

Option-based awards

We used the Black-Scholes Merton valuation model, a prevalent and commonly used valuation methodology, to determine the accounting fair value of the stock option awards:

Date of grant	Value ($)	Expected dividend yield (%)	Risk-free interest rate (%)	Implied volatility (%)	Exercise period (years)
January 1, 2018[1]	14.86	2.50	2.45	22.97	3-10 years
January 1, 2017[2]	9.66	3.36	1.98	23.99	3-10 years
January 1, 2016[3]	7.76	3.53	1.90	20.85	3-10 years

(1) Granted to Mr. L'Heureux and Mr. Roy.
(2) Granted to Mr. L'Heureux and Mr. Roy.
(3) Granted to Mr. L'Heureux.

Share-based awards

The grant date fair value of PSUs, RSUs and DSUs awarded to the NEOs is the Market Value of PSUs, DSUs and RSUs awarded under the LTIPs, being the five-trading day volume weighted average price of the Shares on the TSX prior to the award date.

Long-Term Incentive Plans

Description of Plans, Type of Equity Awards and Performance Measures

In 2018, the Corporation administered four long-term incentive plans pursuant to which awards were made to its executives: (i) a long-term incentive plan adopted in 2011, as amended from time to time (the "**LTI Plan**") under which Options and Old RSUs can be issued, (ii) a performance share unit plan adopted in 2014, as amended from time to time (the "**PSU Plan**"), (iii) a deferred share unit plan adopted in 2015, as amended from time to time (the "**DSU Plan**"), and (iv) a restricted share unit plan adopted in 2015, as amended from time to time (the "**RSU Plan**", and collectively with the LTI Plan, the PSU Plan and the DSU Plan, the "**LTIPs**").

Detailed information on the LTIPs is included in *Schedule C* of this Circular.

LTI Plan

The LTI Plan was designed to increase the interest in the Corporation's welfare of those officers, senior executives or key employees of the Corporation (collectively, the "**Eligible Participants**") who share responsibility for the management, growth and protection of the business of the Corporation and have a significant impact on the Corporation's long-term results, to reward their performance in creating value for Shareholders and to provide a means through which the Corporation may attract and retain key personnel.

For each grant of Options under the LTI Plan, the Governance, Ethics and Compensation Committee (i) designates the Eligible Participants who may receive Options under the LTI Plan, (ii) fixes the number of Options, if any, to be granted to each Eligible Participant and the date or dates on which such Options shall be granted, (iii) determines the price per Share to be payable upon the exercise of each such Option, which shall not be less than the market value of such Shares at the time of the grant, and (iv) determines the relevant vesting provisions, including performance criteria, if any, and the term of the Option which shall not exceed 10 years, the whole subject to the terms and conditions of the LTI Plan.

For each grant of Old RSUs under the LTI Plan, the Governance, Ethics and Compensation Committee (i) designates the Eligible Participants who may receive Options under the LTI Plan, (ii) fixes the number or dollar amount of Old RSUs to be granted to each Eligible Participant and the date or dates on which such Options shall be granted, (iii) determines the relevant conditions and vesting provisions, including the determination of a Performance Period and performance criteria, if any, and (iv) determines the period during which Old RSUs may vest, which period must fall after the end of the Performance Period but no later than the last day of the Restriction Period, the whole subject to the terms and conditions of the LTI Plan. Old RSUs issued under the LTI Plan may be settled in Shares or cash or a combination of both, at the discretion of the Governance, Ethics and Compensation Committee or the Board.

In accordance with the terms of the LTI Plan, a Dividend Equivalent is to be computed in the form of additional Old RSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such Old RSUs are awarded on April 15 of the following fiscal year and vest on the Vesting Date according to the same vesting conditions (including performance criteria, if any) as the underlying Old RSUs.

The last grant of Old RSUs took place on March 28, 2013 and there are currently no outstanding Old RSUs.

PSU Plan

The PSU Plan was designed to provide Eligible Participants with the opportunity to participate in the long-term success of the Corporation, to promote a greater alignment of their interests with those of Shareholders, to reward Eligible Participants for their performance and to provide a means through which the Corporation may attract and retain key personnel. For the purpose of the PSU Plan, awards are made to such "**Eligible Participants**" who contribute in a material way to the present and future success of the Corporation. PSUs issued under the PSU Plan can only be settled in cash.

For each grant of PSUs under the PSU Plan, the Governance, Ethics and Compensation Committee (i) designates the Eligible Participants who may receive PSUs under the PSU Plan, (ii) determines the number of PSUs to be credited to each Eligible Participant, (iii) determines the performance measures and objectives that shall determine the proportion, not exceeding 200%, of such awarded PSUs becoming Vested PSUs, and (iv) determines the Performance Period, the whole subject to the terms and conditions of the PSU Plan.

In accordance with the terms of the PSU Plan, a Dividend Equivalent is to be computed in the form of additional PSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such PSUs are awarded on April 15 of the following fiscal year and vest in proportion to and on the same Vesting Date as the underlying PSUs.

DSU Plan

Effective January 1, 2016, the Board, following a recommendation of the Governance, Ethics and Compensation Committee, approved amendments to the DSU Plan to permit the issuance of DSUs to Eligible Employees. These amendments were designed to assist those executive officers of the Corporation who are subject to Executive Share Ownership Requirements in meeting their minimum equity requirements. For the purpose of the DSU Plan, "**Eligible Employees**" are those employees of the Corporation designated as such by the Board, which currently include key senior executive officers of the Corporation. DSUs issued under the DSU Plan can only be settled in cash.

Unless otherwise determined, DSUs vest immediately upon being granted. However, no holder of DSUs has any right to receive any payment under the DSU Plan until he or she ceases service as an employee and, if applicable, as a Director of the Corporation for any reason (other than for Cause), including by reason of death, disability, retirement or resignation (a "**Termination Date**").

In accordance with the terms of the DSU Plan, a Dividend Equivalent is to be computed in the form of additional DSUs calculated as of each dividend payment date in respect of which normal cash dividends are paid on the Shares and vesting on each such date, unless otherwise determined. The settlement of such additional DSUs will occur in accordance with the same terms as the underlying DSUs.

RSU Plan

The RSU Plan was designed to promote retention of employees of the Corporation. For the purpose of the RSU Plan, "**Eligible Participants**" are those employees of the Corporation designated as such by the Governance, Ethics and Compensation Committee or the Board, which currently include key senior employees and executive officers of the Corporation. RSUs issued under the RSU Plan can only be settled in cash. For each grant of RSUs under the RSU Plan, the Governance, Ethics and Compensation Committee (i) designates the Eligible Participants who may receive RSUs under the RSU Plan, (ii) fixes the number or dollar amount of RSUs to be granted to each Eligible Participant and the date or dates on which such RSUs shall be granted, and (iii) determines the vesting determination date, which shall be the third anniversary from the date such RSUs were awarded, or such other date as fixed by the Governance, Ethics and Compensation Committee, but no later than the last day of the Restriction Period, the whole subject to the terms and conditions of the RSU Plan.

In accordance with the terms of the RSU Plan, a Dividend Equivalent is to be computed in the form of additional RSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such RSUs are awarded on April 15 of the following fiscal year and vest on the Vesting Date according to the same vesting conditions (including performance criteria, if any) as the underlying RSUs.

Incentive Plan Awards Table

The following table summarizes for each NEO the number of Options, RSUs, DSUs and PSUs outstanding under the LTIPs as at December 31, 2018.

		Outstanding Option-Based Awards				*Outstanding Share-Based Awards*		
Name and Principal Position	Date of Grant	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price ($)	Option Expiration Date	Value of Unexercised In-the-Money Options[1] ($)	Number of Shares or Units of Shares that Have Not Vested[2] (#)	Market or Payout Value of Share-Based Awards that Have Not Vested ($)[2] [3]	Market or Payout Value of Vested Share-Based Awards Not Paid Out or Distributed ($)[4]
Alexandre L'Heureux President and CEO	January 1, 2018	40,713	59.75	Dec 31, 2027	-	31,104	1,824,872	608,291
	January 1, 2017	62,629	45.01	Dec 31, 2026	855,512	42,474	2,491,950	830,591
	December 9, 2016	-	-	-	-		-	950,509
	January 1, 2016	31,420	43.17	Dec 31, 2025	487,010		-	1,269,100
	March 27, 2015	48,210	41.69	March 26, 2025	818,606	-	-	-
	March 28, 2014[5]	20,000	35.12	March 27, 2024	471,000	-	-	-
	March 26, 2014	39,130	35.45	March 25, 2024	908,599	-	-	-
				Total	*3,540,727*		*4,316,821*	*3,658,491*
Bruno Roy CFO	January 1, 2018	13,122	59.75	Dec 31, 2027	-	10,026	588,225	196,016
	January 1, 2017	17,857	45.01	Dec 31, 2026	243,927	12,110	710,494	236,909
	November 12, 2016	-	-	-	-	2,993	175,599	-
				Total	*243,927*		*1,474,318*	*432,926*
Paul Dollin COO	January 1, 2018	-	-	-	-	11,111	651,882	217,314
	January 1, 2017	-	-	-	-	16,843	988,179	329,432
	March 21, 2016	-	-	-	-	-	-	124,554
	January 1, 2016	-	-	-	-	-	-	1,323,511
	March 27, 2015	-	-	-	-	-	-	-
	March 26, 2014	-	-	-	-	-	-	-
				Total	-		*1,640,061*	*1,994,811*
Greg Kelly President and CEO, U.S.	January 1, 2018	-	-	-	-	10,459	613,630	204,524
	January 1, 2017	-	-	-	-	13,710	804,366	268,122
	January 1, 2016	-	-	-	-	-	-	967,376
	March 27, 2015	-	-	-	-	-	-	-
				Total			*1,417,995*	*1,440,022*
Guy Templeton President and CEO, Australia and New Zealand	January 1, 2018	-	-	-	-	7,958	466,896	-
	January 1, 2017	-	-	-	-	10,335	606,354	-
	January 1, 2016	-	-	-	-	-	-	744,074
	March 27, 2015	-	-	-	-	-	-	-
				Total			*1,073,250*	*744,074*

(1) Value of the unexercised in-the-money Options at fiscal year-end is calculated based on the difference between the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and the Option exercise price, multiplied by the number of unexercised Options.

(2) Consist of PSUs and RSUs, including PSUs and/or RSUs issued as Dividend Equivalents earned during 2018, but not yet credited thereto.

(3) The value of Share-based awards that have not vested at fiscal year-end is determined by multiplying the number of units held as at December 31, 2018 by the closing price of the Shares on the TSX on December 31, 2018 of $58.67, assuming that performance and vesting conditions will be fully met and assuming a payout of 100%.

(4) Consist of PSUs and DSUs, including PSUs and/or DSUs issued Dividend Equivalents earned during 2018, but not yet credited thereto. The value of DSUs that have vested but not been paid out at fiscal year-end is determined by multiplying the number of vested DSUs held as at December 31, 2018 by the closing price of the Shares on the TSX on December 31, 2018 of $58.67. The value of PSUs that have vested but not been paid out at fiscal year-end is determined by multiplying the number of vested PSUs held as at December 31, 2018 by the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and based on a payout of 121%.

(5) The Board of Directors, following a recommendation of the Governance, Ethics and Compensation Committee, approved a grant of 20,000 Options to Mr. L'Heureux on March 28, 2014, which vested entirely on March 28, 2016.

Incentive Plan Awards – Value Vested or Earned During the Year

The following table provides a summary of the value of Option-based, vested Share-based awards and non-equity incentive plan compensation earned during the Corporation's fiscal year ended December 31, 2018.

Name and Principal Position	Option-Based Awards – Value Vested During the Year[1] ($)	Share-Based Awards – Value Vested During the Year[2] ($)	Non-Equity Incentive Plan Compensation – Value Earned During the Year[3] ($)
Alexandre L'Heureux President and CEO	1,244,389	2,314,725	2,126,300
Bruno Roy CFO	--	204,716	942,338
Paul Dollin[4] COO	--	1,371,087	1,005,022
Greg Kelly[5] President and CEO, U.S.	--	977,264	725,368
Guy Templeton[6] President and CEO, Australia and New Zealand	--	587,014	550,761

(1) Value vested during the year is calculated based on the difference between the closing price of the Shares on the TSX on the date of vesting and the Option exercise price, multiplied by the number of Options vested.

(2) Consist of PSUs and DSUs, including PSUs and/or DSUs issued as Dividend Equivalents earned during 2018, but not yet credited thereto. The value of DSUs that have vested during the year is determined by multiplying the number of units that have vested during 2018 by the closing price of the Shares on the TSX on January 2, 2018 of $59.61. The value of PSUs that have vested during the year is determined by multiplying the number of vested PSUs held as at December 31, 2018 by the closing price of the Shares on the TSX on December 31, 2018 of $58.67 and based on a payout of 121%. Vested DSUs become payable once employment with the Corporation is terminated for any reason other than for cause.

(3) The number corresponds to the bonus earned under the STIP for 2018.

(4) Mr. Dollin is paid in GBP. Amount shown in this table for non-equity incentive plan compensation is converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.7295 to GBP 1.

(5) Mr. Kelly is paid in USD. Amount shown in this table for non-equity incentive plan compensation is converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $1.2953 to USD 1.

(6) Mr. Templeton is paid in AUD. Amount shown in this table for non-equity incentive plan compensation is converted on the basis of the average exchange rate used to present information in the Corporation's consolidated annual audited financial statements, which in 2018 was $0.9682 to AUD 1.

Options Exercised During the Year Ended December 31, 2018

No stock options were exercised by NEOs during the year ended December 31, 2018.

The following table provides a summary as of December 31, 2018, of the security-based compensation plans or individual compensation arrangements pursuant to which equity securities of the Corporation may be issued.

Securities Authorized for Issuance under Equity Compensation Plans

	Number of Shares to be Issued upon Exercise of Outstanding Options	Weighted-Average Exercise Price of Outstanding Options	Number of Shares Remaining Available for Future Issuance under Equity Compensation Plans
Equity Compensation Plans Approved by Securityholders	693,583	43.29	1,387,367
Equity Compensation Plans not Approved by Securityholders	Not applicable	Not applicable	Not applicable
Total	*693,583*	*43.29*	*1,387,367*

Under the LTI Plan, the total number of Shares reserved and available for grant and issuance pursuant to Options and Old RSUs is limited to 2,080,950 Shares, representing approximately 1.99% of the 104,441,416 issued and outstanding Shares as of December 31, 2018. As of such date, an aggregate of 993,188 Options had been issued to employees of the Corporation, representing 0.95% of the 104,441,416 issued and outstanding Shares as of December 31, 2018, of which 190,891 have been cancelled and 108,714 have been exercised, and 693,583 Options remained outstanding, representing 0.66% of the 104,441,416 issued and outstanding Shares as of December 31, 2018. There are no outstanding Old RSUs under the LTI plan. For a full description of the LTIPs, please refer to *Schedule C*.

The following table presents, for each of the Corporation's three most recently completed fiscal years, the annual burn rate of the Options, being the number of Options granted during the applicable fiscal year over the weighted average number of Shares outstanding for the applicable fiscal year.

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2017	Fiscal year ended December 31, 2016
Annual Burn Rate	0.07%	0.14%	0.15%

Other Important Information

Directors' and Officers' Liability Insurance

The Directors and officers of the Corporation and its subsidiaries are covered under (i) a directors' and officers' insurance policy, and (ii) a directors' and officers' excess insurance policy.

The Corporation has also entered into indemnification agreements with each of its Directors and officers. The indemnification agreements generally require that the Corporation indemnify and hold the indemnitees harmless to the greatest extent permitted by law for liabilities arising out of the indemnitees' service to the Corporation as Directors or officers, provided that the indemnitees acted honestly and in good faith with a view to the best interests of the Corporation and, with respect to criminal and administrative actions or proceedings that are enforced by monetary penalty, the indemnitees had no reasonable grounds to believe that their conduct was unlawful. The indemnification agreements also provide for the advancement of defense expenses to the indemnitees by the Corporation.

Aggregate Indebtedness of Directors and Officers

As at March 28, 2019, the Corporation had not made any loans to officers, Directors, employees or former officers, directors and employees of the Corporation or any of its subsidiaries.

Interest of Management and Others in Material Transactions

None of the Nominee Directors, executive officers or insiders of the Corporation, or any associate or affiliate of such persons or the Corporation has or has had any material interest, direct or indirect, in any transaction since the commencement of the Corporation's most recently completed fiscal year or in any proposed transaction that has materially affected or will materially affect the Corporation or any of its subsidiaries.

Mail Service Interruption

If there is a mail service interruption prior to a Shareholder mailing a completed proxy to AST, it is recommended that the Shareholder deposit the completed proxy, in the envelope provided, at any of the following offices of AST:

Montreal, Quebec

2001 Robert-Bourassa Blvd.
Suite 1600
Montreal, QC H3A 2A6

Toronto, Ontario

1 Toronto Street
Suite 1200
Toronto, ON M5C 2V6

Calgary, Alberta

600 The Dome Tower
333-7th Avenue S.W.
Calgary, AB T2P 2Z1

Vancouver, British Columbia

1066 West Hastings Street
Suite 1600
Vancouver, BC V6E 3X1

How to Request More Information

Documents you can request

Additional information relating to the Corporation is available at www.sedar.com under the name WSP Global Inc., including the Corporation's AIF and annual report of the Corporation, which includes the annual audited consolidated financial statements and related management discussion & analysis for the fiscal year ended December 31, 2018. You can also ask us for a copy of the following documents at no charge:

- annual report of the Corporation, which includes the annual audited consolidated financial statements of the Corporation and related management discussion & analysis for the fiscal year ended December 31, 2018;
- any interim financial statements of the Corporation that are filed after the annual audited consolidated financial statements of the Corporation for the fiscal year ended December 31, 2018 and the management discussion & analysis for such interim financial statements; and
- the AIF, together with any document, or the relevant pages of any document, incorporated by reference therein.

The above documents are also available on the Corporation's website at www.wsp.com and on SEDAR at www.sedar.com. All of the Corporation's news releases are also available on its website. In addition, Shareholders may contact the Corporation in writing at Investor Relations, WSP Global Inc., 1600 René-Lévesque Blvd. West, 11th Floor, Montreal, Quebec, H3H 1P9.

Shareholder Proposals for our Next Annual Shareholder Meeting

The Corporation will include proposals from Shareholders that comply with applicable laws in next year's management information circular for our next annual Shareholders meeting to be held in respect of the fiscal year ending on December 31, 2019. Please send your proposal to the Corporate Secretary at the head office of the Corporation: 1600 René-Lévesque Blvd. West, 11th Floor, Montreal, Quebec, H3H 1P9, by January 4, 2020.

Approval of Directors

The content and the sending of this Circular to Shareholders of the Corporation have been approved by the Directors.

March 28, 2019

By order of the Board of Directors,

Christopher Cole
Chairman of the Board of Directors

Glossary of Terms

The following is a glossary of certain terms used in this Circular, including the summary hereof.

"2019 Director Share Ownership Requirement"
has the meaning ascribed to such term under "Upcoming Director Compensation in 2019";

"Acquisition Growth"
means annualized net revenues in respect of acquisitions contribution;

"AIF"
means the annual information form of the Corporation dated March 19, 2019, in respect of the fiscal year ended December 31, 2018;

"AST"
means AST Trust Company (Canada);

"Audit Committee"
means the audit committee of the Board of Directors;

"Black-Out Period"
means a period during which designated employees and other Insiders of the Corporation cannot trade Shares pursuant to the Corporation's policy respecting restrictions on employee trading which is in effect at that time (which, for greater certainty, does not include the period during which a cease trade order is in effect to which the Corporation, or in respect of an Insider, that Insider, is subject);

"Board of Directors" or **"Board"**
refers to the board of directors of the Corporation;

"Cash-Based Component"
means 45% of the annual compensation of the Chairman and Vice Chairman of the Board and 40% of the annual compensation of the other non-executive Directors;

"CDN"
means Canada;

"CEO"
means the Chief Executive Officer of the Corporation;

"CFO"
means the Chief Financial Officer of the Corporation;

"Chairman"
means the Chairman of the Board of Directors;

"Change of Control"
means an event whereby (i) any Person becomes the beneficial owner, directly or indirectly, of 50% or more of either the issued and outstanding Shares or the combined voting power of the Corporation's then outstanding voting securities entitled to vote generally other than in connection with an internal reorganization; (ii) any Person acquires, directly or indirectly, securities of the Corporation to which is attached the right to elect the majority of the directors of the Corporation other than in connection with an internal reorganization; or (iii) the Corporation undergoes a liquidation or dissolution or sells all or substantially all of its assets other than in connection with an internal reorganization;

"Circular"
means this management information circular of the Corporation dated March 28, 2019, together with all schedules hereto, prepared in connection with the Meeting;

"Clawback Policy"
means the executive compensation clawback policy adopted on April 15, 2013, as amended from time to time, described under "Compensation Discussion & Analysis - Executive Compensation Clawback Policy";

"Code"
means, collectively, the Code of Conduct and ancillary policies, as approved by the Board and as amended from time to time;

"Committees"
means, collectively, the Audit Committee and the Governance, Ethics and Compensation Committee;

"COO"
means the Chief Operating Officer of the Corporation;

"Corporate Governance Guidelines"
means the corporate governance guidelines of the Corporation, approved by the Board on December 11, 2015, as amended from time to time;

"Corporate Secretary"
means the Corporate Secretary of the Corporation;

"Corporation" or **"WSP"**
refers to WSP Global Inc. and, where the context requires, also includes subsidiaries and associated companies to which WSP is the successor public issuer;

"CSA"
means the Canadian Securities Administrators;

"CSA Audit Committee Rules"
means National Instrument 52-110 - Audit Committees;

"CSA Disclosure Instrument"
means National Instrument 58-101 - Disclosure of Corporate Governance Practices;

"CSA Governance Policy"
means National Policy 58-201 – Disclosure of Corporate Governance Practices;

"DEN"
means Denmark;

"Director Share Ownership Requirement"
has the meaning ascribed to such term under "Director Compensation Non-Executive Director Minimum Share Ownership Requirement";

"Directors"
means the directors of the Corporation;

"Dividend Equivalent"
means, for an Old RSU, a PSU, a DSU or a RSU, a bookkeeping entry of a number of additional awards of the same type equivalent in value to the dividend paid on a Share;

"DSO"
means days sales outstanding;

"DSU"
means deferred share units granted by the Corporation pursuant to the DSU Plan;

"DSU Plan"
means the Corporation's deferred share unit plan approved by the Board on May 12, 2015, as amended from time to time;

"Eligible Directors"
under the DSU Plan are those Directors that are designated as such by the Board;

"Eligible Employees"
under the DSU Plan are those employees of the Corporation that are designated as such by the Board;

"Eligible Participants"
means the persons who shall be eligible to receive Options or Old RSUs under the LTI Plan, the persons who shall be entitled to receive PSUs under the PSU Plan, the persons who shall be entitled to receives DSUs under the DSU Plan and the persons who shall be entitled to receive RSUs under the RSU Plan, as applicable;

"Employee Shares"
means the Shares purchased by employees of the Corporation or its subsidiaries under the ESPP;

"ESPP"
means the Employee Share Purchase Plan of the Corporation, as it may be amended from time to time;

"Executive Share Ownership Requirement"
has the meaning ascribed to such term under "Compensation Discussion & Analysis - Executive Minimum Share Ownership Requirement";

"GBP"
means British Pounds Sterling;

"Governance, Ethics and Compensation Committee"
means the governance, ethics and compensation committee of the Board of Directors;

"Hugessen"
means Hugessen Consulting Inc.;

"IFRS"
means International Financial Reporting Standards;

"Insider"
has the meaning given to this term in the Securities Act (Quebec), as such legislation may be amended, supplemented or replaced from time to time;

"LTI Plan"
means the Corporation's long-term incentive plan governing the issuance of Options as amended from time to time;

"LTIPs"
means, collectively, the LTI Plan, the PSU Plan, the DSU Plan and the RSU Plan;

"Management"
means the management of the Corporation;

"Market Value"
means the five-trading day volume weighted average price of the Shares on the TSX prior to issuance, exercise, valuation date, payment or vesting, as applicable, of an Old RSU, a PSU, a DSU, an RSU or an Option, as applicable;

"Meeting"
means the annual meeting of Shareholders to be held on May 15, 2019, and any adjournment(s) thereof;

"Meeting Materials"
means collectively, the Circular, the Notice and other proxy-related materials;

"Minimum Annual Requirement"
has the meaning ascribed to such term under "Director Compensation" – "Non-Executive Director Minimum Share Ownership Requirement";

"NEOs"
means the CEO, the CFO and each of the other three most highly compensated executive officers of the Corporation, including any of its subsidiaries, (or the three most highly compensated individuals acting in a similar capacity) other than the CEO and the CFO in the Corporation's last completed fiscal year, being Alexandre L'Heureux, Bruno Roy, Paul Dollin, Greg Kelly and Guy Templeton;

"Named Proxyholders"
means Alexandre L'Heureux and Bruno Roy;

"Nominee"
means a bank, trust company, securities broker or other financial institution or intermediary holding the Shares of a non-registered Shareholder;

"Nominee Directors"
means each of the proposed nominee directors under this Circular, namely Louis-Philippe Carrière, Christopher Cole, Linda Galipeau, Alexandre L'Heureux, Birgit Nørgaard, Suzanne Rancourt, Paul Raymond and Pierre Shoiry;

"Notice"
means the notice of annual meeting of Shareholders;

"Old RSU"
means restricted share units granted by the Corporation pursuant to the LTI Plan;

"Option Price"
means the price per Share to be payable upon the exercise of Options under the LTI Plan;

"Options"
means options granted by the Corporation pursuant to the LTI Plan;

"Orientation and Development Plan"
means the Corporation's Directors Orientation Plan and Development Program;

"Parsons Brinckerhoff Acquisition"
means the acquisition by the Corporation of all the issued and outstanding capital stock of the entities comprising the

business of Parsons Brinckerhoff Group Inc. on October 31, 2014;

"Participants"
means Eligible Participants when such Eligible Participants are granted Options or Old RSUs under the LTI Plan, PSUs under the PSU Plan or RSUs under the RSU Plan or Eligible Directors or Eligible Employees when such Eligible Directors or Eligible Employees are granted DSUs under the DSU Plan, as applicable;

"Peer Group"
means the peer group described under "Compensation Discussion & Analysis - Benchmarking";

"Performance Period"
means the period over which the performance criteria (if any) and other vesting conditions of Old RSUs or PSUs, as applicable, will be measured and which shall end no later than December 31 of the calendar year which is three years commencing at the start of the calendar year in which Old RSUs or PSUs, as applicable, were granted;

"Proxyholder"
means the person named on the form of proxy;

"PSU"
means performance share units granted by the Corporation pursuant to the PSU Plan;

"PSU Plan"
means the Corporation's performance share unit plan approved by the Board on December 11, 2015 and as amended from time to time;

"Record Date"
means April 1, 2019, being the date for determination of Shareholders entitled to receive notice of and to vote at the Meeting;

"Restriction Period"
means the period during which Old RSUs or RSUs may vest, as determined by the Governance, Ethics and Compensation Committee but which period shall end no later than December 31 of the calendar year which is three years after the calendar year in which Old RSUs or RSUs were granted;

"RSU"
means restricted share units granted by the Corporation pursuant to the RSU Plan;

"RSU Plan"
means the Corporation's restricted share unit plan approved by the Board on December 11, 2015 and as amended from time to time;

"Shareholders"
means holders from time to time of Shares;

"Shares"
means the common shares of the Corporation;

"STIP"
means the short-term incentive plan of the Corporation;

"Sun Life"
means Sun Life Financial Trust Inc.;

"Termination Date"
means the date an Eligible Director ceases to be an Eligible Director (and is not at that time an employee of the Corporation) or ceases to be an Eligible Employee (and is not at that time a Director), in each such cases for any reason (other than for Cause), including by reason of death, disability, retirement or resignation;

"Total Shareholder Return" or **"TSR"**
means the Corporation's total shareholder return over a specified period;

"TSX"
means the Toronto Stock Exchange;

"U.K."
means the United Kingdom;

"U.S."
means the United States of America;

"Vested PSUs"
means, with respect to PSUs, at the end of a Performance Period, the number of PSUs credited to the participants account with respect to such award (including any Dividend Equivalents accrued thereon) multiplied by the Vesting Percentage;

"**Vesting Date"**
means the date on which the Governance, Ethics and Compensation Committee determines whether the vesting conditions of Old RSUs, PSUs or RSUs, as applicable (including the performance criteria, if any) have been met, but no later than the last day of the Restriction Period; and

"Vesting Percentage"
means, with respect to PSUs and Old RSUs, the percentage of performance achieved during the applicable Performance Period, as assessed by the Governance, Ethics and Compensation Committee on the Vesting Date in light of the performance criteria set for such Performance Period.

Schedule A - Board of Directors Charter

WSP Global Inc. (the "**Corporation**")

A. Purpose

The role of the board of directors of the Corporation (the "**Board**") is to supervise the management of the business and affairs of the Corporation. The Board, directly and through its committees, shall provide direction to senior management, generally through the president and chief executive officer (the "**CEO**"), to pursue the best interests of the Corporation.

B. Duties and Responsibilities

The Board, in exercising its powers and discharging its duties, shall act honestly and in good faith with a view to the best interests of the Corporation and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. In considering what is in the best interests of the Corporation, the Board may look at the interests of inter alia, shareholders, employees, creditors, consumers, governments and the environment to inform its decisions.

In furtherance of its purpose, the Board shall assume the following duties and responsibilities:

Strategy and Budget

1. Ensure that a strategic planning process is in place and approve, at least on an annual basis, a strategic plan which may take into account, among other things, the longer term opportunities and risks of the business;
2. Approve the Corporation's annual operating and capital budgets;
3. Review operating and financial performance results in relation to the Corporation's strategic plan and budgets;
4. Approve all significant decisions outside of the ordinary course of the Corporation's business, including major financings, acquisitions, and dispositions or material departures from the strategic plan or budgets;

Governance

5. Develop the Corporation's approach to, and disclosure of, corporate governance practices and oversee the development by the governance, ethics and compensation committee (the "**Governance, Ethics and Compensation Committee**") of a set of corporate governance guidelines and principles that are specifically applicable to the Corporation;
6. Approve the nomination of directors to the Board, as well as:
   a) Ensure that a majority of the Corporation's directors have no direct or indirect material relationship with the Corporation and determine who, in the reasonable opinion of the Board, are independent pursuant to applicable legislation, regulation and listing requirements;
   b) Develop appropriate qualifications and criteria for the selection of Board members;
7. Appoint the chairperson of the Board (the "**Chairperson**") and if the Chairperson is an Executive Chairperson, a lead director (the "**Lead Director**") and the chairpersons and members of each committee of the Board, in consultation with the relevant committee of the Board;
8. Along with the Governance, Ethics and Compensation Committee, provide and oversee an orientation and continuing education program for newly appointed directors;
9. Review the disclosure in the Corporation's public disclosure documents relating to corporate governance practices and conduct a periodic review of the relationship between management and the Board, particularly in a view to ensure effective communication and the provision of information to directors in a timely manner;
10. Assess annually the effectiveness and contribution of the Board, the Chairperson, each committee of the Board and their respective chairperson and individual directors;
11. Review and approve the Code of Conduct of the Corporation with the purpose of promoting integrity and deterring wrongdoing, and encouraging and promoting a culture of ethical business conduct and as required, oversee compliance with the Corporation's Code of Conduct by directors, officers and other management personnel and employees;

12. Receive reports from the Governance, Ethics and Compensation Committee regarding any breach of the policies with respect to business conduct and ethics, including the Code of Conduct and review investigations and any resolutions of complaints received under such policies;
13. Delegate (to the extent permitted by law) to the CEO, other executive officers and management personnel appropriate powers to manage the business and affairs of the Corporation;
14. Act and function independently from management in fulfilling its fiduciary obligations;
15. Review, approve and oversee the implementation of the Corporation's material policies, including the insider trading policy, health and safety policies and practices and measures for receiving feedback from the Corporation's stakeholders, and oversee compliance of these policies by directors, executive officers and other management personnel and employees;
16. Review and approve, as required, the Corporation's environmental policies and management systems;

Human Resource Management and Compensation

17. Appoint the CEO and the Chief Financial Officer (the "**CFO**") of the Corporation, following the recommendation of the Governance, Ethics and Compensation Committee;
18. Approve and/or develop, as applicable written position descriptions for the role of the CEO, the CFO and the Chief Operating Officer, which includes delineating management's responsibilities, as well as written position descriptions for the role of the chairperson of each of the committees of the Board, the Vice-Chairman and the Lead Director;
19. Approve the Corporation's compensation policy for directors, if any;
20. Review and approve, following the recommendation of the Governance, Ethics and Compensation Committee, the corporate goals and objectives that the CEO, the CFO and other executive officers are responsible for meeting and reviewing the performance of these individuals against such corporate goals and objectives;
21. Review and approve, following the recommendation of the Governance, Ethics and Compensation Committee, the compensation of the CEO, the CFO and other executive officers of the Corporation (including participation in compensation and benefits policies or changes thereto);
22. Satisfy itself as to the integrity of the CEO and other executive officers and that the CEO and other executive officers create a culture of integrity throughout the organization;
23. Review and approve, following the recommendation of the Governance, Ethics and Compensation Committee, the succession planning relating to the position of the CEO, other executive officers, the chairperson of the Board and of each of the committees and the Lead Director;

Risk Management, Capital Management and Internal Controls

24. Identify and assess periodically the principal risks of the Corporation's business, and ensure the implementation of appropriate systems to manage these risks;
25. Together with the Audit Committee, ensure the integrity of the Corporation's internal control over financial reporting, management of information systems, disclosure controls and procedures, financial disclosure and the safeguarding of the Corporation's assets;
26. Review and approve, upon recommendation from the Audit Committee, and oversee the Corporation's disclosure controls and procedures;

Communications

27. In conjunction with management, meet with the Corporation's shareholders at the annual meeting and be available to respond to questions at that time;
28. Monitor investor relations programs and communications with analysts, the media and the public;
29. Review, approve and oversee the implementation of the Corporation's Public Disclosure Policy and communications policies;

Financial Reporting, Auditors and Transactions

30. Review and approve, as required, the Corporation's financial statements and related financial information;
31. Appoint, upon recommendation from the Audit Committee, (including terms and review of engagement), subject to approval of shareholders, and remove the Corporation's auditor; and
32. Review and approve mergers and acquisition opportunities and financings.

C. Composition

1. The composition and organization of the Board, including the number, qualifications and remuneration of directors, the number of Board meetings, Canadian residency requirements, quorum requirements, meeting procedures and notices of meetings shall comply with applicable requirements of the Canada Business Corporations Act, the securities laws and regulations applicable in the Province of Québec and the articles and by-laws of the Corporation, subject to any exemptions or relief that may be granted from such requirements from time to time.

D. Committees of the Board

1. Subject to applicable law, the Board shall establish, if needed, other Board committees or merge or dispose of any Board committee in addition to the Audit Committee and the Governance, Ethics and Compensation Committee.
2. In conjunction with the Governance, Ethics and Compensation Committee, the Board shall review the appropriate structure, size, composition, mandate and members for each Board committee, and approve any modifications to such items as considered advisable. The Board may review, from time to time, each charter and consider any suggested amendments for approval. In addition, the Board may institute procedures to ensure that the Board and the Board committees function independently of management.
3. To facilitate communication between the Board and each of the Board committees, each committee chairperson shall provide a summary and, to the extent necessary, a report, to the Board on material matters considered by the committee at the first Board meeting following the committee's meeting.

E. Meeting

1. The Board shall meet at least once in each quarter, with additional meetings held as deemed advisable. The Chairperson shall be primarily responsible for the agenda and for supervising the conduct of any Board meeting. Any director may propose the inclusion of items on the agenda, request the presence of, or a report by any member of senior management, or at any Board meeting raise subjects that are not on the agenda for that meeting.
2. The Board shall conduct meetings of the Board in accordance with the Corporation's articles and by-laws.
3. The secretary of the Corporation (the "**Corporate Secretary**"), his or her designate or any other person the Board requests, shall act as secretary of Board meetings.
4. Minutes of Board meetings shall be recorded and maintained by the Corporate Secretary, or any other person acting in such capacity, and subsequently presented to the Board for approval.
5. The non-executive members of the Board may hold regularly-scheduled meetings, or portions of regularly scheduled meetings, at which employee directors and members of management are not present.
6. Each director is expected to attend all meetings of the Board and any committee of which he or she is a member.
7. Each director is expected to review and be familiar with Board and Committee materials which have been provided in sufficient time for review prior to the meeting.
8. The Board shall have unrestricted access to management and employees of the Corporation (including, for greater certainty, its affiliates, subsidiaries and their respective operations).

F. Other

1. The Board shall perform any other function as prescribed by law or as not delegated by the Board to one of the committees of the Board or to management personnel.
2. This Board Charter is a statement of broad policies and is intended as a component of the flexible governance framework within which the Board, assisted by its committees, directs the affairs of the Corporation. While it should be interpreted in the context of all applicable laws, regulations and listing requirements, as well as in the context of the Corporation's articles and by-laws, it is not intended to establish any legally binding obligations.

G. Limitations on Board's duties

1. Nothing contained in this charter is intended to expand applicable standards of conduct under statutory or regulatory requirements for the directors of the Corporation.
2. Members of the Board are entitled to rely, absent knowledge to the contrary, on (i) the integrity of the persons and organizations from whom they receive information, and (ii) the accuracy and completeness of the information provided.

Schedule B - Position Descriptions

Chairman of the Board of Directors

The Board of Directors has adopted a position description for the Chairman of the Board. Some of the primary responsibilities of the Chairman include, among others, the following: (i) establishing procedures to govern the Board of Directors' work and ensure the Board of Directors' full discharge of its duties, (ii) working with the president and CEO, other officers and senior management personnel to monitor progress on the strategic plan, annual budgets, policy implementation and succession planning, (iii) ensuring that the Board of Directors acts and functions independently from Management in fulfilling its fiduciary obligations, and (iv) chairing every meeting of the Board of Directors and encouraging free and open discussion at such meetings.

Chief Executive Officer

The Board of Directors has adopted a position description for the CEO. The CEO is accountable to the Board of Directors for the effective overall management of the Corporation and for conformity with policies agreed upon by the Board of Directors. The CEO shall have full responsibility for the day-to-day operations of the business of the Corporation and its subsidiaries in accordance with the strategic plan and operating and capital budgets. Some of the primary responsibilities of the CEO include, among others, the following: (i) manage the strategic and operational performance of the Corporation in accordance with the goals, policies and objectives set by the Board from time to time, including overseeing the Corporation's achievement and maintenance of a satisfactory competitive position within its industry, (ii) develop, for the Board's consideration and approval, an annual strategic plan which takes into account, among other things, potential growth through strategic acquisitions, longer term opportunities and risks of the business, (iii) develop, in cooperation with the CFO and the COO, an annual operating plan and financial budget that supports the Corporation's long-term strategy, (iv) establish a strong working relationship with the Board of Directors and (v) oversee the CFO and the COO in ensuring that the day-to-day business affairs of the Corporation are appropriately managed through the development and implementation of processes that will ensure the achievement of the Corporation's financial and operating goals and objectives.

Chair of Committees

The Chair of each of the Audit Committee and the Governance, Ethics and Compensation Committee currently are respectively, Mr. Carrière and Ms. Galipeau. Under applicable securities laws, each of Mr. Carrière and Ms. Galipeau is independent from the Corporation.

Position descriptions have been adopted by the Board of Directors for the Chair of each of the Audit Committee and the Governance, Ethics and Compensation Committee.

Some of the primary responsibilities of the Chair of the Audit Committee include, among others, the following: (i) establish procedures to govern the Audit Committee's work and ensuring the Audit Committee fully discharges its duties, (ii) ensure that there is an effective relationship between Management and the members of the Audit Committee, (iii) in consultation with the CEO, the Corporate Secretary and the Chairman, determine the frequency, dates and locations of meetings of the Audit Committee, (iv) report to the Board of Directors on the matters reviewed by, and on any decisions or recommendations of the Audit Committee at the next meeting of the Board of Directors following any meeting of the Audit Committee, and (v) ensure the proper flow of information to the Audit Committee.

Some of the primary responsibilities of the Chair of the Governance, Ethics and Compensation Committee include, among others, the following: (i) establish procedures to govern the Governance, Ethics and Compensation Committee's work and ensure the Governance, Ethics and Compensation Committee fully discharges its duties; (ii) in consultation with the CEO, the Corporate Secretary and the Chairman of the Board of Directors, determine the frequency, dates and locations of meetings of the Governance, Ethics and Compensation Committee, (iii) prepare the Governance, Ethics and Compensation Committee meeting agendas to ensure all required business is brought before the Governance, Ethics and Compensation Committee to enable it to efficiently carry out its duties and responsibilities, (iv) chair every meeting of the Governance, Ethics and Compensation Committee and encourage candid, free and open discussions at meetings of the Governance, Ethics and Compensation Committee and (v) ensure that sufficient information is provided by Management to enable the Governance, Ethics and Compensation Committee to exercise its duties.

Schedule C - Long-Term Incentive Plans

LTI Plan

Effective January 1, 2011, the Corporation has adopted a long term incentive plan (the "**LTI Plan**") for certain management employees holding positions that can have a significant impact on the Corporation's long-term results. Under the LTI Plan, the Corporation may grant, subject to certain terms and conditions, options ("**Options**") to purchase Shares or restricted share units ("**Old RSUs**") to Eligible Participants (as hereinafter defined).

The LTI Plan is administered by the Governance, Ethics and Compensation Committee, which shall also be responsible for its interpretation, construction and application.

Pursuant to the LTI Plan, only those officers, senior executives and other employees of the Corporation that occupy key positions as determined by the Governance, Ethics and Compensation Committee are eligible to receive Options or Old RSUs ("**Eligible Participants**", and when such Eligible Participants are granted Options or Old RSUs, the "**Participants**"). In determining Options or Old RSUs to be granted under the LTI Plan, the Governance, Ethics and Compensation Committee gives due consideration to the value of each Eligible Participant's present and potential future contribution to the Corporation's success.

Under the LTI Plan, the total number of Shares reserved and available for grant and issuance pursuant to Options and Old RSUs is limited to 2,080,950 Shares, representing approximately 1.99% of the 104,441,416 issued and outstanding Shares as of December 31, 2018 (the "**Total Reserve**"). At the discretion of the Governance, Ethics and Compensation Committee, RSUs issued under the LTI Plan may be paid in cash or in Shares, or a combination of both.

Shares in respect of which an Option or Old RSU is granted but not exercised prior to the termination of such Option or not vested or delivered prior to the termination of such Old RSU, due to the expiration, termination or lapse of such Option or Old RSU or otherwise, are available for Options or Old RSUs to be granted thereafter. Pursuant to the LTI Plan, in no event can the number of Shares issued from treasury to satisfy the payment of vested Old RSUs exceed 2% of the issued and outstanding Shares at the time. The LTI Plan further provides that (i) the aggregate number of Shares reserved for issuance at any time to any one Eligible Participant shall not exceed 4% of the issued and outstanding Shares at such time and that (ii) the aggregate number of Shares (a) issued to any one insider or to insiders and associates of such insiders under the LTI Plan or any other proposed or established share compensation arrangement within any one-year period and (b) issuable to insiders and associates of such insiders at any time under the LTI Plan or any other proposed or established share compensation arrangement, shall not in each case exceed 4% of the issued and outstanding Shares.

Options or Old RSUs granted or awarded under the LTI Plan may not be assigned or transferred with the exception of an assignment made to a personal representative of a deceased Participant.

The Board of Directors may amend the LTI Plan or any Options or Old RSUs at any time without the consent of the Participants so long as the amendment shall:

- not adversely alter or impair the Options or Old RSUs granted, except as permitted in the LTI Plan;
- be subject to regulatory approvals including, where required, the approval of the TSX; and
- be subject to Shareholder approval, as required by law or the TSX, provided that Shareholder approval is not required for the following amendments and the Board of Directors may make any changes which may include but are not limited to:
  - amendments of a "housekeeping" nature;
  - a change to the vesting provisions of any Option or Old RSU;
  - the introduction or amendment of a cashless exercise feature payable in securities, whether or not such feature provides for a full deduction of the number of underlying securities from the Total Reserve;
  - the addition of a form of financial assistance and any amendment to a financial assistance provision which is adopted;
  - a change to the Eligible Participants of the LTI Plan, including a change which would have the potential of broadening or increasing participation by insiders; and
  - the addition of a deferred or restricted share unit or other provision giving Eligible Participants the right to receive securities while no cash consideration is received by the Corporation.

The Board of Directors will be required to obtain Shareholder approval for the following amendments:

- any change to the maximum number of Shares issuable from treasury under the LTI Plan, including an increase to the fixed maximum number of Shares or a change from a fixed maximum number of Shares to a fixed maximum percentage, other than an adjustment pursuant to a change in capitalization;
- any amendment which reduces the exercise price of any Option after the Options have been granted or any cancellation of an Option and the substitution of that Option by a new Option with a reduced price, except in the case of an adjustment pursuant to a change in capitalization;
- any amendment which extends the expiry date of any Option or determined by the Board of Directors in respect of an Old RSU of any Old RSU beyond the original expiry date, except in case of an extension due to a Black-Out Period;
- any amendment which would allow non-employee directors to be eligible for awards under the LTI Plan;
- any amendment which would permit any Option or Old RSU granted under the LTI Plan to be transferable or assignable by any Participant other than by will or by the laws of succession of the domicile of a deceased Participant under the LTI Plan;
- any amendment which increases the maximum number of Shares that may be issued to (i) insiders and associates of such insiders; or (ii) any one insider and associates of such insider under the LTI Plan or any other proposed or established share compensation arrangement in a one-year period, except in case of an adjustment pursuant to a change in capitalization; and
- any amendment to the amendment provisions of the LTI Plan,

provided that Shares held directly or indirectly by insiders benefiting from such amendments shall be excluded when obtaining such Shareholder approval.

Options

For each grant of Options under the LTI Plan, the Governance, Ethics and Compensation Committee shall (i) fix the number of Options to be granted to each Eligible Participant, (ii) determine the price per Share to be payable upon the exercise of each such Option (the "**Option Price**"), which shall not be less than the market value of such Shares at the time of the grant, and (iii) determine the relevant vesting provisions, including performance criteria, if any, and the term of the Option which shall not exceed ten years, the whole subject to the terms and conditions of the LTI Plan. For purposes of the LTI Plan, the "market value" of the Shares shall be, in accordance with the March 26, 2015 amendments to the LTI Plan described below, (i) if the grant is made outside a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period ending on the last trading day before the day on which the Option is granted or, if not available, the closing market price of the Shares at the time of the grant, or (ii) if the grant is made during a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period following the last day of such Black-Out Period. Unless otherwise determined by the Board of Directors, all unexercised Options shall be cancelled at the expiry of such Options. The expiration date is automatically extended if it falls on or within nine days of a Black-Out Period.

If a Participant's employment is terminated with cause, Options terminate on the effective date of the termination or the date specified in the notice of termination. If a Participant's employment is terminated other than for cause, by death, disability or retirement, any Options may be exercised if they have vested at the time of termination or cessation of employment. Such Options are exercisable for a period of 30 days after the termination date or prior to the expiration of the original term of such Options, whichever occurs earlier. In the event of the death of a Participant, his/her vested Options at the time of death must be exercised by his/her heirs within one year of the Participant's death or prior to the expiration of the original term of such Options, whichever occurs earlier.

In the event of the injury or disability of a Participant or in the event of retirement of a Participant, any Options may be exercised by the Participant as the rights to exercise such Options accrue; however such Options shall only be exercisable within three years after the cessation of employment (or the effective date on which the Participant becomes eligible long-term disability benefits) or the retirement, as applicable, or prior to the expiration of the original term of such Options, whichever occurs earlier. In the event a Participant takes a voluntary leave of absence, any Options may be exercised by the Participant as the rights to exercise such Options accrue; however such Options shall only be exercisable within one year after the commencement of such leave of absence or prior to the expiration of the original term of such Options, whichever occurs earlier.

Prior to its expiration or earlier termination in accordance with the LTI Plan, Options are exercisable in whole or in part and at such time or times and/or pursuant to performance criteria or other vesting conditions as the Board of Directors may determine in its sole discretion at the time of granting the Option. No Options are exercisable in Black-Out Periods.

Old RSUs

For each grant of Old RSUs under the LTI Plan, the Governance, Ethics and Compensation Committee shall (i) fix the number or dollar amount of Old RSUs to be granted to each Eligible Participant, (ii) determine the relevant conditions and vesting provisions, including the determination of a Performance Period and performance criteria, if any, and (iii) determine the period during which Old RSUs may vest which period shall end no later than December 31 of the calendar year which is three years after the calendar year in which the Old RSUs were granted (the "**Restriction Period**"), the whole subject to the terms and conditions of the LTI Plan. The vesting of the Old RSUs are also subject to the expiration of the performance period which corresponds to the period over which the performance criteria and other vesting conditions will be measured and which period shall end no later than December 31 of the calendar year which is three years after the calendar year in which the Old RSUs were granted (the "**Performance Period**"). After the vesting date, which is the date on which, after the end of the Performance Period, the Governance, Ethics and Compensation Committee determines that the vesting conditions (including the performance criteria, if any) are met (the "**Vesting Date**"), but no later than the last day of the Restriction Period, the Participants are entitled to receive payment for each awarded Old RSU in the form of Shares, cash, or a combination of Shares and cash, at the discretion of the Governance, Ethics and Compensation Committee. For the purposes of such payment, the market value of the Shares shall be the volume weighted average trading price of the Shares on the TSX for the five trading day-period ending on the last trading day before the day on which the payment is made.

If a Participant is terminated with cause or resigns, the participation in the LTI Plan terminates and all unvested Old RSUs are cancelled along with any rights to Shares that related to the unvested Old RSUs. Upon a Participant's retirement, if a Participant's employment is terminated other than for cause, by reason of injury or disability, a Participant becomes eligible to receive long-term disability benefits, a Participant elects a voluntary leave of absence and upon a Participant's death, his/her participation in the LTI Plan shall terminate and all unvested Old RSUs in the Participant's account as of such date shall remain in effect until the applicable Vesting Date, provided the Participant shall cease to accumulate Dividend Equivalents as of the separation date. If, on the Vesting Date, the Governance, Ethics and Compensation Committee determines that the vesting conditions were not met for such Old RSUs, then all unvested Old RSUs credited to such Participant shall be forfeited and cancelled along with any rights to Shares that related to the unvested Old RSUs. If, on the Vesting Date, the Governance, Ethics and Compensation Committee determines that the vesting conditions were met, the Participant or his/her heirs, as applicable, shall be entitled to receive Shares or cash on a pro rata basis based on the number of months prior to the retirement, termination, eligibility date, date of election of the voluntary leave of absence or death, as applicable. If vesting conditions have been met at the date of resignation, retirement, termination, eligibility date, date of election of the voluntary leave of absence or death, as applicable, but a corresponding distribution or payment has not yet been received by the Participant, the Participant is entitled to such distribution or payment, even if it is made after the date of resignation, retirement, termination, eligibility date, date of election of the voluntary leave of absence or death, as applicable.

The LTI Plan also provides that in the event of a Change in Control (as defined in the LTI Plan), a reorganization of the Corporation, an amalgamation of the Corporation, an arrangement involving the Corporation, a take-over bid (as that term is defined in the Securities Act (Quebec)) for all of the Shares or the sale or disposition of all or substantially all of the property and assets of the Corporation, the Board of Directors may make such provision for the protection of the rights of the Participants as the Board in its discretion considers appropriate in the circumstances, including, without limitation, changing the performance criteria and/or other vesting conditions for the Options and/or the date on which any Option expires, or the Restriction Period, the Performance Period, the performance criteria and/or other vesting conditions for the Old RSUs.

LTI Plan Amendments

On April 15, 2013, the LTI Plan was amended by the Board of Directors, upon a recommendation of the Governance, Ethics and Compensation Committee, to clarify the procedure for determining the number of Old RSUs to be credited to a Participant's account when the Governance, Ethics and Compensation Committee has only approved a total dollar amount of Old RSUs to be granted to such Participant. Further to these amendments, in cases where the Governance, Ethics and Compensation Committee only approves a dollar amount of Old RSUs to be granted to an Eligible Participant, such Participant's account shall be credited with a number of Old RSUs equal to the approved dollar amount divided by the market value of one Share, which shall be, (i) if the grant is made during a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period following the last day of such Black-Out Period, and (ii) if the grant is made outside a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period ending on the last trading day before the day on which the Old RSUs are granted. The foregoing procedure for determining the number of Old RSUs to be credited to a Participant's account was further amended in accordance with the March 26, 2015 amendments to the LTI Plan described below. No fractional Old RSUs shall be issued to Participants and the number of Old RSUs to be issued in such event shall be rounded up or down to the nearest whole number of Old RSUs. The Board of Directors determined that such amendments were of a "housekeeping" nature, the whole pursuant to Section 11.1.3.1 of the LTI Plan and, therefore, that no Shareholder approval was required.

The LTI Plan was further amended by the Board of Directors on March 12, 2014 to simplify the content of the Option and Old RSU agreements, and on April 22, 2014 to clarify how Dividend Equivalents (as hereinafter defined) are computed to a Participant's account on a quarterly basis but credited only on an annual basis on April 15. The Board of Directors determined that such amendments were of a "housekeeping" nature, the whole pursuant to Section 11.1.3.1 of the LTI Plan and, therefore, that no Shareholder approval was required.

In accordance with the terms of the LTI Plan, a Dividend Equivalent is to be computed in the form of additional Old RSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such Old RSUs shall vest on the Vesting Date according to the same vesting conditions (including performance criteria, if any) as the underlying Old RSUs. Dividend Equivalents shall be computed on each dividend payment date by dividing: (i) the amount obtained by multiplying the amount of each dividend declared and paid per Share by the number of Old RSUs recorded in the Participant's account on the record date for the payment of such dividend, by (ii) the weighted average trading price of the Shares on the TSX for the five trading days immediately following the dividend record date for the payment of any dividend made on the Shares, with fractions computed to three decimal places.

As provided in the April 22, 2014 amendments, such Dividend Equivalents payable in the form of additional Old RSUs will be credited to a Participant's account annually on April 15 between the date Old RSUs have been awarded and the Vesting Date.

The LTI Plan was further amended by the Board of Directors on March 26, 2015 to (i) clarify that Dividend Equivalents shall cease to accumulate upon a Participant ceasing to participate in the LTI Plan under certain circumstances, and (ii) clarify the definition of "market value" used for the determination of an Option Price or the number of Old RSUs to be credited to a Participant's account when only a dollar amount of Old RSUs to be granted has been approved. As per such amendments, in determining an Option Price or the number of Old RSUs to be credited to a Participant's account when only a dollar amount of Old RSUs to be granted has been approved by the Governance, Ethics and Compensation Committee, the "market value" of the Shares shall be (i) if the grant of Options or Old RSUs is made outside a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period ending on the last trading day before the day on which the Options or Old RSUs are granted or, if not available, the closing market price of the Shares at the time of the grant, or (ii) if the grant is made during a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period following the last day of such Black-Out Period. The board of directors determined that such amendments were of a "housekeeping" nature, the whole pursuant to Section 11.1.3.1 of the LTI Plan and, therefore, that no Shareholder approval was required.

The LTI Plan was further amended by the Board of Directors on December 11, 2018 to (i) ensure appropriate tax treatment for participants, (ii) allow the ability to delegate authority under the LTI Plan to specified officers of the Corporation, (iii) provide additional flexibility while continuing to comply with securities laws, and (iv) permit Options to be exercised during a Black-Out Period provided that no Shares are sold until after the Black-Out Period ends. The Board of Directors determined that such amendments were of a "housekeeping" nature, the whole pursuant to Section 11.1.3.1 of the LTI Plan and, therefore, that no Shareholder approval was required.

PSU Plan

In 2014, the Board approved, following a recommendation of the Governance, Ethics and Compensation Committee, the creation and issuance of PSUs in accordance with a newly adopted Performance Share Unit Plan (the "**PSU Plan**"). The PSU plan was designed to provide Eligible Participants with the opportunity to participate in the long-term success of the Corporation, to promote a greater alignment of their interests with those of Shareholders, to reward Eligible Participants for their performance and to provide a means through which the Corporation may attract and retain key personnel. The PSU Plan is administered by the Governance, Ethics and Compensation Committee. Once vested, PSUs issued under the PSU Plan are payable in cash only.

For each grant of PSUs under the PSU Plan, the Governance, Ethics and Compensation Committee shall (i) determine the number of PSUs (including fractional PSUs) to be credited to each Eligible Participant, having regard to the market value of the Shares at the time of the grant, (ii) determine the performance measures and objectives that shall determine the proportion, not exceeding 200% of such awarded PSUs becoming Vested PSUs, and (iii) determine the Performance Period, the whole subject to the terms and conditions of the PSU Plan. For the purpose of such determination, the "market value" of the Shares shall be, in accordance with the amendments to the PSU Plan approved by Board of Directors on March 26, 2015 and described below, (i) if the award is made outside a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period ending on the last trading day before the award date or, if not available, the closing market price of the Shares at the time of the award or (ii) if the award is made during a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period following the last day of such Black-Out Period.

Following the completion of a Performance Period applicable to an award, the Governance, Ethics and Compensation Committee shall assess the performance in light of the measures identified and the objectives set for such Performance Period. The Governance, Ethics and Compensation Committee shall then determine the percentage, not to exceed 200%, of performance achieved during the Performance Period (the "**Vesting Percentage**") applicable to the awards. In making its determination, the Governance, Ethics and Compensation Committee may set the Vesting Percentage at a higher percentage (not to exceed 200%) than would have resulted based solely on the performance measures and objectives. The number of PSUs that will vest for a Participant will correspond to the number of PSUs granted to such Participant on the grant date (including Dividend Equivalents) multiplied by the Vesting Percentage (the "**Vested PSUs**").

Participants are entitled to receive payment in cash for each Vested PSU in an amount equal to the number of Vested PSUs multiplied by the volume weighted average trading price of the Shares on the TSX for the five trading day period immediately preceding the date or dates determined by the Governance, Ethics and Compensation Committee as the date(s) on which all or part of an award shall be valued and thereafter be paid, less any applicable withholding taxes.

Upon a Participant's retirement, if a Participant's employment is terminated other than for cause, or if a Participant becomes Disabled (as defined in the PSU Plan), subject to any resolution passed by the Governance, Ethics and Compensation Committee, a pro-rated portion of PSUs in the Participant's account which have not become payable as of the separation date, based on the amount of time such Participant was actively employed during the Performance Period, shall be paid to the Participant after each applicable Vesting Date, provided that such PSUs have become Vested PSUs in accordance with the PSU Plan, and provided further the Participant shall cease to accumulate Dividend Equivalents as of the separation date. Upon the death of a Participant, any PSU granted which have not become payable on or before the date of death will immediately vest and become payable and, for such purpose, the Vesting Percentage shall be 100% and the PSUs will be valued at the date of death. Upon the termination of a Participant's employment for cause or for any other reason than those specified above, any unvested PSU credited to such Participant's account shall be forfeited and cancelled along with any Dividend Equivalent in relation to such PSUs.

The PSU Plan also provides that in the event of a Change of Control (as defined in the PSU Plan), all outstanding PSUs shall vest immediately at a Vesting Percentage of 100%, or such higher percentage as may be determined by the Governance, Ethics and Compensation Committee.

PSU Plan Amendments

To reflect amendments of a housekeeping nature and to align with the April 22, 2014 LTI amendments made to the LTI Plan, the PSU Plan was amended by the Board of Directors on April 22, 2014 to clarify how Dividend Equivalents under the PSU Plan are computed to a participant's account on a quarterly basis but credited only on an annual basis on April 15.

In accordance with the terms of the PSU Plan, the Dividend Equivalent is to be computed in the form of additional PSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such PSUs are credited annually on April 15 and shall vest on the Vesting Date according to the same vesting conditions (including performance criteria, if any) as the underlying PSUs.

The PSU Plan was further amended by the Board of Directors on March 26, 2015 to (i) clarify that Dividend Equivalents shall cease to accumulate upon a Participant ceasing to participate in the PSU Plan under certain circumstances, and (ii) amend the definition of "market value" and to align with the March 26, 2015 amendments to the LTI Plan. Pursuant to such amendments, the market value of the Shares at the time of the grant shall be (i) if the award is made outside a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period ending on the last trading day before the award date or, if not available, the closing market price of the Shares at the time of the award or (ii) if the award is made during a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period following the last day of such Black-Out Period. The Board of Directors determined that such amendments were of a "housekeeping" nature.

The PSU Plan was further amended by the Board of Directors on December 11, 2015 to: (i) clarify that the Award Market Value of an Award declared outside a Black-Out Period as part of a periodic grant program but with an effective Award Date that falls within a Black-Out Period may be calculated as if such Award had been made outside a Black-Out Period, (ii) clarify that the Valuation Date of any Award cannot be modified after the corresponding Award Date and that the Valuation Date cannot be later than the December 31 date that immediately follows the end of the applicable Performance Period, (iii) clarify that vested PSUs are payable no later than the December 31 date that immediately follows the end of the Performance Period. The Board of Directors determined that such amendments were of a "housekeeping" nature.

The PSU Plan was further amended by the Board of Directors on December 11, 2018 to ensure alignment with the other plans and to provide for other general updates of a "housekeeping" nature.

DSU Plan

Effective May 12, 2015, the Board approved, following a recommendation of the Governance, Ethics and Compensation Committee, the creation and issuance of deferred share units ("**DSUs**") in accordance with a newly adopted Deferred Share Unit Plan (the "**DSU Plan**"). The DSU plan was designed to enhance the Corporation's ability to attract and retain talented individuals to serve as members of the Board, to promote alignment of interests between Eligible Directors and the Shareholders and to assist Eligible Directors in fulfilling the Director Share Ownership Requirements. The DSU Plan is administered by the Governance, Ethics and Compensation Committee. For the purpose of the DSU Plan, "**Eligible Directors**" are those directors who are not employees of the Corporation and are designed as such by the Board, and when such Eligible Directors are granted DSUs, they are also referred to as "**Participants**". DSUs issued under the DSU Plan can only be settled in cash.

Unless he or she has met the applicable minimum annual requirement under the Director Share Ownership Requirements (the "**Minimum Annual Requirement**") for a given fiscal year and made an election in that respect, Eligible Directors receive part of their compensation in DSUs, the exact number of which, rounded down to the next whole Deferred Share Unit, being calculated using the fair market value at the time of the grant. For the purpose of the DSU Plan, the fair market value is the volume weighted average trading price of a Share on the TSX for the five trading days immediately preceding the date of calculation or such other manner as is required or allowed by the rules and policies of the TSX, or, if not available, the last available closing market price of the Shares at the time of the grant (the "**Fair Market Value**").

Unless otherwise determined, DSUs vest immediately upon being granted. However, no holder of DSUs will have any right to receive any payment under the Plan until he or she ceases to be an Eligible Director (and is not at that time an employee of the Corporation) or his or her membership on the Corporation's Board is terminated for any reason (other than for Cause), in each such cases including by death, disability, retirement or resignation (a "**Termination Date**").

In accordance with the terms of the DSU Plan, a Dividend Equivalent is to be computed in the form of additional DSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such additional DSUs will vest at the time these are credited to the recipient's account and settlement of such Dividend Equivalent will occur at the same time and in accordance with the same terms as the underlying DSUs. Dividend Equivalents shall be computed as of each dividend payment date by dividing: (i) the amount obtained by multiplying the amount of each dividend declared and paid per Share by the number of DSUs recorded in the Participant's account on the record date for the payment of such dividend, by (ii) the weighted average trading price of the Shares on the TSX for the five trading days immediately following the dividend record date for the payment of any dividend made on the Shares, rounded down to the next whole DSU. Such Dividend Equivalent payable in the form of additional DSUs will be credited to a Participant's account annually on April 15 from the date DSUs have been awarded to the date of settlement of such DSUs.

Once a Termination Date occurs for a given Participant, such Participant (or its legal representative in the case of death) will be entitled to file up to two redemption notices requesting settlement of all or part of the DSUs credited to its account by way of a cash payment calculated using the Fair Market Value of the Shares on the date of such filing. Should no redemption notice be filed, then the Participant will be deemed to have filed a redemption notice for all its DSUs on December 1 of the first calendar year commencing after the date of the Participant's Termination Date (other than as a result of the Participant's death while serving as a Director, in which case the date for determination of the Fair Market Value will be the date of the Participant's death).

The DSU Plan also provides that in the event of a Change of Control (as defined in the DSU Plan), the Board may make such provision for the protection of the rights of the Participants as the Board, in its discretion considers appropriate in the circumstances, including without limitation, providing for substitute or replacement deferred share units of the continuing entity (unless substitution or replacement of the outstanding Deferred Share Units is deemed impossible or impractical by the Board, in its sole discretion). Notwithstanding the foregoing, no Participant will be entitled to receive payment for, or in respect of, any DSUs on or before his or her Termination Date.

DSU Plan Amendments

Effective January 1, 2016, the Board approved, following a recommendation of the Governance, Ethics and Compensation Committee, certain amendments to the DSU Plan expanding the DSU Plan to certain employees of the Corporation in addition to the Eligible Directors and providing for certain other housekeeping matters (the "**Amended DSU Plan**"). Under the Amended DSU Plan, "**Eligible Employees**" are those employees of the Corporation who are designated as such

by the Board, and when such Eligible Employees are granted DSUs, they are also referred to as Participants. Except as set forth below, provisions of the DSU Plan applicable to Eligible Directors also apply to Eligible Employees (and continue to apply to Eligible Directors) under the Amended DSU Plan.

The main purpose of the amendments to the DSU Plan is to enhance the Corporation's ability to attract and retain talented individuals to serve as employees of the Corporation, to promote greater alignment of interests between Eligible Employees and the Shareholders and to support Eligible Employees in fulfilling their Share Ownership Requirements. The DSU Plan is administered by the Governance, Ethics and Compensation Committee.

No DSUs have been issued to Eligible Employees prior to 2016 and participation in the Amended DSU Plan by such Eligible Employees remains entirely at the Eligible Employee's discretion, since no given portion of an Eligible Employee's "**Annual Eligible Remuneration**" has been determined by the Board to be mandatorily payable in DSUs. For the purpose of the Amended DSU Plan, the Annual Eligible Remuneration is the amount of the annual bonus or other annual short term incentive compensation payable to an Eligible Employee in respect of his or her duties and performance as an employee of the Corporation. However, the Amended DSU Plan allows the Board to revise this policy and to require that a certain portion of the Annual Eligible Remuneration be paid in DSUs to Eligible Employees to help them achieve their applicable Share Ownership Requirements.

In the event of termination of employment for cause (or resignation contemporary to the discovery by the Corporation of any basis or grounds for termination for cause), all DSUs granted, vested or credited in favor of a Participant will be forfeited and cancelled effective immediately upon such termination and such Participant will not be entitled to any payment, benefit or other right under the Amended DSU Plan.

The Amended DSU Plan also clarifies certain matters relating to Participants subject to United States taxation.

The DSU Plan was further amended by the Board of Directors on December 11, 2018 to (i) ensure alignment with the other plans, (ii) provide that executives who elect to defer a portion of their short-term incentive compensation into DSUs will receive a matching grant of additional DSUs ("**Matching DSUs**"), and (iii) allow for a different vesting schedule for these Matching DSUs. The Board of Directors determined that such amendments were of a "housekeeping" nature.

RSU Plan

Effective January 1, 2016, the Board approved, following a recommendation of the Governance, Ethics and Compensation, the creation and issuance of new restricted share units granted or to be granted by the Corporation ("**RSUs**") in accordance with a newly adopted restricted share unit Plan (the "**RSU Plan**"). The RSU Plan was designed to increase the interest in the Corporation's welfare of Eligible Participants, who share responsibility for the management, growth and protection of the business of the Corporation or a Subsidiary, to provide an incentive to Eligible Participants to continue their services for the Corporation or a Subsidiary and to provide a means through which the Corporation may attract and retain key personnel. The RSU Plan is administered by the Governance, Ethics and Compensation Committee. Once vested, RSUs issued under the RSU Plan are payable in cash only.

For each grant of RSUs under the RSU Plan, the Governance, Ethics and Compensation Committee shall (i) fix the number or dollar amount of RSUs, as the case may be, to be granted to each Eligible Participant and the date or dates on which such RSUs shall be granted (the "**Award Date**") and (ii) determine the relevant conditions and vesting provisions and Restriction Period of such RSUs. Under the RSU Plan, (i) RSUs shall vest three years after the Award Date unless otherwise provided for by the Governance, Ethics and Compensation Committee (the "**Vesting Date**") and (ii) the "**Restriction Period**" shall be determined by the Governance, Ethics and Compensation Committee, but in all cases shall end no later than December 31 of the calendar year which is three years after the calendar year in which the award is granted. Although the Governance, Ethics and Compensation Committee could provide at the time of granting RSUs for any vesting conditions as it deems appropriate, the Corporation expects the vesting of all RSUs to be time-based only.

If a dollar amount of RSUs is granted instead of a specified number of RSUs, the Participant's account shall be credited with a number of RSUs equal to the approved dollar amount divided by the market value of one Share, which shall be (i) if the grant is made outside a Black-Out Period, including if the grant is declared outside a Black-Out Period as part of a periodic grant program but with an effective Award Date that falls within a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period ending on the last trading day before the Award Date or, if not available, the last available closing market price of the Shares at the time of the grant, or (ii) if the grant is made during a Black-Out Period, the volume weighted average trading price of the Shares on the TSX for the five trading day period following the last day of such Black-Out Period.

In accordance with the terms of the RSU Plan, a Dividend Equivalent is to be computed in the form of additional RSUs calculated on each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such RSUs are credited annually on April 15 and shall vest on the Vesting Date according to the same vesting conditions as the underlying RSUs. Dividend Equivalents are computed as of each dividend payment date by dividing: (i) the amount obtained by multiplying the amount of each dividend declared and paid per Share by the number of RSUs recorded in the Participant's account on the record date for the payment of such dividend, by (ii) the weighted average trading price of the Shares on the TSX for the five trading days immediately following the dividend record date for the payment of any dividend made on the Shares, rounded down to the next whole RSU.

At latest on the 30th day after a Vesting Date, Participants are entitled to receive payment in cash for each RSU which vested on that date in an amount equal to the number of vested RSUs multiplied by the volume weighted average trading price of the Shares on the TSX for the five trading day period immediately preceding the Vesting Date, less any applicable withholding taxes.

Upon a Participant's retirement, if a Participant's employment is terminated other than for cause, or if a Participant becomes Disabled (as defined in the RSU Plan), subject to any resolution passed by the Governance, Ethics and Compensation Committee, a pro-rated payment, based on the amount of time such Participant was actively employed since the Award Date and the total length of the RSUs' vesting period, will be paid to the Participant after each applicable vesting date. However, the Participant shall cease to accumulate Dividend Equivalents as of the separation date.

The RSU Plan also provides that in the event of a Change of Control (as defined in the RSU Plan), all outstanding RSUs shall vest immediately.

RSU Plan Amendments

On December 11, 2018, the RSU Plan was amended by the Board of Directors to ensure alignment with the other plans and to provide for other general updates of a "housekeeping" nature.

ANNEX A

WSP Global Inc. (WSP) is the ultimate parent company of WSP USA Inc. WSP and its affiliates have not and have never been charged or convicted for issues related to corruption, bribery or anti-competitive conduct. That being said, WSP notably wishes to draw the below facts and circumstances to your attention.

Should any additional information about this Annex A be required, please do not hesitate to contact Laura Unger, U.S. Regulatory Compliance Manager (complianceusa@wsp.com)

Facts and circumstances related to Genivar (now WSP Canada Inc., a subsidiary of WSP Global Inc.)

Genivar has never been charged or convicted for issues related to fraud, corruption or anti-competitive conduct.

As WSP has disclosed in public filings, since 2012 Genivar had been the object of investigations and search warrants initiated by Quebec's Unité Permanente Anticorruption (UPAC) and the Canadian Competition Bureau in several regions within the Province of Québec in connection with the award of municipal infrastructure contracts in Québec between 2002 and 2011. In 2013, Genivar was named at a Commission of Inquiry on the Awarding and Management of Public Contracts in the Construction Industry in the Province of Quebec, Canada (colloquially the Charbonneau Commission) which conducted an investigation into the construction industry in Quebec. The Commission identified potential or actual wrongdoing and inappropriate conduct with respect to the award of certain municipal infrastructure contracts by former employees of most consulting firms, including Genivar. The Commission, which had no law enforcement function, issued recommendations in its Report of November 2015. Certain Genivar employees who may have been involved in these potential or actual wrongdoings have been the subject of legal and regulatory proceedings, some of which are still under investigation by Canada's Competition Bureau and the Quebec Order of Engineers. In particular, criminal charges against a former Genivar employee were laid by the Competition Bureau on June 21st, 2018.

During the course of 2017, WSP Canada Inc., in connection with the voluntary reimbursement program established pursuant to Bill 26, An Act to ensure mainly the recovery of amounts improperly paid as a result of fraud or fraudulent tactics in connection with public contracts, came to a settlement with relevant municipalities in Québec and satisfied its obligations under such settlement. Furthermore, in March 2019, the Québec Superior Court approved a settlement between Genivar (now WSP Canada), Canada's Competition Bureau and Director of Public Prosecutions. As a result of the settlement, WSP Canada will not face any prosecution in connection with the award of municipal infrastructure contracts in Québec between 2002 and 2011. In fact, as a reason to approve the settlement, the Court expressly recognized the efficacity of WSP's Compliance and Ethics program, which notably includes the following components:

- WSP has a Chief Ethics and Compliance Officer (CECO) responsible for overseeing the implementation of the global ethics and anti-corruption program. The CECO reports directly to the Board of Directors on a quarterly basis.
- WSP has a Compliance and Ethics team comprised of qualified individuals located in offices across the globe.
- WSP has a Code of Conduct and associated ethics policies, including (i) Anti-corruption Policy, (ii) a Working with Third Parties Policy, and (iii) a Gifts, Entertainment and Hospitality Policy, which are available in 12 different languages. The Code and associated policies are approved and regularly reviewed by the Board and implemented throughout the organization.

- WSP has a whistleblowing hotline managed by an external independent third party service provider. Reports can be made on an anonymous and confidential basis.
- WSP has an anti-retaliation policy that protects persons who allege misconduct in good faith.
- Business ethics and fair competition training is carried out through: an online onboarding training module, yearly online training refreshers, and live training sessions.
- Specific communication campaigns – endorsed by key leaders in the organization to promote tone from the top – are regularly launched on ethics-related subjects such as: whistleblowing, anti-corruption, fraud, and fair competition.

To this day, Genivar has never been charged or convicted for issues related to fraud, corruption or anti-competitive conduct. WSP Canada is fully entitled to bid for and obtain public contracts, including in Quebec.