LILLY ELI & CO
Form DEF 14A
March 08, 2010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934 (Amendment No.)

Filed by the Registrant x
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Check the appropriate box:

o Preliminary Proxy Statement
o **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
x Definitive Proxy Statement
o Definitive Additional Materials
o Soliciting Material Pursuant to §240.14a-12

ELI LILLY AND COMPANY

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

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Notice of 2010 Annual Meeting and Proxy Statement

March 8, 2010

Dear Shareholder:

You are cordially invited to attend our annual meeting of shareholders on Monday, April 19, 2010, at the Lilly Center Auditorium, Lilly Corporate Center, Indianapolis, Indiana, at 11:00 a.m. EDT.
The notice of meeting and proxy statement that follow describe the business we will consider at the meeting. Your vote is very important. I urge you to vote by mail, by telephone, or on the Internet to be certain your shares are represented at the meeting, even if you plan to attend.
Please note our procedures for admission to the meeting described on page 4.
I look forward to seeing you at the meeting.

John C. Lechleiter, Ph.D.
Chairman, President, and Chief Executive Officer

Important notice regarding the availability of proxy materials for the shareholder meeting to be held April 19, 2010: The annual report and proxy statement are available at http://www.lilly.com/pdf/lillyar2009.pdf

Notice of Annual Meeting of Shareholders

April 19, 2010

The annual meeting of shareholders of Eli Lilly and Company will be held at the Lilly Center Auditorium, Lilly Corporate Center, Indianapolis, Indiana, on Monday, April 19, 2010, at 11:00 a.m. EDT for the following purposes:

- to elect five directors of the company to serve three-year terms
- to ratify the appointment by the audit committee of Ernst & Young LLP as principal independent auditor for the year 2010
- to approve amendments to the articles of incorporation to provide for annual election of all directors
- to approve amendments to the articles of incorporation to eliminate all supermajority voting requirements
- to consider and vote on a shareholder proposal requesting that the board amend the bylaws to allow holders of 10 percent of the outstanding shares of stock to call special meetings of shareholders
- to consider and vote on a shareholder proposal requesting that the board of directors adopt a policy of prohibiting CEOs from serving on the compensation committee of the board
- to consider and vote on a shareholder proposal requesting that the board of directors adopt a policy of asking shareholders to ratify the compensation of named executive officers at the annual meeting of shareholders

to consider and vote on a shareholder proposal requesting that the compensation committee of the board of directors establish a policy requiring senior executives to retain equity awards until two years after leaving the company.

Shareholders of record at the close of business on February 12, 2010, will be entitled to vote at the meeting and at any adjournment of the meeting.

Attendance at the meeting will be limited to shareholders, those holding proxies from shareholders, and invited guests from the media and financial community. A page at the back of this report contains an admission ticket. If you plan to attend the meeting, please bring this ticket with you.

This combined proxy statement and annual report to shareholders and the proxy voter card are being mailed on or about March 8, 2010.

By order of the board of directors,

James B. Lootens
Secretary

March 8, 2010
Indianapolis, Indiana

General Information

Why did I receive this proxy statement?
The board of directors of Eli Lilly and Company is soliciting proxies to be voted at the annual meeting of shareholders (the annual meeting) to be held on Monday, April 19, 2010, and at any adjournment of the annual meeting. When the company asks for your proxy, we must provide you with a proxy statement that contains certain information specified by law.

What will the shareholders vote on at the annual meeting?
Eight items:

- election of directors
- ratification of the appointment of principal independent auditor
- amending the company s articles of incorporation to provide for annual election of all directors
- amending the company s articles of incorporation to eliminate all supermajority voting requirements
- a shareholder proposal on allowing shareholders to call special meetings of shareholders
- a shareholder proposal on prohibiting CEOs from serving on the compensation committee
- a shareholder proposal on shareholder ratification of executive compensation
- a shareholder proposal on executives holding equity awards into retirement.

Will there be any other items of business on the agenda?
We do not expect any other items of business because the deadline for shareholder proposals and nominations has already passed. Nonetheless, in case there is an unforeseen need, the accompanying proxy gives discretionary authority to the persons named on the proxy with respect to any other matters that might be brought before the meeting. Those persons intend to vote that proxy in accordance with their best judgment.

Who is entitled to vote?
Shareholders as of the close of business on February 12, 2010 (the record date) may vote at the annual meeting. You have one vote for each share of common stock you held on the record date, including shares:

- held directly in your name as the shareholder of record
- held for you in an account with a broker, bank, or other nominee
- attributed to your account in The Eli Lilly and Company Employee 401(k) Plan (the 401(k) plan).

What constitutes a quorum?
A majority of the outstanding shares, present or represented by proxy, constitutes a quorum for the annual meeting. As of the record date, 1,153,145,432 shares of company common stock were issued and outstanding.

How many votes are required for the approval of each item?
There are differing vote requirements for the various proposals.

The five nominees for director will be elected if the votes cast for the nominee exceed the votes cast against the nominee. Abstentions will not count as votes cast either for or against a nominee.

The following items of business will be approved if the votes cast for the proposal exceed those cast against the proposal:

- the appointment of principal independent auditor
- the shareholder proposals.

Abstentions will not be counted either for or against these proposals.

The management proposals to amend the articles of incorporation to provide for annual election of all directors and to eliminate all supermajority voting requirements require the vote of 80 percent of the outstanding shares. For these items, abstentions have the same effect as a vote against the proposals.

Broker discretionary voting. If your shares are held by a broker, the broker will ask you how you want your shares to be voted. If you give the broker instructions, your shares will be voted as you direct. If you do not give instructions, one of two things can happen, depending on the type of proposal. For the ratification of the auditor and the management proposals on amending the articles of incorporation to provide for annual election of all directors and to eliminate all supermajority voting requirements, the broker may vote your shares in its discretion. For all other proposals, the broker may not vote your shares at all.

How do I vote by proxy?
If you are a shareholder of record, you may vote your proxy by any one of the following methods:

By mail. Sign and date each proxy card you receive and return it in the prepaid envelope. Sign your name exactly as it appears on the proxy. If you are signing in a representative capacity (for example, as an attorney-in-fact, executor, administrator, guardian, trustee, or the officer or agent of a corporation or partnership), please indicate your name and your title or capacity. If the stock is held in custody for a minor (for example, under the Uniform Transfers to Minors Act), the custodian should sign, not the minor. If the stock is held in joint ownership, one owner may sign on behalf of all owners. If you return your signed proxy but do not indicate your voting preferences, we will vote on your behalf for the election of the nominees for director listed below, for the ratification of the appointment of the independent auditor, for the management proposals on amending the articles of incorporation to provide for annual election of all directors and to eliminate all supermajority voting requirements, and against the shareholder proposals.
If you did not receive a proxy card in the materials you received from the company and you wish to vote by mail rather than by telephone or on the Internet as discussed below, you may request a paper copy of these materials and a proxy card by calling 317-433-5112. If you received an e-mail message notifying you of the electronic availability of these materials, please provide the control number from the e-mail, along with your name and mailing address.

By telephone. Shareholders in the United States, Puerto Rico, and Canada may vote by telephone by following the instructions on your proxy card or, if you received these materials electronically, by following the instructions in the e-mail message that notified you of their availability. Voting by telephone has the same effect as voting by mail. If you vote by telephone, do not return your proxy card. Telephone voting will be available until 11:59 p.m. EDT, April 18, 2010.

On the Internet. You may vote online at **www.proxyvote.com**. Follow the instructions on your proxy card or, if you received these materials electronically, follow the instructions in the e-mail message that notified you of their availability. Voting on the Internet has the same effect as voting by mail. If you vote on the Internet, do not return your proxy card. Internet voting will be available until 11:59 p.m. EDT, April 18, 2010.
You have the right to revoke your proxy at any time before the meeting by (i) notifying the company s secretary in writing or (ii) delivering a later-dated proxy by telephone, on the Internet, or by mail. If you are a shareholder of record, you may also revoke your proxy by voting in person at the meeting.

How do I vote shares that are held by my broker?
If you have shares held by a broker or other nominee, you may instruct your broker or other nominee to vote your shares by following instructions that the broker or nominee provides to you. Most brokers offer voting by mail, by telephone, and on the Internet.

How do I vote in person?
If you are a shareholder of record, you may vote your shares in person at the meeting. However, we encourage you to vote by mail, by telephone, or on the Internet even if you plan to attend the meeting.

How do I vote my shares in the 401(k) plan?
You may instruct the plan trustee on how to vote your shares in the 401(k) plan by mail, by telephone, or on the Internet as described above, except that, if you vote by mail, the card that you use will be a voting instruction card rather than a proxy card.

How many shares in the 401(k) plan can I vote?
You may vote all the shares allocated to your account on the record date. In addition, unless you decline, your vote will also apply to a proportionate number of other shares held in the 401(k) plan for which voting directions are not received. These undirected shares include:

shares credited to the accounts of participants who do not return their voting instructions (except for a small number of shares from a prior stock ownership plan, which can be voted only on the directions of the participants to whose accounts the shares are credited)

shares held in the plan that are not yet credited to individual participants accounts.

All participants are named fiduciaries under the terms of the 401(k) plan and under the Employee Retirement Income Security Act (ERISA) for the limited purpose of voting shares credited to their accounts and the portion of undirected shares to which their vote applies. Under ERISA, fiduciaries are required to act prudently in making voting decisions. If you do not want to have your vote applied to the undirected shares, you should check the box marked I decline. Otherwise, the trustee will automatically apply your voting preferences to the undirected shares proportionally with all other participants who elected to have their votes applied in this manner.

What happens if I do not vote my 401(k) plan shares?
Your shares will be voted by other plan participants who have elected to have their voting preferences applied proportionally to all shares for which voting instructions are not otherwise received.

What does it mean if I receive more than one proxy card?
It means that you hold shares in more than one account. To ensure that all your shares are voted, sign and return each card. Alternatively, if you vote by telephone or on the Internet, you will need to vote once for each proxy card and voting instruction card you receive.

What does it mean if I did not receive a proxy card?
You may have elected to receive your proxy statement electronically, in which case you should have received an email with directions on how to access the proxy statement and how to vote your shares. If you wish to request a paper copy of these materials and a proxy card, please call 317-433-5112.

Who tabulates the votes?
The votes are tabulated by an independent inspector of election, IVS Associates, Inc.

What should I do if I want to attend the annual meeting?
All shareholders as of the record date may attend by presenting the admission ticket that appears at the end of this proxy statement. Please fill it out and bring it with you to the meeting. The meeting will be held at the Lilly Center Auditorium. Please use the Lilly Center entrance to the south of the fountain at the intersection of Delaware and McCarty streets. You will need to pass through security, including a metal detector. Present your ticket to an usher at the meeting.
Parking will be available on a first-come, first-served basis in the garage indicated on the map at the end of this report. If you have questions about admittance or parking, you may call 317-433-5112.

How do I contact the board of directors?
You may send written communications to one or more members of the board, addressed to:
Lead Director, Board of Directors
Eli Lilly and Company
c/o Corporate Secretary
Lilly Corporate Center
Indianapolis, Indiana 46285

All such communications (from shareholders or other interested parties) will be forwarded to the relevant director(s), except for solicitations or other matters unrelated to the company.

How do I submit a shareholder proposal for the 2011 annual meeting?
The company s 2011 annual meeting is scheduled for April 18, 2011. If a shareholder wishes to have a proposal considered for inclusion in next year s proxy statement, he or she must submit the proposal in writing so that we receive it by November 8, 2010. Proposals should be addressed to the company s corporate secretary, Lilly Corporate Center, Indianapolis, Indiana 46285. In addition, the company s bylaws provide that any shareholder wishing to propose any other business at the annual meeting must give the company written notice by November 8, 2010. That notice must provide certain other information as described in the bylaws. Copies of the bylaws are available online at **http://investor.lilly.com/governance.cfm** or in paper form upon request to the company s corporate secretary.

Does the company offer an opportunity to receive future proxy materials electronically?
Yes. If you are a shareholder of record or a member of the 401(k) plan, you may, if you wish, receive future proxy statements and annual reports online. If you elect this feature, you will receive an e-mail message notifying you when

the materials are available, along with a web address for viewing the materials and instructions for voting by telephone or on the Internet. If you have more than one account, you may receive separate e-mail notifications for each account.

You may sign up for electronic delivery in two ways:

- If you vote online as described above, you may sign up for electronic delivery at that time.
- You may sign up at any time by visiting **http://investor.lilly.com/services.cfm**.

If you received these materials electronically, you do not need to do anything to continue receiving materials electronically in the future.

If you hold your shares in a brokerage account, you may also have the opportunity to receive proxy materials electronically. Please follow the instructions of your broker.

What are the benefits of electronic delivery?

Electronic delivery reduces the company s printing and mailing costs. It is also a convenient way for you to receive your proxy materials and makes it easy to vote your shares online. If you have shares in more than one account, it is an easy way to avoid receiving duplicate copies of proxy materials.

What are the costs of electronic delivery?

The company charges nothing for electronic delivery. You may, of course, incur the usual expenses associated with Internet access, such as telephone charges or charges from your Internet service provider.

Can I change my mind later?

Yes. You may discontinue electronic delivery at any time. For more information, call 317-433-5112.

What is householding ?

We have adopted householding, a procedure under which shareholders of record who have the same address and last name and do not receive proxy materials electronically will receive only one copy of our annual report and proxy statement unless one or more of these shareholders notifies us that they wish to continue receiving individual copies. This procedure saves printing and postage costs by reducing duplicative mailings.

Shareholders who participate in householding will continue to receive separate proxy cards. Householding will not affect dividend check mailings.

Beneficial shareholders can request information about householding from their banks, brokers, or other holders of record.

What if I want to receive a paper copy of the annual report and proxy statement?

If you wish to receive a paper copy of the 2009 annual report and 2010 proxy statement, or future annual reports and proxy statements, please call 1-800-542-1061 or write to: Householding Department, 51 Mercedes Way, Edgewood, New York 11717. We will deliver the requested documents to you promptly upon your request.

Board of Directors

Directors Biographies

Class of 2010
The following five directors terms will expire at this year s annual meeting. Each of these directors has been nominated and is standing for election to serve a term that will expire in 2013. See page 55 of this proxy statement for more information.

Ralph Alvarez Age 54 Director since 2009
Retired President and Chief Operating Officer, McDonald s Corporation
Mr. Alvarez served as president and chief operating officer of McDonald s Corporation from August 2006 until December 2009. Previously, he served as president of McDonald s North America, with responsibility for all the McDonald s restaurants in the U.S. and Canada. Prior to that, he was president of McDonald s USA. Mr. Alvarez joined McDonald s in 1994 and has held a variety of leadership roles throughout his career, including chief operations officer and president of the central division, both with McDonald s USA, and president of McDonald s Mexico. Prior to joining McDonald s, he held leadership positions at Burger King Corporation and Wendy s International, Inc. Mr. Alvarez serves on the President s Council and the International Advisory Board of the University of Miami, and he is a member of the board of trustees for Chicago s Field Museum. He previously served on the boards of McDonald s Corporation and KeyCorp. Mr. Alvarez has been serving under interim election since April 2009.
Board Committees: finance and public policy and compliance

Sir Winfried Bischoff Age 68 Director since 2000
Chairman, Lloyds Banking Group plc
Sir Winfried Bischoff has been chairman of the board of Lloyds Banking Group plc since September 2009. He served as chairman of Citigroup Inc. from December 2007 until February 2009 and as interim chief executive officer for a portion of 2007. He served as chairman of Citigroup Europe from 2000 to 2007. From 1995 to 2000, he was chairman of Schroders plc. He joined the Schroder Group in 1966 and held a number of positions there, including chairman of J. Henry Schroder & Co. and group chief executive of Schroders plc. He is also a director of The McGraw-Hill Companies, Inc. He previously served on the boards of Citigroup Inc., Prudential plc, Land Securities plc, and Akbank T.A.S.
Board Committees: directors and corporate governance and finance (chair)

R. David Hoover Age 64 Director since 2009
Chairman and Chief Executive Officer, Ball Corporation
Mr. Hoover is chairman and chief executive officer of Ball Corporation. Mr. Hoover joined Ball Corporation in 1970 and has held a variety of leadership roles throughout his career, including vice president and treasurer, senior vice president and chief financial officer, executive vice president, and vice chairman. He is a member of the boards of Ball Corporation; Energizer Holdings, Inc.; and Qwest Communications International Inc.
Mr. Hoover previously served on the board of Irwin Financial Corporation. He is the chair of the board of trustees of DePauw University and on the Indiana University Kelley School

of Business Dean s Council. He is also a director of Boulder Community Hospital and a member of the Colorado Forum. Mr. Hoover has been serving under interim election since June 2009.

Board Committees: audit and compensation

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Franklyn G. Prendergast, M.D., Ph.D. Age 65 Director since 1995
Edmond and Marion Guggenheim Professor of Biochemistry and Molecular Biology and Professor of Molecular Pharmacology and Experimental Therapeutics, Mayo Medical School; Director, Mayo Clinic Center for Individualized Medicine; and Director Emeritus, Mayo Clinic Cancer Center
Dr. Prendergast is the Edmond and Marion Guggenheim Professor of Biochemistry and Molecular Biology and Professor of Molecular Pharmacology and Experimental Therapeutics at Mayo Medical School and the director of the Mayo Clinic Center for Individualized Medicine. He has held several other teaching positions at the Mayo Medical School since 1975. Dr. Prendergast serves on the board of trustees of the Mayo Foundation.
Board Committees: public policy and compliance and science and technology

Kathi P. Seifert Age 60 Director since 1995
Retired Executive Vice President, Kimberly-Clark Corporation
Ms. Seifert served as executive vice president for Kimberly-Clark Corporation until June 2004. She joined Kimberly-Clark in 1978 and served in several capacities in connection with both the domestic and international consumer products businesses. Prior to joining Kimberly-Clark, Ms. Seifert held management positions at Procter & Gamble, Beatrice Foods, and Fort Howard Paper Company. She is chairman of Katapult, LLC. Ms. Seifert serves on the boards of Supervalu Inc.; Revlon Consumer Products Corporation; Lexmark International, Inc.; Appleton Papers Inc.; the U.S. Fund for UNICEF; and the Fox Cities Performing Arts Center.
Board Committees: audit and public policy and compliance

Class of 2011
The following four directors will continue in office until 2011.

Michael L. Eskew Age 60 Director since 2008
Former Chairman and Chief Executive Officer, United Parcel Service, Inc.
Mr. Eskew served as chairman and chief executive officer of United Parcel Service, Inc., from January 2002 until December 2007. He continues to serve on the UPS board of directors. Mr. Eskew began his UPS career in 1972 as an industrial engineering manager and held various positions of increasing responsibility, including time with UPS s operations in Germany and with UPS Airlines. In 1993, Mr. Eskew was named corporate vice president for industrial engineering. Two years later he became group vice president for engineering. In 1998, he was elected to the UPS board of directors. In 1999, Mr. Eskew was named executive vice president and a year later was given the additional title of vice chairman. He serves as chairman of the board of trustees of The Annie E. Casey Foundation. Mr. Eskew also serves on the boards of 3M Corporation and IBM Corporation.
Board Committees: audit (chair) and compensation

Alfred G. Gilman, M.D., Ph.D. Age 68 Director since 1995

Chief Scientific Officer, Cancer Prevention and Research Institute of Texas

Dr. Gilman is the chief scientific officer of the Cancer Prevention and Research Institute of Texas and regental professor of pharmacology emeritus at the University of Texas Southwestern Medical Center at Dallas. Dr. Gilman was on the faculty of the University of Virginia School of Medicine from 1971 to 1981 and was named a professor of pharmacology there in 1977. He previously served as executive vice president for academic affairs and provost of the University of Texas Southwestern Medical Center at Dallas, dean of the University of Texas Southwestern Medical School, and professor of pharmacology at the University of Texas Southwestern Medical Center. He held the Raymond and Ellen Willie Distinguished Chair of Molecular Neuropharmacology; the Nadine and Tom Craddick Distinguished Chair in Medical Science; and the Atticus James Gill, M.D., Chair in Medical Science at the university and was named a regental professor in 1995. He is a director of Regeneron Pharmaceuticals, Inc. Dr. Gilman was a recipient of the Nobel Prize in Physiology or Medicine in 1994.

Board Committees: public policy and compliance and science and technology (chair)

Karen N. Horn, Ph.D. Age 66 Director since 1987
Retired President, Private Client Services, and Managing Director, Marsh, Inc.
Ms. Horn serves as the board s lead director. She served as president of private client services and managing director of Marsh, Inc. from 1999 until her retirement in 2003. Prior to joining Marsh, she was senior managing director and head of international private banking at Bankers Trust Company; chairman and chief executive officer of Bank One, Cleveland, N.A.; president of the Federal Reserve Bank of Cleveland; treasurer of Bell Telephone Company of Pennsylvania; and vice president of First National Bank of Boston. Ms. Horn serves as director of T. Rowe Price Mutual Funds; Simon Property Group, Inc.; and Norfolk Southern Corporation and vice chairman of the U.S.-Russia Investment Foundation. She previously served on the board of Fannie Mae and Georgia-Pacific Corporation. Ms. Horn has been senior managing director of Brock Capital Group since 2004.
Board Committees: compensation (chair) and directors and corporate governance

John C. Lechleiter, Ph.D. Age 56 Director since 2005
Chairman, President, and Chief Executive Officer
Dr. Lechleiter is chairman, president, and chief executive officer of Eli Lilly and Company. He served as president and chief operating officer from 2005 to 2008. He joined Lilly in 1979 as a senior organic chemist and has held management positions in England and the U.S. He was named vice president of pharmaceutical product development in 1993 and vice president of regulatory affairs in 1994. In 1996, he was named vice president for development and regulatory affairs. Dr. Lechleiter became senior vice president of pharmaceutical products in 1998 and executive vice president for pharmaceutical products and corporate development in 2001. He was named executive vice president for pharmaceutical operations in 2004. He is a member of the American Chemical Society, Business Roundtable, and Business Council. Dr. Lechleiter serves on the boards of Pharmaceutical Research and Manufacturers of America (PhRMA); Xavier University (Cincinnati, Ohio); Fairbanks Institute (Indianapolis); Indianapolis Downtown, Inc.; the Central Indiana Corporate Partnership; and the United Way of Central Indiana. He also serves on the board of Nike, Inc. and previously served on the board of Great Lakes Chemical Corporation.
Board Committees: none

Class of 2012
The following four directors will continue in office until 2012.

Martin S. Feldstein, Ph.D. Age 70 Director since 2002
George F. Baker Professor of Economics, Harvard University
Dr. Feldstein is the George F. Baker Professor of Economics at Harvard University and president emeritus of the National Bureau of Economic Research. From 1982 through 1984, he served as chairman of the Council of Economic Advisers and President Ronald Reagan s chief economic adviser. Dr. Feldstein served as president and chief executive officer of the National Bureau of Economic Research from 1977 to 1982 and 1984 to 2008. In 2009,

President Obama appointed him to the President s Economic Recovery Advisory Board. He is a member of the American Philosophical Society, a corresponding fellow of the British Academy, a fellow of the Econometric Society, and a fellow of the National Association for Business Economics. Dr. Feldstein is a trustee of the Council on Foreign Relations and a member of the Trilateral Commission, the Group of 30, the American Academy of Arts and Sciences, and the Council of Academic Advisors of the American Enterprise Institute and past president of the American Economic Association. He previously served on the boards of American International Group, Inc. and HCA Inc.

Board Committees: audit, finance, and public policy and compliance (chair)

J. Erik Fyrwald Age 50 Director since 2005
Chairman, President, and Chief Executive Officer, Nalco Company
Mr. Fyrwald joined Nalco Company (a leading integrated water treatment and process improvement company) as chairman, president, and chief executive officer in February 2008 following a 27-year career at DuPont. From 2003 to 2008, Mr. Fyrwald served as group vice president of the agriculture and nutrition division at DuPont. From 2000 until 2003, he was vice president and general manager of DuPont s nutrition and health business. In 1999, Mr. Fyrwald was vice president for corporate strategic planning and business development. At DuPont, he held a broad variety of assignments in a number of divisions covering many industries. He has worked in several locations throughout North America and Asia. In addition to serving as chairman of Nalco s board of directors, Mr. Fyrwald serves as a director of the Society of Chemical Industry and the American Chemistry Council and is a trustee of the Field Museum of Chicago.
Board Committees: compensation and science and technology

Ellen R. Marram Age 63 Director since 2002
President, The Barnegat Group LLC
Ms. Marram is the president of The Barnegat Group LLC, a firm that provides business advisory services. She was a managing director at North Castle Partners, LLC from 2000 to 2005 and is currently an advisor to the firm. She served as the chief executive officer of a privately-held start-up B2B exchange for the food and beverage industry, efdex, Inc., from August 1999 to May 2000 (efdex never became fully operational and in September 2000 commenced liquidation in the U.K. due to its insolvency). From 1993 to 1998, Ms. Marram was president and chief executive officer of Tropicana and the Tropicana Beverage Group. From 1988 to 1993, she was president and chief executive officer of the Nabisco Biscuit Company, the largest operating unit of Nabisco, Inc.; from 1987 to 1988, she was president of Nabisco s grocery division; and from 1970 to 1986, she held a series of marketing positions at Nabisco/Standard Brands, Johnson & Johnson, and Lever Brothers. Ms. Marram is a member of the board of directors of Ford Motor Company and The New York Times Company, as well as several private companies. She previously served on the board of Cadbury plc. She also serves on the boards of Institute for the Future, New York-Presbyterian Hospital, Lincoln Center Theater, and Families and Work Institute.
Board Committees: compensation and directors and corporate governance (chair)

Douglas R. Oberhelman Age 57 Director since 2008
Vice Chairman and Chief Executive Officer-Elect, Caterpillar Inc.
Mr. Oberhelman is vice chairman and chief executive officer-elect of Caterpillar Inc. He will join the Caterpillar board and become chief executive officer on July 1, 2010 and chairman on November 1, 2010. He joined Caterpillar in 1975 and has held a variety of positions, including senior finance representative based in South America for Caterpillar Americas Co; region finance manager and district manager for the company s North American commercial division; and managing director and vice general manager for strategic planning at Caterpillar Japan Ltd. Mr. Oberhelman was elected a vice president in 1995, serving as Caterpillar s chief financial officer from 1995 to November 1998. In 1998, he became vice president with responsibility for the engine products division and he was elected a group president and member of Caterpillar s executive office in 2002.

Mr. Oberhelman serves on the boards of Ameren Corporation, The Nature Conservancy Illinois Chapter, the National Association of Manufacturers, the Manufacturing Institute, and the Wetlands America Trust.

Board Committees: audit and finance

Highlights of the Company s Corporate Governance Guidelines

The board of directors has established guidelines that it follows in matters of corporate governance. The following summary provides highlights of those guidelines. A complete copy of the guidelines is available online at **http://investor.lilly.com/governance.cfm** or in paper form upon request to the company s corporate secretary.

I. Role of the Board

The directors are elected by the shareholders to oversee the actions and results of the company s management. Their responsibilities include:

providing general oversight of the business

approving corporate strategy

approving major management initiatives

providing oversight of legal and ethical conduct

overseeing the company s management of significant business risks

selecting, compensating, and evaluating directors

evaluating board processes and performance

selecting, compensating, evaluating, and, when necessary, replacing the chief executive officer, and compensating other senior executives

ensuring that a succession plan is in place for all senior executives.

II. Composition of the Board

Mix of Independent Directors and Officer-Directors

There should always be a substantial majority (75 percent or more) of independent directors. The chief executive officer should be a board member. Other officers may, from time to time, be board members, but no officer other than the chief executive officer should expect to be elected to the board by virtue of his or her position in the company.

Selection of Director Candidates

The board is responsible for selecting candidates for board membership and for establishing the criteria to be used in identifying potential candidates. The board delegates the screening process to the directors and corporate governance committee. For more information on the director nomination process, including the current selection criteria, see Directors and Corporate Governance Committee Matters on pages 21-23.

Independence Determinations

The board annually determines and discloses the independence of directors based on a review by the directors and corporate governance committee. No director is considered independent unless the board has determined that he or she has no material relationship with the company, either directly or as a partner, significant shareholder, or officer of an organization that has a material relationship with the company. Material relationships can include commercial, industrial, banking, consulting, legal, accounting, charitable, and familial relationships, among others. To evaluate the materiality of any such relationship, the board has adopted categorical independence standards consistent with the New York Stock Exchange (NYSE) listing standards, except that the look-back period for determining whether a director s prior relationship with the company impairs independence is extended from three to four years. Specifically, a director is not considered independent if (i) the director or an immediate family member is a current partner of the company s independent auditor (currently Ernst & Young LLP); (ii) the director is a current employee of such firm; (iii) the director has an immediate family member who is a current employee of such firm and who participates in the firm s audit, assurance, or tax compliance (but not tax planning) practice; or (iv) the director or an immediate family member was within the last four years (but is no longer) a partner or employee of such firm and personally worked on our audit within that time.

In addition, a director is not considered independent if any of the following relationships existed within the previous four years:

- a director who is an employee of the company, or whose immediate family member is an executive officer of the company. Temporary service by an independent director as interim chairman or chief executive officer will not disqualify the director from being independent following completion of that service.

- a director who receives any direct compensation from the company other than the director s normal director compensation, or whose immediate family member receives more than $120,000 per year in direct compensation from the company other than for service as a nonexecutive employee.

- a director who is employed (or whose immediate family member is employed as an executive officer) by another company where any Lilly executive officer serves on the compensation committee of that company s board.

a director who is employed by, who is a 10 percent shareholder of, or whose immediate family member is an executive officer of a company that makes payments to or receives payments from Lilly for property or services that exceed the greater of $1 million or two percent of that company s gross revenue in a single fiscal year.

a director who is an executive officer of a nonprofit organization that receives grants or contributions from the company in a single fiscal year exceeding the greater of $1 million or two percent of that organization s gross revenue in a single fiscal year.

Members of board committees must meet all applicable independence tests of the NYSE, Securities and Exchange Commission (SEC), and Internal Revenue Service (IRS).

In February 2010, the directors and corporate governance committee reviewed directors responses to a questionnaire asking about their relationships with the company (and those of their immediate family members) and other potential conflicts of interest, as well as material provided by management related to transactions, relationships, or arrangements between the company and the directors or parties related to the directors. The committee determined that all 12 nonemployee directors listed below are independent, and that the members of each committee also meet the independence standards referenced above. The committee recommended this conclusion to the board and explained the basis for its decision, and this conclusion was adopted by the board. The committee and the board determined that none of the 12 directors listed below has had during the last four years (i) any of the relationships listed above or (ii) any other material relationship with the company that would compromise his or her independence. The table below includes a description of categories or types of transactions, relationships, or arrangements considered by the board (in addition to those listed above) in reaching its determination that the directors are independent. All of these relationships and transactions were entered into at arm s length in the normal course of business and, to the extent they are commercial relationships, have standard commercial terms. None of these relationships or transactions exceeded the thresholds described above or otherwise compromises the independence of the named directors.

Name	**Independent**	**Transactions/Relationships/Arrangements**
Mr. Alvarez	Yes	None
Sir Winfried Bischoff	Yes	Commercial banking, capital markets, and indenture trustee relationships between Lilly and various Citigroup banks immaterial
Mr. Eskew	Yes	Lilly s purchase of shipping, courier, and post office services from UPS immaterial
Dr. Feldstein	Yes	None
Mr. Fyrwald	Yes	Lilly s purchase of DuPont and Nalco products and services immaterial
Dr. Gilman	Yes	Lilly grants and contributions to the University of Texas Southwestern Medical Center immaterial
Mr. Hoover	Yes	None
Ms. Horn	Yes	None
Ms. Marram	Yes	None
Mr. Oberhelman	Yes	None
Dr. Prendergast	Yes	Lilly grants and contributions to Mayo Clinic and Mayo Foundation immaterial
Ms. Seifert	Yes	None

Director Tenure and Retirement Policy

Subject to the company s charter documents, the following are the board s expectations for director tenure:

A company officer-director, including the chief executive officer, will resign from the board at the time he or she retires or otherwise ceases to be an active employee of the company.

Nonemployee directors will retire from the board not later than the annual meeting of shareholders that follows their seventy-second birthday.

Directors may stand for reelection even though the board s retirement policy would prevent them from completing a full three-year term.

A nonemployee director who retires or changes principal job responsibilities will offer to resign from the board. The directors and corporate governance committee will assess the situation and recommend to the board whether to accept the resignation.

Other Board Service

Effective November 1, 2009, no new director may serve on more than three other public company boards, and no incumbent director may accept new positions on public company boards that would result in service on more than three other public company boards. The directors and corporate governance committee or the chair of that committee may approve exceptions to this limit upon a determination that such additional service will not impair the director s effectiveness on the company board.

Voting for Directors

In an uncontested election, any nominee for director who fails to receive a majority of the votes cast shall promptly tender his or her resignation following certification of the shareholder vote. The directors and corporate governance committee will consider the resignation offer and recommend to the board whether to accept it. The board will act on the committee s recommendation within 90 days following certification of the shareholder vote. Board action on the matter will require the approval of a majority of the independent directors.

The company will disclose the board s decision on a Form 8-K furnished to the SEC within four business days after the decision, including a full explanation of the process by which the decision was reached and, if applicable, the reasons why the board rejected the director s resignation. If the resignation is accepted, the directors and corporate governance committee will recommend to the board whether to fill the vacancy or reduce the size of the board.

Any director who tenders his or her resignation under this provision will not participate in the committee or board deliberations regarding whether to accept the resignation offer. If all members of the directors and corporate governance committee fail to receive a majority of the votes cast at the same election, then the independent directors who did receive a majority of the votes cast will appoint a committee amongst themselves to consider the resignation offers and recommend to the board whether to accept them.

III. Director Compensation and Equity Ownership

The directors and corporate governance committee annually reviews board compensation. Any recommendations for changes are made to the board by the committee.

Directors should hold meaningful equity ownership positions in the company; accordingly, a significant portion of overall director compensation is in the form of company equity. Directors are required to hold company stock valued at not less than five times their annual cash retainer; new directors are allowed five years to reach this ownership level.

IV. Key Responsibilities of the Board

Selection of Chairman and Chief Executive Officer; Succession Planning

The board currently combines the role of chairman of the board with the role of chief executive officer, coupled with a lead director position to further strengthen the governance structure. The board believes this provides an efficient and effective leadership model for the company. Combining the chairman and CEO roles fosters clear accountability, effective decision-making, and alignment on corporate strategy. To assure effective independent oversight, the board has adopted a number of governance practices, including:

- a strong, independent, clearly-defined lead director role (see below for a full description of the role)

- executive sessions of the independent directors after every board meeting

- annual performance evaluations of the chairman and CEO by the independent directors.

However, no single leadership model is right for all companies and at all times. The board recognizes that depending on the circumstances, other leadership models, such as a separate independent chairman of the board, might be appropriate. Accordingly, the board periodically reviews its leadership structure.

The lead director recommends to the board an appropriate process by which a new chairman and chief executive officer will be selected. The board has no required procedure for executing this responsibility because it believes that the most appropriate process will depend on the circumstances surrounding each such decision.

A key responsibility of the CEO and the board is ensuring that an effective process is in place to provide continuity of leadership over the long term at all levels in the company. Each year, succession-planning reviews are held at every significant organizational level of the company, culminating in a full review of senior leadership talent by the independent directors. During this review, the CEO and the independent directors discuss future candidates for senior leadership positions, succession timing for those positions, and development plans for the highest-potential candidates. This process ensures continuity of leadership over the long term, and it forms the basis on which the company makes ongoing leadership assignments. It is a key success factor in managing the long planning and investment lead times of our business.

In addition, the CEO maintains in place at all times, and reviews with the independent directors, a confidential plan for the timely and efficient transfer of his or her responsibilities in the event of an emergency or his or her sudden incapacitation or departure.

Evaluation of Chief Executive Officer

The lead director is responsible for leading the independent directors in executive session to assess the performance of the chief executive officer at least annually. The results of this assessment are reviewed with the chief executive officer and considered by the compensation committee in establishing the chief executive officer s compensation for the next year.

Succession Management and Election of Officers

The independent directors are responsible for overseeing the succession and management development program for senior leadership. The chief executive officer develops and maintains a process for advising the board on succession planning for the chief executive officer and other key senior leadership positions. The chief executive officer reviews this plan with the independent directors at least annually.

Consistent with the succession-management plan, the chief executive officer recommends to the board candidates for the company s principal corporate offices.

Corporate Strategy

Once each year, the board devotes an extended meeting to an update from management regarding the strategic issues and opportunities facing the company, allowing the board an opportunity to provide direction for the corporate strategic plan. These strategy sessions also provide the board an opportunity to interact extensively with the company s senior leadership team. This assists the board in its succession-management responsibilities.

Throughout the year, significant corporate strategy decisions are brought to the board for approval.

Code of Ethics

The board approved the company s code of ethics, which complies with the requirements of the NYSE and the SEC. This code is set out in:

The Red Book, a comprehensive code of ethical and legal business conduct applicable to all employees worldwide and to our board of directors

Code of Ethical Conduct for Lilly Financial Management, a supplemental code for our chief executive officer and all members of financial management that recognizes the unique responsibilities of those individuals in assuring proper accounting, financial reporting, internal controls, and financial stewardship.

Both documents are available online at **http://www.lilly.com/about/compliance/conduct/** or in paper form upon request to the company s corporate secretary.

The audit committee and public policy and compliance committee assist in the board s oversight of compliance programs with respect to matters covered in the code of ethics.

Risk Oversight

The company has an enterprise risk management program overseen by its chief ethics and compliance officer and senior vice president, enterprise risk management, who reports directly to the CEO and is a member of the company s top leadership committee. Enterprise risks are identified and prioritized by management, and each prioritized risk is assigned to a board committee or the full board for oversight. For example, strategic risks are overseen by the full board; financial risks are overseen by the audit or finance committee; compliance and reputational risks are typically overseen by the public policy and compliance committee; and scientific risks are overseen by the science and technology committee. Management regularly reports on each such risk to the relevant committee or the board. The enterprise risk management program as a whole is reviewed annually at a joint meeting of the audit and public policy and compliance committees, as well as at an annual board strategy session. Additional review or reporting on enterprise risks is conducted as needed or as requested by the board or committee. Also, the compensation committee periodically reviews the most important enterprise risks to ensure that compensation programs do not encourage excessive risk-taking.

V. Functioning of the Board

Executive Session of Directors

The independent directors meet alone in executive session and in private session with the chief executive officer at every regularly scheduled board meeting.

Lead Director

The board annually appoints a lead director from among the independent directors (currently Ms. Horn). The lead director:

leads the board s processes for selecting and evaluating the chief executive officer;

presides at all meetings of the board at which the chairman is not present, including executive sessions of the independent directors unless the directors decide that, due to the subject matter of the session, another independent director should preside;

serves as a liaison between the chairman and the independent directors;

approves meeting agendas and schedules and generally approves information sent to the board;

has the authority to call meetings of the independent directors; and

has the authority to retain advisors to the independent directors.

Conflicts of Interest

Occasionally a director s business or personal relationships may give rise to an interest that conflicts, or appears to conflict, with the interests of the company. Directors must disclose to the company all relationships that create a conflict or an appearance of a conflict. The board, after consultation with counsel, takes appropriate steps to ensure that all directors voting on an issue are disinterested. In appropriate cases, the affected director will be excused from discussions on the issue.

To avoid any conflict or appearance of a conflict, board decisions on certain matters of corporate governance are made solely by the independent directors. These include executive compensation and the selection, evaluation, and removal of the chief executive officer.

Review and Approval of Transactions with Related Persons
The board has adopted a written policy and written procedures for review, approval, and monitoring of transactions involving the company and related persons (directors and executive officers, their immediate family members, or shareholders owning five percent or greater of the company s outstanding stock). The policy covers any related-person transaction that meets the minimum threshold for disclosure in the proxy statement under the relevant SEC rules (generally, transactions involving amounts exceeding $120,000 in which a related person has a direct or indirect material interest).

Policy. Related-person transactions must be approved by the board or by a committee of the board consisting solely of independent directors, who will approve the transaction only if they determine that it is in the best interests of the company. In considering the transaction, the board or committee will consider all relevant factors, including:
- the company s business rationale for entering into the transaction;
- the alternatives to entering into a related-person transaction;
- whether the transaction is on terms comparable to those available to third parties, or in the case of employment relationships, to employees generally;
- the potential for the transaction to lead to an actual or apparent conflict of interest and any safeguards imposed to prevent such actual or apparent conflicts; and
- the overall fairness of the transaction to the company.

The board or relevant committee will periodically monitor the transaction to ensure that there are no changed circumstances that would render it advisable for the company to amend or terminate the transaction.

Procedures.
- Management or the affected director or executive officer will bring the matter to the attention of the chairman, the lead director, the chair of the directors and corporate governance committee, or the secretary.
- The chairman and the lead director shall jointly determine (or, if either is involved in the transaction, the other shall determine in consultation with the chair of the directors and corporate governance committee) whether the matter should be considered by the board or by one of its existing committees consisting only of independent directors.
- If a director is involved in the transaction, he or she will be recused from all discussions and decisions about the transaction.
- The transaction must be approved in advance whenever practicable, and if not practicable, must be ratified as promptly as practicable.
- The board or relevant committee will review the transaction annually to determine whether it continues to be in the company s best interests.

There are currently no related-person transactions.

Orientation of New Directors; Director Education
A comprehensive orientation process is in place for new directors. In addition, directors receive ongoing continuing education through educational sessions at meetings, the annual strategy retreat, and periodic communications between meetings. We hold periodic mandatory training sessions for the audit committee, to which other directors and executive officers are invited. We also afford directors the opportunity to attend external director education programs.

Director Access to Management and Independent Advisors

Independent directors have direct access to members of management whenever they deem it necessary. The independent directors and committees are also free to retain their own independent advisors, at company expense, whenever they feel it would be desirable to do so. In accordance with NYSE listing standards, the audit, compensation, and directors and corporate governance committees have sole authority to retain independent advisors to their respective committees.

Assessment of Board Processes and Performance

The directors and corporate governance committee annually assesses the performance of the board, its committees, and board processes based on inputs from all directors. The committee also considers the contributions of individual directors at least every three years when considering whether to recommend nominating the director to a new three-year term.

VI. Board Committees

Number, Structure, and Independence

The duties and membership of the six board-appointed committees are described below. Only independent directors may serve on the committees.

Committee membership and selection of committee chairs are recommended to the board by the directors and corporate governance committee after consulting the chairman of the board and after considering the backgrounds, skills, and desires of the board members. The board has no set policy for rotation of committee members or chairs but annually reviews committee memberships and chair positions, seeking the best blend of continuity and fresh perspectives on the committees.

Functioning of Committees

Each committee reviews and approves its own charter annually, and the directors and corporate governance committee reviews and approves all committee charters annually. The chair of each committee determines the frequency and agenda of committee meetings. In addition, the audit, compensation, and public policy and compliance committees meet alone in executive session on a regular basis; all other committees meet in executive session as needed.

All six committee charters are available online at **http://investor.lilly.com/governance.cfm**.

Committees of the Board of Directors

Audit Committee
The duties of the audit committee are described in the Audit Committee Report found on page 24.

Compensation Committee
The duties of the compensation committee are described on pages 26-27, and the Compensation Committee Report is shown on page 40.

Directors and Corporate Governance Committee
The duties of the directors and corporate governance committee are described on page 21.

Finance Committee

- reviews and makes recommendations regarding capital structure and strategies, including dividends, stock repurchases, capital expenditures, financings and borrowings, and significant business development projects.

Public Policy and Compliance Committee

- oversees the processes by which the company conducts its business so that the company will do so in a manner that complies with laws and regulations and reflects the highest standards of integrity

- reviews and makes recommendations regarding policies, practices, and procedures of the company that relate to public policy and social, political, and legal trends and issues.

Science and Technology Committee

- reviews and makes recommendations regarding the company s strategic research goals and objectives

- reviews new developments, technologies, and trends in pharmaceutical research and development

- oversees matters of scientific and medical integrity and risk management.

Membership and Meetings of the Board and Its Committees

In 2009, each director attended more than 90 percent of the total number of meetings of the board and the committees on which he or she serves. In addition, all board members are expected to attend the annual meeting of shareholders, and all attended in 2009. Current committee membership and the number of meetings of the board and each committee in 2009 are shown in the table below.

Name	**Board**	**Audit**	**Compensation**	**Directors and Corporate Governance**	**Finance**	**Public Policy and Compliance**	**Science and Technology**
Mr. Alvarez[1]	Member				Member	Member	
Sir Winfried Bischoff	Member			Member	Chair		
Mr. J. Michael Cook[2]							
Mr. Eskew	Member	Chair	Member				
Dr. Feldstein	Member	Member			Member	Chair	
Mr. Fyrwald	Member		Member				Member
Dr. Gilman	Member					Member	Chair
Mr. Hoover[3]	Member	Member	Member				
Ms. Horn	Lead Director		Chair	Member			
Dr. Lechleiter	Chair						
Ms. Marram	Member		Member	Chair			
Mr. Oberhelman	Member	Member			Member		
Dr. Prendergast	Member					Member	Member
Ms. Seifert	Member	Member				Member	
Number of 2009 Meetings	7	10	8	7	6	6	4

[1] Mr. Alvarez joined the board as of April 1, 2009.

[2] Mr. Cook retired from the board as of April 20, 2009.

[3] Mr. Hoover joined the board as of June 1, 2009.

Directors Compensation

Director compensation is reviewed and approved annually by the board, on the recommendation of the directors and corporate governance committee. Directors who are employees receive no additional compensation for serving on the board or its committees.

Cash Compensation
The company provides nonemployee directors the following cash compensation:

- retainer of $80,000 per year (payable monthly)
- $1,000 for each committee meeting attended
- $2,000 to the committee chair for each committee meeting conducted as compensation for the chair s preparation time
- retainer of $20,000 per year to the lead director ($30,000 beginning in 2010)
- reimbursement for customary and usual travel expenses.

Stock Compensation
Stock compensation for nonemployee directors consists of shares of company stock equaling $145,000, deposited annually in a deferred stock account in the Lilly Directors Deferral Plan (as described below), payable after service on the board has ended.

Lilly Directors Deferral Plan
This plan allows nonemployee directors to defer receipt of all or part of their retainer and meeting fees until after their service on the board has ended. Each director can choose to invest the funds in one or both of two accounts:

Deferred Stock Account. This account allows the director, in effect, to invest his or her deferred cash compensation in company stock. In addition, the annual award of shares to each director noted above (4,040 shares in 2009) is credited to this account on a pre-set annual date. Funds in this account are credited as hypothetical shares of company stock based on the market price of the stock at the time the compensation would otherwise have been earned. Hypothetical dividends are reinvested in additional shares based on the market price of the stock on the date dividends are paid. Actual shares are issued or transferred after the director ends his or her service on the board.

Deferred Compensation Account. Funds in this account earn interest each year at a rate of 120 percent of the applicable federal long-term rate, compounded monthly, as established the preceding December by the U.S. Treasury Department under Section 1274(d) of the Internal Revenue Code. The rate for 2010 is 4.9 percent. The aggregate amount of interest that accrued in 2009 for the participating directors was $189,802, at a rate of 5.2 percent.

Both accounts may be paid in a lump sum or in annual installments for up to 10 years, beginning the second January following the director s departure from the board. Amounts in the deferred stock account are paid in shares of company stock.

In 2009, we provided the following compensation to directors who are not employees:

Directors   Compensation

Name	Fees Earned or Paid in Cash ($)[1]	Stock Awards ($)[2]	All Other Compensation and Payments ($)[3]	Total ($)[4, 5]
Current				
Mr. Alvarez	$69,000	$145,000	$1,134	$215,134
Sir Winfried Bischoff	$105,000	$145,000	$22,179	$272,179
Mr. Eskew	$115,000	$145,000	$1,321	$261,321
Dr. Feldstein	$110,000	$145,000	$37,545	$292,545
Mr. Fyrwald	$98,000	$145,000	$23,150	$266,150
Dr. Gilman	$98,000	$145,000	$32,204	$275,204
Mr. Hoover	$57,667	$145,000	$32,877	$235,544
Ms. Horn	$134,000	$145,000	$6,795	$285,795
Ms. Marram	$110,000	$145,000	$33,304	$288,304
Mr. Oberhelman	$94,000	$145,000	$1,836	$240,836
Dr. Prendergast	$90,000	$145,000	$0	$235,000
Ms. Seifert	$95,000	$145,000	$40,000	$280,000
Retired				
Mr. Cook	$37,667	$48,333	$31,000	$117,000

[1] The following directors deferred 2009 cash compensation into their deferred stock accounts under the Lilly Directors   Deferral Plan (further described above):

Name	2009 Cash Deferred	Shares
Mr. Fyrwald	$98,000	2,871
Mr. Hoover	$57,667	1,684

[2] Each nonemployee director, other than Mr. Cook, received an award of stock valued at $145,000 (4,040 shares). Mr. Cook received an award of 1,347 shares, which was prorated for the time he was a director in 2009. This stock award and all prior stock awards are fully vested in that they are not subject to forfeiture; however, the shares are not issued until the director ends his or her service on the board, as further described above under   Lilly Directors Deferral Plan.   The table shows the grant date fair value for each director   s stock award. Aggregate outstanding stock awards in the table are shown on page 53 under   Ownership of Company Stock   in the   Directors   Deferral Plan Shares column. Aggregate stock options are shown in the table below under   Directors   Outstanding Stock Options   .

[3] This column includes amounts donated by the Eli Lilly and Company Foundation, Inc. under its matching gift program, which is generally available to U.S. employees as well as the outside directors. Under this program, the foundation matches 100 percent of charitable donations over $25 made to eligible charities, up to a maximum of $90,000 per year for each individual. For all directors except Dr. Prendergast, Ms. Seifert, and Mr. Cook, the amounts in this column also include tax reimbursements related to expenses for the directors   spouses to travel to and participate in board functions that included spouse participation. For Sir Winfried Bischoff, this column also includes $14,210 for expenses for his spouse to travel to and participate in board functions that included spouse

participation.

The foundation matched the donations in the table below for outside directors in 2009 via payments made directly to the recipient charity.

Name	Amount of Matching Donation
Dr. Feldstein	$36,000
Mr. Fyrwald	$22,000
Dr. Gilman	$29,210
Mr. Hoover	$31,100
Ms. Horn	$5,475
Ms. Marram	$32,500
Ms. Seifert	$40,000
Retired	
Mr. Cook	$31,000

4 Directors do not participate in a company pension plan or non-equity incentive plan.

5 Nonemployee directors received no stock options in 2009. The company discontinued granting stock options to nonemployee directors in 2005.

Directors Outstanding Stock Options

Name	Grant Date	Expiration Date	Exercise Price	Outstanding Stock Options (Exercisable)
Mr. Alvarez				0
Sir Winfried Bischoff	2/20/2001	2/18/2011	$73.98	2,800
	2/19/2002	2/17/2012	$75.92	2,800
	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				11,200
Mr. Cook				0
Mr. Eskew				0
Dr. Feldstein	2/19/2002	2/17/2012	$75.92	2,800
	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				8,400
Mr. Fyrwald				0
Dr. Gilman	4/20/2000	4/19/2010	$75.94	2,800
	2/20/2001	2/18/2011	$73.98	2,800
	2/19/2002	2/17/2012	$75.92	2,800
	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				14,000
Mr. Hoover				0
Ms. Horn	4/20/2000	4/19/2010	$75.94	2,800
	2/20/2001	2/18/2011	$73.98	2,800
	2/19/2002	2/17/2012	$75.92	2,800
	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				14,000
Ms. Marram	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				5,600

Mr. Oberhelman				0
Dr. Prendergast	4/20/2000	4/19/2010	$75.94	2,800
	2/20/2001	2/18/2011	$73.98	2,800
	2/19/2002	2/17/2012	$75.92	2,800
	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				14,000
Ms. Seifert	4/20/2000	4/19/2010	$75.94	2,800
	2/20/2001	2/18/2011	$73.98	2,800
	2/19/2002	2/17/2012	$75.92	2,800
	2/18/2003	2/18/2013	$57.85	2,800
	2/17/2004	2/17/2014	$73.11	2,800
				14,000

Directors and Corporate Governance Committee Matters

Overview
The directors and corporate governance committee recommends to the board candidates for membership on the board and board committees and for lead director. The committee also oversees matters of corporate governance, including board performance, director independence and compensation, and the corporate governance guidelines. The committee s charter is available online at **http://investor.lilly.com/governance.cfm** or in paper form upon request to the company s corporate secretary.
All committee members are independent as defined in the NYSE listing requirements.

Director Qualifications
The board seeks independent directors who represent a mix of backgrounds and experiences that will enhance the quality of the board s deliberations and decisions. Candidates shall have substantial experience with one or more publicly traded national or multinational companies or shall have achieved a high level of distinction in their chosen fields.
Board membership should reflect diversity in its broadest sense, including persons diverse in geography, gender, and ethnicity. The board is particularly interested in maintaining a mix that includes the following backgrounds:

- active or retired chief executive officers and senior executives, particularly those with experience in operations, finance, accounting, banking, marketing, and sales

- international business

- science and medicine

- government and public policy

- health care system (public or private).

Finally, board members should display the personal attributes necessary to be an effective director: unquestioned integrity, sound judgment, independence in fact and mindset, ability to operate collaboratively, and commitment to the company, its shareholders, and other constituencies.
The Lilly board members represent a desirable mix of backgrounds, skills, and experiences, and they all share the personal attributes of effective directors described above. Below are some of the specific experiences and skills of our independent directors:

Ralph Alvarez
Through his senior executive experience at McDonalds and other global restaurant businesses, Mr. Alvarez has extensive experience in consumer marketing, global operations, international business, and strategic planning. His international experience includes a special focus on emerging markets.

Sir Winfried Bischoff
Sir Winfried Bischoff has a distinguished career in banking and finance, including commercial banking, corporate finance, and investment banking. He has CEO experience both in Europe and the U.S. He is a globalist, with particular expertise in European matters but with extensive experience overseeing worldwide operations. He has extensive corporate governance experience from his service on public company boards in the U.S., U.K., and other European and Asian countries.

Michael L. Eskew

Mr. Eskew has CEO experience with UPS, where he established a record of success in managing complex worldwide operations, strategic planning, and building a strong consumer brand focus. He is an audit committee financial expert, based on his CEO experience and his service on other U.S. company audit committees. He has extensive corporate governance experience through his service on the boards of other companies.

Martin S. Feldstein

Dr. Feldstein is a renowned economist, academic, and adviser to U.S. presidents of both political parties. He has deep economic and public policy expertise, financial acumen, and a global perspective. His background as an academic brings a diversity of experience and perspective to the board s deliberations. He has also served on the boards of several major public companies.

J. Erik Fyrwald

Mr. Fyrwald has a strong record of operational and strategy leadership in two complex worldwide businesses with a focus on technology and innovation. An engineer by training, he has extensive senior executive experience at DuPont, a multinational chemical company, where he led their agriculture and nutrition division, which used chemical and biotechnology solutions to enhance plant health. More recently, he has gained CEO experience at Nalco, a global technology-based water products and services company.

Alfred G. Gilman
Dr. Gilman is a Nobel Prize winning pharmacologist, researcher, and medical professor. He has deep expertise in basic science, including mechanisms of drug action, and experience with pharmaceutical discovery research. As the former dean of a major medical school, he brings to the board important perspectives of both the academic and practicing medical communities.

R. David Hoover
Mr. Hoover has extensive CEO experience at Ball Corporation, with a strong record of leadership in operations and strategy. He is an audit committee financial expert as a result of his experience as CEO and formerly as CFO of Ball. He also has extensive corporate governance experience through his service on other public company boards.

Karen N. Horn
Ms. Horn is a former CEO with extensive experience in various segments of the financial industry, including banking and financial services. Through her for-profit and her public-private partnership work, she has significant experience in international economics and finance. Ms. Horn has extensive corporate governance experience through service on other public company boards in a variety of industries.

John C. Lechleiter
Dr. Lechleiter is our chairman, president, and chief executive officer. Under our corporate governance guidelines, the CEO is expected to serve on the board of directors. Dr. Lechleiter, a Ph.D. chemist, has over 30 years of experience with the company in a variety of roles of increasing responsibility in research and development, sales and marketing, and corporate administration. As a result, he has a deep understanding of pharmaceutical research and development, sales and marketing, strategy, and operations. He also has significant corporate governance experience through service on other public company boards.

Ellen R. Marram
Ms. Marram is a former CEO with a strong marketing and consumer brand background. Through her nonprofit and private company activities, she has a special focus and expertise in wellness and consumer health. Ms. Marram has extensive corporate governance experience through service on other public company boards in a variety of industries.

Douglas R. Oberhelman
Mr. Oberhelman has a strong strategic and operational background as a senior executive (and most recently as CEO-elect) of Caterpillar, a leading manufacturing company with worldwide operations and a special focus on emerging markets. He is an audit committee financial expert as a result of his prior experience as CFO of Caterpillar and as a member and chairman of the audit committee of another U.S. public company.

Franklyn G. Prendergast
Dr. Prendergast is a prominent medical clinician, researcher, and academician. He has extensive experience in senior-most administration at Mayo Clinic, a major medical institution, and as director of its renowned cancer center. He has special expertise in two critical areas for Lilly oncology and personalized medicine. As a medical doctor, he brings an important practicing physician perspective to the board s deliberations.

Kathi P. Seifert
Ms. Seifert is a former senior executive of Kimberly-Clark, a global consumer products company. She has strong expertise in consumer marketing and brand management, having led sales and marketing for several worldwide brands, with a special focus on consumer health. She has extensive corporate governance experience through her other board positions.

Director Nomination Process

The board delegates the screening process to the directors and corporate governance committee, which receives direct input from other board members. Potential candidates are identified through recommendations from several sources, including:

- incumbent directors
- management
- shareholders
- an independent executive search firm retained by the committee to assist in locating and screening candidates meeting the board s selection criteria.

The committee employs the same process for evaluating all candidates, including those submitted by shareholders. The committee initially evaluates a candidate based on publicly available information and any additional information supplied by the party recommending the candidate. If the candidate appears to satisfy the selection criteria and the committee s initial evaluation is favorable, the committee, assisted by management or the search firm, gathers additional data on the candidate s qualifications, availability, probable level of interest, and any potential conflicts of interest. If the committee s subsequent evaluation continues to be favorable, the candidate is contacted by the chairman of the board and one or more of the independent directors for direct discussions to determine the mutual levels of interest in pursuing the candidacy. If these discussions are favorable, the committee makes a final recommendation to the board to nominate the candidate for election by the shareholders (or to select the candidate to fill a vacancy, as applicable). Mr. Alvarez and Mr. Hoover, who are standing for election, were referred to the committee by an independent executive search firm.

Process for Submitting Recommendations and Nominations

A shareholder who wishes to recommend a director candidate for evaluation by the committee pursuant to this process should forward the candidate s name and information about the candidate s qualifications to the chair of the directors and corporate governance committee, in care of the corporate secretary, at Lilly Corporate Center, Indianapolis, Indiana 46285. The candidate must meet the selection criteria described above and must be willing and expressly interested in serving on the board.

Under Section 1.9 of the company s bylaws, a shareholder who wishes to directly nominate a director candidate at the 2011 annual meeting (i.e., to propose a candidate for election who is not otherwise nominated by the board through the recommendation process described above) must give the company written notice by November 8, 2010. The notice should be addressed to the corporate secretary at Lilly Corporate Center, Indianapolis, Indiana 46285. The notice must contain prescribed information about the candidate and about the shareholder proposing the candidate as described in more detail in Section 1.9 of the bylaws. A copy of the bylaws is available online at **http://investor.lilly.com/governance.cfm**. The bylaws will also be provided by mail without charge upon request to the corporate secretary.

Audit Committee Matters

Audit Committee Membership

All members of the audit committee are independent as defined in the SEC regulations and NYSE listing standards applicable to audit committee members. The board of directors has determined that Mr. Eskew, Mr. Hoover, and Mr. Oberhelman are audit committee financial experts, as defined in the rules of the SEC.

Audit Committee Report

The audit committee (we or the committee) reviews the company s financial reporting process on behalf of the board. Management has the primary responsibility for the financial statements and the reporting process, including the systems of internal controls and disclosure controls. In this context, we have met and held discussions with management and the independent auditor. Management represented to us that the company s consolidated financial statements were prepared in accordance with generally accepted accounting principles, and we have reviewed and discussed the audited financial statements and related disclosures with management and the independent auditor, including a review of the significant management judgments underlying the financial statements and disclosures.

The independent auditor reports to us. We have sole authority to appoint and to replace the independent auditor.

We have discussed with the independent auditor matters required to be discussed by Statement on Auditing Standards No. 61 (Communication with Audit Committees), as amended and as adopted by the Public Company Accounting Oversight Board (PCAOB) in Rule 3200T, including the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments, and the clarity of the disclosures in the financial statements. In addition, we have received the written disclosures and the letter from the independent auditor required by applicable requirements of the PCAOB regarding communications with the audit committee concerning independence, and have discussed with the independent auditor the auditor s independence from the company and its management. In concluding that the auditor is independent, we determined, among other things, that the nonaudit services provided by Ernst & Young LLP (as described below) were compatible with its independence. Consistent with the requirements of the Sarbanes-Oxley Act of 2002, we have adopted policies to avoid compromising the independence of the independent auditor, such as prior committee approval of nonaudit services and required audit partner rotation.

We discussed with the company s internal and independent auditors the overall scope and plans for their respective audits, including internal control testing under Section 404 of the Sarbanes-Oxley Act. We periodically meet with the internal and independent auditors, with and without management present, and in private sessions with members of senior management (such as the chief financial officer and the chief accounting officer) to discuss the results of their examinations, their evaluations of the company s internal controls, and the overall quality of the company s financial reporting. We also periodically meet in executive session.

In reliance on the reviews and discussions referred to above, we recommended to the board (and the board subsequently approved the recommendation) that the audited financial statements be included in the company s annual report on Form 10-K for the year ended December 31, 2009, for filing with the SEC. We have also appointed the company s independent auditor, subject to shareholder ratification, for 2010.

Audit Committee

Michael L. Eskew, Chair
Martin S. Feldstein, Ph.D.
R. David Hoover
Douglas R. Oberhelman
Kathi P. Seifert

Services Performed by the Independent Auditor

The audit committee preapproves all services performed by the independent auditor, in part to assess whether the provision of such services might impair the auditor s independence. The committee s policy and procedures are as follows:

The committee approves the annual **audit services** engagement and, if necessary, any changes in terms, conditions, and fees resulting from changes in audit scope, company structure, or other matters. The committee may also preapprove other audit services, which are those services that only the independent auditor reasonably can provide. Since 2004, audit services have included internal controls attestation work under Section 404 of the Sarbanes-Oxley Act.

Audit-related services are assurance and related services that are reasonably related to the performance of the audit, and that are traditionally performed by the independent auditor. The committee believes that the provision of these services does not impair the independence of the auditor.

Tax services. The committee believes that, in appropriate cases, the independent auditor can provide tax compliance services, tax planning, and tax advice without impairing the auditor s independence.

The committee may approve **other services** to be provided by the independent auditor if (i) the services are permissible under SEC and PCAOB rules, (ii) the committee believes the provision of the services would not impair the independence of the auditor, and (iii) management believes that the auditor is the best choice to provide the services.

Process. At the beginning of each audit year, management requests prior committee approval of the annual audit, statutory audits, and quarterly reviews for the upcoming audit year as well as any other engagements known at that time. Management will also present at that time an estimate of all fees for the upcoming audit year. As specific engagements are identified thereafter, they are brought forward to the committee for approval. To the extent approvals are required between regularly scheduled committee meetings, preapproval authority is delegated to the committee chair.

For each engagement, management provides the committee with information about the services and fees, sufficiently detailed to allow the committee to make an informed judgment about the nature and scope of the services and the potential for the services to impair the independence of the auditor.

After the end of the audit year, management provides the committee with a summary of the actual fees incurred for the completed audit year.

Independent Auditor Fees

The following table shows the fees incurred for services rendered on a worldwide basis by Ernst & Young LLP, the company s independent auditor, in 2009 and 2008. All such services were preapproved by the committee in accordance with the preapproval policy.

	2009 (millions)	2008 (millions)
Audit Fees Annual audit of consolidated and subsidiary financial statements, including Sarbanes-Oxley 404 attestation Reviews of quarterly financial statements Other services normally provided by the auditor in connection with statutory and regulatory filings	$8.0	$8.0
Audit-Related Fees Assurance and related services reasonably related to the performance of the audit or reviews of the financial statements 2009 and 2008: primarily related to employee benefit plan and other ancillary audits, and due diligence services on potential acquisitions	$1.1	$0.8
Tax Fees 2009 and 2008: primarily related to consulting and compliance services	$1.2	$1.7
All Other Fees 2009 and 2008: primarily related to compliance services outside the U.S.	$0.1	$0.2
Total	$10.4	$10.7

Compensation Committee Matters

Scope of Authority

The compensation committee oversees the company s global compensation philosophy and establishes the compensation of executive officers. The committee also acts as the oversight committee with respect to the company s deferred compensation plans, management stock plans, and other management incentive compensation programs. In overseeing those plans, the committee may delegate authority to company officers for day-to-day plan administration and interpretation, including selecting participants, determining award levels within plan parameters, and approving award documents. However, the committee may not delegate any authority for matters affecting the executive officers.

The Committee s Processes and Procedures

The committee s primary processes for establishing and overseeing executive compensation can be found in the Compensation Discussion and Analysis section under The Committee s Processes and Analyses below. Additional processes and procedures include:

Meetings. The committee meets several times each year (eight times in 2009). Committee agendas are established in consultation with the committee chair and the committee s independent compensation consultant. The committee meets in executive session after each meeting.

Role of Independent Consultant. The committee has retained Frederic W. Cook and his firm, Frederic W. Cook & Co., Inc., as its independent compensation consultant to assist the committee. Mr. Cook reports directly to the committee, and neither he nor his firm is permitted to perform any services for management. The consultant s duties include the following:

- review committee agendas and supporting materials in advance of each meeting and raise questions with the company s global compensation group and the committee chair as appropriate
- review the company s total compensation philosophy, peer group, and target competitive positioning for reasonableness and appropriateness
- review the company s executive compensation program and advise the committee of plans or practices that might be changed in light of evolving best practices
- provide independent analyses and recommendations to the committee on the CEO s pay
- review draft Compensation Discussion and Analysis report and related tables for the proxy statement
- proactively advise the committee on best practices for board governance of executive compensation
- undertake special projects at the request of the committee chair.

The consultant interacts directly with members of company management only on matters under the committee s oversight and with the knowledge and permission of the committee chair.

Role of Executive Officers and Management. With the oversight of the CEO and the senior vice president of human resources, the company s global compensation group formulates recommendations on matters of compensation philosophy, plan design, and the specific compensation recommendations for executive officers (other than the CEO as noted below). The CEO gives the committee a performance assessment and compensation recommendation for each of the other executive officers. Those recommendations are then considered by the committee with the assistance of its compensation consultant. The CEO and the senior vice president of human resources attend committee meetings but are not present for executive sessions or for any discussion of their own compensation. (Only nonemployee directors and the committee s consultant attend executive sessions.)

The CEO normally does not participate in the formulation or discussion of his pay recommendations; however, for 2010 Dr. Lechleiter requested that no increases be made to his base salary or incentive targets. The CEO has no prior knowledge of the recommendations that the consultant makes to the committee.

Risk assessment. With the help of its compensation consultant, in 2009 the committee reviewed the company s compensation policies and practices for all employees, including executive officers, and determined that our compensation programs will not have a material adverse effect on the company. The committee also reviewed our compensation programs for certain design features that have been identified by experts as having the potential to encourage excessive risk-taking, including:

- too much focus on equity
- compensation mix overly weighted toward annual incentives
- highly leveraged payout curves and uncapped payouts
- unreasonable goals or thresholds
- and steep payout cliffs at certain performance levels that may encourage short-term business decisions to meet payout thresholds.

The committee noted several design features of the company s cash and equity incentive programs for all employees that reduce the likelihood of excessive risk-taking:

- The program design provides a balanced mix of cash and equity, annual and longer-term incentives, and performance metrics (revenue, earnings, and total shareholder return).
- Maximum payout levels for bonuses and performance awards are capped at 200 percent of target.
- All regular U.S. employees participate in the same bonus plan.

- Bonus and equity programs have minimum payout levels for nonexecutive officers.
- The company currently does not grant stock options.
- The compensation committee has downward discretion over incentive program payouts.
- The executive compensation recovery policy allows the company to claw back payments made using materially inaccurate financial results.
- Executive officers are subject to share ownership and retention guidelines.
- Compliance and ethical behaviors are integral factors considered in all performance assessments.

The committee determined that, for all employees, the company s compensation programs do not encourage excessive risk and instead encourage behaviors that support sustainable value creation. Nonetheless, as a result of the review, the committee is implementing certain changes to the bonus and equity incentive plan designs for 2010 to further reduce incentives to incur excessive risk as follows:

- Key risks to the business strategy are reviewed by the board as part of the company s annual long-range planning process. These risks will be an input into an annual review by the compensation committee to assess the potential for compensation programs to encourage excessive risk-taking (or excessively risk-averse behaviors).
- The bonus plan has been modified to allow for greater differentiation based on individual performance and smoother payout curves.
- A linear payout formula for the PA is replacing the nine discrete earnings-per-share (EPS) ranges, eliminating payout cliffs between ranges. Additionally, the threshold payout level will be increased from zero to 50 percent of target, and the maximum payout level will be lowered from 200 percent to 150 percent of target for all participants.
- The committee expanded the executive compensation recovery policy (described in more detail on pages 39-40).

Compensation Committee Interlocks and Insider Participation

None of the compensation committee members:

- has ever been an officer or employee of the company
- is or was a participant in a related-person transaction in 2009 (see page 14 for a description of our policy on related-person transactions)
- is an executive officer of another entity, at which one of our executive officers serves on the board of directors.

Executive Compensation

Compensation Discussion and Analysis

Summary

Executive compensation for 2009 aligned well with the objectives of our compensation philosophy and with our performance, driven by these factors:

Strong growth in operating results drove strong annual bonus and performance award (PA) payouts. As described below, strong operating performance included 5.3 percent pro-forma adjusted revenue growth and 15.7 percent adjusted EPS growth, both of which were more than double our peer group average. This resulted in above-target cash bonus and PA payouts for all participants.

Lagging stock price resulted in no payout of shareholder value awards (SVAs). Total shareholder return for 2007-2009 failed to meet the threshold for the SVA; as a result, awards granted to executive officers did not pay out.

Cost-effective equity design maintained for 2009, with more emphasis on long-term performance. In 2009, we shifted our PA program from a one-year to a two-year performance period, in response to shareholder input and the board s emphasis on strong corporate governance. We continued our SVA program and maintained a 50/50 mix of PAs and SVAs for all members of senior management, including executive officers. We improved the overall cost structure of our equity program in 2007, while maintaining its competitiveness and motivational impact, by eliminating stock options in favor of SVAs.

A balanced program fosters employee achievement, retention, and engagement. We delivered a total compensation package composed of salary, performance-based cash and equity incentives, and a competitive employee benefits program. Together these elements reinforced pay-for-performance, provided a balanced focus on both long- and short-term performance, and encouraged employee retention and engagement.

In addition:

The compensation committee reviewed the connection between compensation and risk. The committee reviewed our compensation programs and policies for features that may encourage excessive risk taking. The committee found the overall program to be sound, but approved changes to the executive compensation recovery policy, share ownership and retention guidelines, and some design features for 2010 incentive programs.

No increase in CEO compensation for 2010. In light of the business challenges the company currently faces, at Dr. Lechleiter s request, the compensation committee approved that no increases be made to his 2010 salary or incentive targets.

Executive Compensation Philosophy

Our strategy is to create value by accelerating the flow of innovative new medicines that provide improved outcomes for individual patients. We aim to discover, develop, or acquire innovative new therapies medicines that make a real difference for patients and deliver clear value for payers. In addition, we must continually improve productivity in all that we do. To achieve these goals, we must attract, engage, and retain highly-talented individuals who are committed to the company s core values of integrity, excellence, and respect for people. Our compensation and benefits programs are based on these objectives:

Compensation should reflect individual and company performance. We link all employees pay to individual and company performance.

- As employees assume greater responsibilities, more of their pay is linked to company performance and shareholder returns.
- We seek to deliver above-market compensation given top-tier individual and company performance, but below-market compensation where individual performance falls short of expectations and/or company performance lags the industry.
- We design our programs to be simple and clear, so that employees can easily understand how their efforts affect their pay.
- Our incentive programs use hard metrics (sales, earnings, and total shareholder return) that can be objectively measured against our peer companies.
- We balance the objectives of pay-for-performance and employee retention. Even during downturns in company performance, the program should continue to motivate and engage successful, high-achieving employees.

Compensation should foster a long-term focus. A long-term focus is critical to success in our industry and is consistent with our goal of retaining highly talented employees as they build their careers. Throughout the company, a competitive benefits program aids retention. As employees progress to higher levels of the organization, a greater portion of compensation is tied to our longer-term performance.

Compensation should be based on the level of job responsibility and reflect the market. We seek internal pay relativity, meaning that pay differences among jobs should be commensurate with differences in job responsibility and impact. We aim to remain competitive with the pay of other premier employers with whom we compete for talent.

Compensation should be egalitarian and efficient. We seek to deliver superior long-term shareholder returns and to share value created with employees in a cost-effective manner. While compensation will always reflect differences in job responsibilities, geographies, and marketplace considerations, the overall structure of compensation and benefits programs should be broadly similar across the organization.

The Committee s Processes and Analyses

The compensation committee uses several tools to help it structure compensation programs that meet company objectives. Among those are:

Assessment of individual performance. Individual performance has a strong impact on compensation.

- The independent directors, under the direction of the lead director, meet with the CEO in private session at the beginning of the year to agree upon the CEO s performance objectives for the year. At the end of the year, the independent directors meet in executive session to review the performance of the CEO based on his or her achievement of the agreed-upon objectives, contribution to the company s performance, ethics and integrity, and other leadership accomplishments. This evaluation is shared with the CEO by the lead director and is used by the compensation committee in setting the CEO s compensation.

For the other executive officers, the committee receives a performance assessment and compensation recommendation from the CEO and also exercises its judgment based on the board s interactions with the executive officer. As with the CEO, the executive s performance evaluation is based on the executive s achievement of objectives established between the executive and his or her supervisor, the executive s contribution to the company s performance, ethics and integrity, and other leadership attributes and accomplishments.

Assessment of company performance. The committee uses company performance measures in two ways:

In establishing total compensation ranges, the committee uses as a reference point the performance of the company and its peer group with respect to sales, earnings per share, return on assets, return on equity, and total shareholder return.

The committee establishes specific company performance measures that determine payouts under the company s cash and equity formula-based incentive programs.

Peer group analysis. The committee compares the company s programs with a peer group of global pharmaceutical companies: Abbott Laboratories; Amgen Inc.; AstraZeneca plc; Bristol-Myers Squibb Company; GlaxoSmithKline plc; Hoffmann-La Roche Inc.; Johnson & Johnson; Merck & Co., Inc.; Novartis AG; Pfizer Inc.; Sanofi-Aventis; Schering-Plough Corporation; and Wyeth. Pharmaceutical companies needs for scientific and sales and marketing talent are unique to the industry and we must compete with these companies for talent. The committee uses the peer group data in two ways:

- *Overall competitiveness.* The committee uses aggregated data and both company and individual performance as a reference point to ensure that the executive compensation program as a whole is competitive, meaning within the broad middle range of comparative pay at peer companies when the company achieves the targeted performance levels. The committee does not target a specific position within the range.
- *Individual competitiveness.* The committee compares the overall pay of individual executives, if the jobs are sufficiently similar to make the comparison meaningful. The individual s pay is driven primarily by individual and company performance and internal relativity, rather than the peer group data; the peer group data is used as a market check to ensure that individual pay remains within the broad middle range of peer group pay. The committee does not target a specific position within the range.

The peer group is reviewed for appropriateness at least every three years. The group was reviewed in June 2008, and the new group was used for purposes of 2009 compensation decisions. The committee added four new companies (AstraZeneca plc, Hoffmann-La Roche Inc., Novartis AG, and Sanofi-Aventis) because over time the number of comparator companies had decreased due to industry consolidation. The committee desired an expanded peer group to have a better representation of companies that are direct competitors for our products, operate in a similar business model, and employ people with the unique skills required to operate an established biopharmaceutical company. The committee also considered market cap as of December 31, 2007 and 2007 revenue as measures of size; with the exception of Johnson & Johnson, all peer companies were between one-half to three times Lilly with regard to both measures. The committee included Johnson & Johnson, despite its size, because it competes directly with Lilly for talent at all management levels.

CEO compensation. To provide further assurance of independence, the compensation recommendation for the CEO is developed by the committee s independent consultant (Frederic W. Cook and his firm, Frederic W. Cook & Co., Inc.) with limited support from company staff. The Cook firm prepares analyses showing competitive CEO compensation among the peer group for the individual elements of compensation and total direct compensation. Mr. Cook develops a range of recommendations for any change in the CEO s base salary, annual incentive target, equity grant value, and equity mix. The recommendations take into account the peer competitive pay analysis, expected future pay trends, and importantly, the position of the CEO in relation to other senior company executives and proposed pay actions for all key employees of the company. The range allows the committee to exercise its discretion based on the CEO s individual performance and other factors. The CEO has no prior knowledge of the recommendations and normally takes no part in the recommendations, committee discussions, or decisions. For 2010, Dr. Lechleiter requested that no increases be made to his base salary or incentive targets.

Executive Compensation for 2009

Overview Establishment of Overall Pay

In making its pay decisions for 2009, the committee reviewed 2008 company performance data and peer group data as discussed above, and also considered expected competitive trends in executive pay. That review showed:

Company performance. In 2008, the company performed in the upper tier of the peer group in adjusted earnings per share growth, sales growth, return on assets, and return on equity and in the lower tier in one-year and five-year total shareholder return.

Pay relative to peer group. The company s total pay to executive officers for 2008 was in the broad middle range of the peer group.

The committee determined the following:

Program elements. The 2009 program consisted of base salary, a cash incentive bonus award, and two forms of performance-based equity grants: PAs and SVAs. Executives also received the company employee benefits package. This program balances the mix of cash and equity compensation, the mix of current and longer-term compensation, the mix of financial and market goals, and the security of foundational benefits in a way that furthers the compensation objectives discussed above.

Pay ranges and mix of pay elements. The company generally maintained the same pay ranges and mix of pay elements as in 2008. The committee believes this overall program continues to provide cost-effective delivery of total compensation that:

- encourages retention and employee engagement by delivering competitive cash and equity components
- maintains a strong link to company performance and shareholder returns through a balanced equity incentive program without encouraging excessive risk-taking
- maintains appropriate internal pay relativity, and
- provides opportunity for total pay within the broad middle range of expected peer-group pay given company performance comparable to that of our peers.

2009 Target Compensation

The graphs below show the balance of target compensation determined by the committee.

2009 Actual Compensation

The graphs below show the ratio of pay elements in actual compensation received for 2009.

Base salary and bonus amounts are shown in the Summary Compensation Table. The PA payout for 2009 performance is shown in the table on page 44. The SVA payout for 2007-2009 performance was zero for all named executive officers except Mr. Carmine, who was not an officer when the award was granted. Mr. Carmine s payout is shown in the Options Exercised and Stock Vested in 2009 table.

Base Salary

In setting base salaries for 2009, the committee considered the following:

The corporate budget. The corporate budget for salary increases was established based on company performance for 2008, expected performance for 2009, and a reference to general external trends. The objective of the budget is to allow salary increases to retain, motivate, and reward successful performers while maintaining affordability within the company s business plan. Individual pay increases can be more or less than the budget amount depending on individual performance, but aggregate increases must stay within the budget. The aggregate increases for the named executive officers and the other executive officers were within the corporate budget of four percent.

Internal relativity, meaning the relative pay differences between different job levels.

Peer group data specific to certain positions in which the jobs were viewed as comparable in content and importance. We used the peer-group data as a market check for reasonableness and competitiveness. The salaries, as determined by the other factors, were within the broad middle range of expected competitive pay and, therefore, no further adjustments were necessary for competitiveness.

Individual performance. As described above under The Committee s Processes and Analyses, base salary increases were driven largely by individual performance assessments.

In assessing Dr. Lechleiter s 2008 performance, the independent directors considered the company s and Dr. Lechleiter s accomplishment of objectives that had been established at the beginning of the year and their own subjective assessment of his performance. They noted that under Dr. Lechleiter s leadership in 2008, the company:

exceeded sales and earnings targets

successfully transitioned through the change in leadership with Mr. Taurel retiring at the end of 2008

aggressively expanded the product portfolio through business development transactions, including the acquisition of ImClone Systems Incorporated

implemented wide-ranging productivity improvements, including reducing layers of management.

In establishing Dr. Lechleiter s base salary, the committee also considered his assumption of the additional role of chairman of the board in 2009.

With regard to Dr. Paul, the committee considered Lilly Research Laboratories progress with respect to pipeline goals, cycle time reductions, and transformation efforts, as well as his already-strong compensation.

The committee considered Mr. Carmine s effective leadership in driving strong operating results and reinforcing a culture of transparency, ethics, and compliance.

The committee noted Mr. Rice s continued strong leadership of the financial component, fostering a culture of controls and compliance, and overall contributions to company strategy.

With regard to Mr. Armitage, the committee recognized his continued leadership in shaping intellectual-property policy to foster innovation and driving a corporate culture of compliance and transparency.

Change in base salary ($000 s)

Name	**2008**	**2009**	**Percentage Increase**
Dr. Lechleiter	$ 1,400	$ 1,500	7%
Dr. Paul	$ 1,006	$ 1,026	2%
Mr. Carmine	$ 880	$ 924	5%
Mr. Rice	$ 850	$ 901	6%
Mr. Armitage	$ 785	$ 816	4%

Cash Incentive Bonuses

The company s annual cash bonus program aligns employees goals with the company s sales and earnings growth objectives for the current year. Cash incentive bonuses for all management employees worldwide, as well as most nonmanagement employees in the U.S., are determined under The Eli Lilly and Company Bonus Plan (the bonus plan). Under the plan, the company sets bonus targets for all participants at the beginning of each year. Bonus payouts range from zero to 200 percent of target amounts depending on the company s financial results relative to predetermined performance measures. At the end of the performance period, the committee has discretion to adjust a bonus payout downward (but not upward) from the amount yielded by the formula for executive officers.

The committee considered the following when establishing the 2009 awards:

Bonus targets. Bonus targets (expressed as a percentage of base salary) were based on job responsibilities, internal relativity, and peer group data. Consistent with our compensation objectives, as executives assume greater responsibilities, more of their pay is linked to company performance. For three named executive officers, the committee maintained the same bonus targets as 2008; for two named executive officers, targets were increased in order to appropriately reflect internal relativity and maintain cash compensation within the broad middle range of expected competitive pay, given median peer-group performance.

Bonus targets (as a percentage of base salary):

Name	2008	2009	Change
Dr. Lechleiter	140%	140%	0%
Dr. Paul	85%	90%	5%
Mr. Carmine	85%	90%	5%
Mr. Rice	80%	80%	0%
Mr. Armitage	80%	80%	0%

Company performance measures. The committee established 2009 company performance measures with a 25 percent weighting on sales growth and a 75 percent weighting on growth in adjusted EPS (reported EPS adjusted as described below under Adjustments for Certain Items). This mix of performance measures focuses employees appropriately on improving both top-line sales and bottom-line earnings, with special emphasis on earnings in order to tie rewards directly to productivity improvements. The measures are also effective motivators because they are easy for employees to track and understand.

In establishing the 2009 target growth rates, the committee considered the expected 2009 performance of our peer group, based on published investment analyst estimates. The target growth rates of three percent for sales and seven percent for adjusted EPS were slightly above the median expected growth rates for our peer group. These targets were aligned with our compensation objectives of producing above-target payouts if the company outperformed the peer group and below-target payouts if company performance lagged the peer group. Payouts were determined by this formula:

(0.25 x sales multiple) + (0.75 x adjusted EPS multiple) = bonus multiple

Bonus multiple X bonus target X base salary earnings = payout

2009 sales and adjusted EPS multiples are illustrated by these charts:

2009 pro forma sales of $21,836 million represented 5.3 percent growth over 2008 pro forma sales of $20,732 million and resulted in a sales multiple of 1.23.

2009 pro forma adjusted EPS of $4.42 represented growth of 15.7 percent over 2008 pro forma adjusted EPS of $3.82 and resulted in an EPS multiple of 1.87.

Together, the sales multiple and the adjusted EPS multiple yielded a bonus multiple of 1.71.

(0.25 x 1.23) + (0.75 x 1.87) = 1.71 bonus multiple

See page 37 for a reconciliation of 2009 reported and pro forma sales and adjusted EPS.

Equity Incentives Total Equity Program
We employ two forms of equity incentives granted under the 2002 Lilly Stock Plan: performance awards (PAs) and shareholder value awards (SVAs). These incentives are designed to focus our leaders on long-term shareholder value: SVAs have a three-year performance period and PAs, beginning in 2009, have a two-year performance period. For executive officers, PAs pay out in restricted stock units that vest one year after the

performance period. Executive officers are required to hold net shares they earn from SVAs for one year after payout. The following chart shows the holding periods for PA and SVA grants over time:

Target grant values. For 2009, the committee increased aggregate grant values for three named executives based on internal relativity, individual performance, and aggregated peer-group data suggesting that the 2008 grant values were below the broad middle range compared to those of peers. Consistent with the company s compensation objectives, individuals at higher levels received a greater proportion of total compensation in the form of equity. The committee determined that for members of senior management, a 50/50 split between PAs and SVAs appropriately balances the company financial performance and shareholder equity return metrics of the two programs. Target values for 2009 equity grants for the named executive officers were as follows:

Target grant values ($000 s)

Name	2008 PA	2009 PA	2008 SVA	2009 SVA	Percentage Increase (total)
Dr. Lechleiter	$3,250	$3,750	$3,250	$3,750	15%
Dr. Paul	$1,500	$1,500	$1,500	$1,500	0%
Mr. Carmine	$1,500	$1,500	$1,500	$1,500	0%
Mr. Rice	$1,200	$1,500	$1,200	$1,500	25%
Mr. Armitage	$855	$1,000	$855	$1,000	17%

Equity Incentives Performance Awards

PAs provide employees with shares of company stock if certain company performance goals are achieved. The awards are structured as a schedule of shares of company stock based on growth in adjusted EPS over specified time periods of one or more years. In 2009, the company granted both a one-year and a two-year award to all global management as a transition to a two-year performance period for all PAs granted beginning in 2010. (This design change was implemented in response to shareholder feedback.) The two grants in 2009 provided the opportunity for participants to receive *one and only one* PA payout each year without skipping a year. The 2009 PA paid in February 2010, while the 2009-2010 PA will pay out in February 2011, assuming performance targets are met (see Holding Periods for PAs and SVAs chart above). The fair market value at grant for both awards was the same. Possible payouts for both PAs range from zero to 200 percent of the target amount, depending on adjusted EPS growth over the performance period. No dividends are paid on the awards during the performance period. At the end of the performance period, the committee has discretion to adjust an award payout downward (but not upward) from the amount yielded by the formula. For the 2009 grants, the committee considered the following:

Company performance measure. The committee established the performance measure as adjusted EPS growth. The committee believes adjusted EPS growth is an effective motivator because it is closely linked to shareholder value, is broadly communicated to the public, is easily understood by employees, and allows for objective comparisons to peer-group performance. The target growth percentage of seven percent was slightly above the median expected adjusted earnings performance of companies in our peer group over both a one-year and two-year period, based on published investment analyst estimates. Accordingly, consistent with our compensation objectives, company performance exceeding the expected peer-group median would result in above-target payouts, while company performance lagging the expected peer-group median would result in below-target payouts.

Payouts for 2009 PAs were determined according to this schedule:

2009 PA

2009 EPS	Less than $3.90	$3.90-$3.96	$3.97-$4.04	$4.05-$4.12	$4.13-$4.19	$4.20-$4.27	$4.28-$4.34	Greater than $4.34
Percent of Target	0%	50%	75%	100%	125%	150%	175%	200%

2009 pro forma adjusted EPS of $4.42 represented a growth over 2008 pro forma adjusted EPS ($3.82) of 15.7 percent. This top-tier growth within the peer group resulted in a 2009 PA payout at 200 percent of target. See page 37 for a reconciliation of 2009 reported and pro forma adjusted EPS.

Payouts for 2009-2010 PAs will be determined in 2011 based on the schedule below:

2009-2010 PA

Aggregate 2009-2010 EPS	Less than $7.87	$7.87-$8.09	$8.10-$8.33	$8.34-$8.57	$8.58-$8.81	$8.82-$9.06	$9.07-$9.31	Greater than $9.31
Percent of Target	0%	50%	75%	100%	125%	150%	175%	200%

Equity Incentives Shareholder Value Awards

In 2007, the company replaced its stock option program with the SVA program. SVAs are structured as a schedule of shares of company stock based on the performance of the company s stock over a three-year period. No dividends are paid on the awards during the performance period. Payouts range from zero to 140 percent of the target amount, depending on stock performance over the period. At the end of the performance period, the committee has discretion to adjust an award payout downward (but not upward) from the amount yielded by the formula. The SVA program delivers equity compensation that is strongly linked to long-term total shareholder returns. It is more cost-effective than the stock option program it replaced because the SVA program delivers, at a lower cost to the company, an equity incentive that is equally or more effective in aligning employee interests with long-term shareholder returns. For the 2009 grants, the committee considered the following:

Company performance measure. The SVA is designed to pay above target if company stock outperforms an expected compounded annual rate of return for large-cap companies and below target if company stock underperforms that rate of return. The expected rate of return used in this calculation was determined considering total return that a reasonable investor would consider appropriate for investing in a large-cap U.S. company, less the company s current dividend yield, based on input from external money managers. Executive officers receive no payout if the stock price, less three years of dividends at the current rate, does not grow over the three-year performance period in other words, if total shareholder return for the three-year period is zero or negative.

The starting price for the 2009-2011 SVAs was $34.74 per share, representing the average of the closing prices of company stock for all trading days in November and December 2008. The ending price to determine payouts will be the average of the closing prices of company stock for all trading days in November and December 2011.

Payouts of the 2009-2011 SVA to executive officers will be determined by this schedule when they are paid out in early 2012:

2009-2011 SVA

Stock Price	Less than $28.57	$28.57-$32.78	$32.79-$36.99	$37.00-$39.49	$39.50-$41.99	$42.00-$44.49	Greater than
unded Growth ed for ds)	Less than (6.3)%	(6.3)%-(1.9)%	(1.9)%-2.1%	2.1%-4.4%	4.4%-6.5%	6.5% -8.6%	Greater than
of Target	0%	40%	60%	80%	100%	120%	140%

Stock Options
The company stopped granting stock options in 2007. All outstanding stock options are currently under water, meaning they have no realizable value. The stock option granted in 1999 expired in 2009, and all of the named executive officers forfeited the award having realized no value. These awards (and other expired stock options) were not replaced.

Adjustments for Certain Items
Consistent with past practice, the committee adjusted the results on which 2009 bonuses and PAs were determined to eliminate the distorting effect of certain unusual income or expense items on year-over-year growth percentages. The adjustments are intended to:

- align award payments with the underlying growth of the core business
- avoid volatile, artificial inflation or deflation of awards due to the unusual items in either the award year or the previous (comparator) year
- eliminate certain counterproductive short-term incentives for example, incentives to refrain from acquiring new technologies or to defer disposing of underutilized assets or settling legacy legal proceedings to protect current bonus payments.

To assure the integrity of the adjustments, the committee establishes adjustment guidelines at the beginning of the year. These guidelines are consistent with the company guidelines for reporting adjusted earnings to the investment community, which are reviewed by the audit committee of the board. The adjustments apply equally to income and expense items. The compensation committee reviews all adjustments and retains downward discretion i.e., discretion to reduce compensation below the amounts that are yielded by the adjustment guidelines.
For the 2009 awards calculation, the committee made these adjustments to EPS:

- For both 2009 and 2008: Eliminated the impact of (i) significant asset impairments and restructuring charges and (ii) one-time accounting charges for the acquisition of in-process research and development
- For 2009: Eliminated the impact of special charges related to litigation and the government investigations noted below
- For 2008: Eliminated the impact of (i) the ImClone Systems Incorporated acquisition, (ii) a one-time benefit to income resulting from settlement of a tax audit, and (iii) special charges related to the resolution of government investigations of prior sales and marketing practices of the company.

In addition, to eliminate the distorting effect of the acquisition of ImClone Systems Incorporated (completed in late November 2008) on year-over-year growth rates, the committee adjusted sales and EPS for 2008 on a pro forma basis as if the acquisition had been completed at the beginning of 2008.
The adjustments were intended to align award payments more closely with underlying business growth trends and eliminate volatile swings (up or down) caused by the unusual items. This is demonstrated by the 2007, 2008, and 2009 adjustments:

Reconciliations of the adjustments to our reported sales and earnings per share are below. The bolded numbers are the growth percentages used to calculate payouts under the compensation programs.

	2009	2008	% Growth 2009 vs. 2008	2007	% Growth 2008 vs. 2007
Sales as reported ($ millions)	$21,836.0	$20,371.9	7.2%	$18,633.5	9.3%
Pro forma ICOS adjustment				$72.7	
Eliminate ImClone sales in 2008		($35.6)			
Subtotal adjusted for ImClone sales only	$21,836.0	$20,336.3		$18,706.2	**8.7%**
Pro forma ImClone adjustment		$324.7			
Sales pro forma adjusted (sales and royalties)	$21,836.0	$20,732.2	**5.3%**	$18,706.2	
EPS as reported	$3.94	($1.89)	NM	$2.71	NM
Eliminate net impact associated with ImClone acquisition		$4.46			
Eliminate IPR&D charges for acquisitions and in-licensing transactions	$0.05	$0.10		$0.63	
Eliminate asset impairments, restructuring and other special charges (including charges related to litigation and government investigations)	$0.42	$1.54		$0.21	
Eliminate benefit from resolution of IRS audit		($0.19)			
Proforma ICOS adjustment				($0.01)	
EPS pro forma adjusted (ICOS only)	$4.42	$4.02		$3.54	**13.6%**
Pro forma ImClone adjustment		($0.20)			
EPS pro forma adjusted (ImClone only)	$4.42	$3.82	**15.7%**		

NM Not meaningful
Numbers in the 2009 column do not add due to rounding.

Equity Incentive Grant Mechanics and Timing
The committee approves target grant values for equity incentives prior to the grant date. On the grant date, those values are converted to shares based on:

the closing price of company stock on the grant date the same valuation methodology the company uses to determine the accounting expense of the grants under Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) Topic 718.

The committee s procedure for the timing of equity grants assures that grant timing is not being manipulated for employee gain. The annual equity grant date for all eligible employees is in mid-February. The committee establishes this date well in advance typically in October. The mid-February grant date timing is driven by these considerations:

It coincides with the company s calendar-year-based performance management cycle, allowing supervisors to deliver the equity awards close in time to performance appraisals, which increases the impact of the awards by strengthening the link between pay and performance.

It follows the annual earnings release by approximately two weeks, so that the stock price at that time can reasonably be expected to fairly represent the market s collective view of our then-current results and prospects.

Grants to new hires and other off-cycle grants are effective on the first trading day of the following month.

Employee and Post-Employment Benefits

The company offers core employee benefits coverage to:

provide our global workforce with a reasonable level of financial support in the event of illness or injury

enhance productivity and job satisfaction through programs that focus on work/life balance.

The benefits available are the same for all U.S. employees and include medical and dental coverage, disability insurance, and life insurance.

In addition, the 401(k) plan and The Lilly Retirement Plan (the retirement plan) provide a reasonable level of retirement income reflecting employees careers with the company. U.S. employees are eligible to participate in these plans. To the extent that any employee s retirement benefit exceeds IRS limits for amounts that can be paid through a qualified plan, the company also offers a nonqualified pension plan and a nonqualified savings plan. These plans provide only the difference between the calculated benefits and the IRS limits, and the formula is the same for all U.S. employees.

The cost of both employee and post-employment benefits is partially borne by the employee, including each executive officer.

Perquisites

The company provides very limited perquisites to executive officers. The company aircraft is made available for the personal use of Dr. Lechleiter, where the committee believes the security and efficiency benefits to the company clearly outweigh the expense. Dr. Lechleiter did not use the corporate aircraft for personal flights during 2009. Until March 1, 2009, the company aircraft was made available to other executive officers for the more limited purpose of travel to outside board meetings. However, the company no longer allows this use. Depending on seat availability, family members of executive officers may travel on the company aircraft to accompany executives who are traveling on business. There is no incremental cost to the company for these trips.

The Lilly Deferred Compensation Plan

Executives may defer receipt of part or all of their cash compensation under The Lilly Deferred Compensation Plan (the deferred compensation plan). The plan allows executives to save for retirement in a tax-effective way at minimal cost to the company. Under this unfunded plan, amounts deferred by the executive are credited at an interest rate of 120 percent of the applicable federal long-term rate, as described in more detail following the Nonqualified Deferred Compensation in 2009 table on page 48.

Severance Benefits

Except in the case of a change in control of the company, the company is not obligated to pay severance to named executive officers upon termination of their employment; any such payments are at the discretion of the committee. See footnote 2 to the Potential Payments Upon Termination of Employment table on page 50 for a description of a severance arrangement for Dr. Paul.

The company has adopted a change-in-control severance pay plan for nearly all employees of the company, including the executive officers. The plan is intended to preserve employee morale and productivity and encourage retention in the face of the disruptive impact of an actual or rumored change in control. In addition, for executives, the plan is intended to align executive and shareholder interests by enabling executives to consider corporate transactions that are in the best interests of the shareholders and other constituents of the company without undue concern over whether the transactions may jeopardize the executives own employment.

Although there are some differences in benefit levels depending on the employee s job level and seniority, the basic elements of the plan are comparable for all regular employees:

Double trigger. Unlike single trigger plans that pay out immediately upon a change in control, the company plan generally requires a double trigger a change in control followed by an involuntary loss of employment within two years thereafter. This is consistent with the purpose of the plan, which is to provide employees with a guaranteed level of financial protection upon loss of employment. A partial exception is made for outstanding PAs, a portion of which would be paid out upon a change in control on a pro-rated basis for time worked based on the forecasted payout level at the time of the change in control. The committee believes this partial payment is appropriate because of the difficulties in converting the company EPS targets into an award based on the surviving company s EPS. Likewise, if Lilly is not the surviving entity, a portion of outstanding SVAs is paid out on a pro-rated basis for time worked up to the change in control based on the merger price for company stock.

Covered terminations. Employees are eligible for payments if, within two years of the change in control, their employment is terminated (i) without cause by the company or (ii) for good reason by the employee, each as is defined in the plan. See pages 50-52 for a more detailed discussion, including a discussion of what constitutes a change in control.

Two-year protections. Employees who suffer a covered termination receive up to two years of pay and benefits protection. These provisions assure employees a reasonable period of protection of their income and core employee benefits upon which they depend for financial security.

Severance payment. Eligible terminated employees would receive a severance payment ranging from six months to two years base salary. Executives are all eligible for two years base salary plus cash bonus, with bonus established as the higher of the then-current year s bonus target or the last bonus paid prior to the change in control. Beginning in October 2010, the bonus portion of this payment will be established based on bonus target only.

Benefit continuation. Basic employee benefits such as health and life insurance would be continued for up to two years following termination of employment. All executives, including named executive officers, are entitled to two years benefit continuation. This period will be reduced to 18 months beginning in October 2010.

Pension supplement. Under the portion of the plan covering executives, a terminated employee would be entitled to a supplement of two years of age credit and two years of service credit for purposes of calculating eligibility and benefit levels under the retirement plan. This benefit will be eliminated beginning in October 2010.

Accelerated vesting of equity awards. Any unvested equity awards at the time of termination of employment would become vested.

Excise tax. In some circumstances, the payments or other benefits received by the employee in connection with a change in control could exceed limits established under Section 280G of the Internal Revenue Code. The employee would then be subject to an excise tax on top of normal federal income tax. Because of the way the excise tax is calculated, it can impose a large burden on some employees while similarly compensated employees will not be subject to the tax. The costs of this excise tax and associated gross-ups would be borne by the company. (Employees would pay income tax resulting from severance payments.) To avoid triggering the excise tax, payments that would otherwise be due under the plan that are up to three percent over the IRS limit will be cut back to the limit. Effective in October 2010, this cutback threshold will be raised to five percent above the IRS limit.

Share Ownership and Retention Guidelines; Hedging Prohibition

Share ownership and retention guidelines help to foster a focus on long-term growth. The committee has adopted a guideline requiring the CEO to own company stock valued at least five times his or her annual base salary. The committee revised the guidelines in 2009 for other executive officers to require ownership of a fixed number of shares based on position rather than a multiple of salary. The fixed number of shares eliminates volatility in the share ownership requirements that can occur with sharp movements in share price. Until the guideline level is reached, the executive officer must retain all existing holdings as well as 50 percent of net shares resulting from new equity payouts. Our executives have a long history of maintaining extensive holdings in company stock, and all established executive officers already meet or exceed the guideline. All new executive officers are on track to meet or exceed the guideline within the next few years. Dr. Lechleiter currently holds shares valued, as of year-end 2009, at over 11 times his salary. The following table shows the required share levels for the named executive officers:

Executive	Prior Share Requirement	Revised Share Requirement	Meets Requirement
Dr. Lechleiter	five times base salary		Yes
Dr. Paul	54,393	55,000	Yes
Mr. Carmine	49,897	55,000	Yes
Mr. Rice	42,407	55,000	Yes
Mr. Armitage	42,008	42,000	Yes

Executive officers are also required to retain all shares received from the company equity programs, net of acquisition costs and taxes, for at least one year, even once share requirements have been met. For PAs, this requirement is met by paying the award in the form of restricted stock units. As a result, executive officers experienced the same type of financial loss from the decline in stock value during 2009 as other company shareholders. Employees are not permitted to hedge their economic exposures to company stock through short sales or derivative transactions.

Tax Deductibility Cap on Executive Compensation

U.S. federal income tax law prohibits the company from taking a tax deduction for certain compensation paid in excess of $1,000,000 to certain executive officers. However, performance-based compensation is fully deductible if the programs are approved by shareholders and meet other requirements. Our policy is to qualify our incentive compensation programs for full corporate deductibility to the extent feasible and consistent with our overall compensation objectives.

We have taken steps to qualify all incentive awards (bonuses, PAs, and SVAs) for full deductibility as performance-based compensation. The committee may make payments that are not fully deductible if, in its judgment, such payments are necessary to achieve the company s compensation objectives and to protect shareholder interests. For 2009, the non-deductible compensation under this law was slightly less than the portion of each of Dr. Lechleiter s and Dr. Paul s base salaries that exceeded $1,000,000 as shown in the Summary Compensation Table.

Executive Compensation Recovery Policy and Other Risk Mitigation Tools

All incentive awards are subject to forfeiture prior to payment upon termination of employment or for disciplinary reasons. In 2009, the committee adopted an expanded executive compensation recovery policy applicable to executive officers. The company can recover incentive compensation (cash or equity) that was based on achievement of financial results that were subsequently the subject of a restatement if the executive officer engaged in intentional misconduct that caused or partially caused the need for the restatement and the effect of the wrongdoing was to increase the amount of bonus or incentive compensation. The expanded policy also permits the recovery or claw back of all or a portion of any incentive compensation or payment in the case of materially inaccurate financial statements or material errors in the performance calculation, whether or not they result in a restatement and whether or not the executive officer has engaged in wrongful conduct. Recoveries under this no-fault provision cannot extend back more than two years.

The recovery policy applies to any incentive compensation awarded or paid to an employee at a time when he or she is an executive officer. Subsequent changes in status, including retirement or termination of employment, do not affect the company s rights to recover compensation under the policy.

In addition to the executive compensation recovery policy, the committee and management have implemented compensation-program design features to mitigate the risk of compensation programs encouraging misconduct or excessive risk-taking. First, incentive programs are designed using a diversity of meaningful financial metrics (growth in total shareholder return, measured over three years, net sales, and EPS, measured over one and two years), thus providing a balanced approach between short- and long-term performance. The committee reviews incentive programs each year against the objectives of the programs, assesses any features that could encourage excessive risk-taking, and makes changes as necessary. Second, management has implemented effective controls that minimize unintended and willful reporting errors.

The committee does not believe it is practical to apply a specific claw-back policy to SVAs since it is very difficult to isolate the amount, if any, by which the stock price might benefit from misstated earnings over a three-year performance period. In this case, the committee has the authority to exercise downward discretion to reduce or withhold payouts.

2010 Compensation Actions

Several changes to the company s executive compensation program will take effect in 2010:

In light of the business challenges the company faces, Dr. Lechleiter requested that he receive no increase in base salary or incentive targets in 2010. The committee agreed to maintain his 2009 compensation package for 2010.

The transition from a one-year PA to a two-year PA will be completed, and PA targets will be revised to have a threshold payout of 50 percent of target (rather than zero) and a maximum payout of 150 percent of target (rather than 200 percent).

Changes to the change in control severance pay plans that generally reduce benefits are effective October 2010.

Changes to the retirement and retiree medical plans that reduce benefits for employees retiring prior to age 65 were effective January 2010.

Compensation Committee Report

The compensation committee (we or the committee) evaluates and establishes compensation for executive officers and oversees the deferred compensation plan, the company s management stock plans, and other management incentive, benefit, and perquisite programs. Management has the primary responsibility for the company s financial statements and reporting process, including the disclosure of executive compensation. With this in mind, we have reviewed and discussed with management the Compensation Discussion and Analysis found on pages 28-40 of this proxy statement. The committee is satisfied that the Compensation Discussion and Analysis fairly and completely represents the philosophy, intent, and actions of the committee with regard to executive compensation. We recommended to the board of directors that the Compensation Discussion and Analysis be included in this proxy statement for filing with the SEC.

Compensation Committee

Karen N. Horn, Ph.D., Chair
Michael L. Eskew
J. Erik Fyrwald

R. David Hoover
Ellen R. Marram

Summary Compensation Table

rincipal Position	Year	Salary ($)	Stock Awards ($)[2]	Option Awards ($)[2]	Non-Equity Incentive Plan Compensation ($)[3]	Change in Pension Value ($)[4]	All Other Compensation ($)[5]	Co
leiter, Ph.D.[1]	2009	$ 1,483,333	$ 11,250,000	$0	$ 3,551,100	$ 4,553,125	$ 90,091	$
esident, and	2008	$ 1,339,125	$ 8,125,000	$0	$ 2,709,053	$ 2,221,597	$ 87,107	$
ive Officer	2007	$ 1,149,083	$ 4,972,500	$0	$ 2,160,277	$ 921,394	$ 70,761	$
ul, M.D.	2009	$ 1,023,450	$ 4,500,000	$0	$ 1,575,090	$ 2,302,595	$ 16,682	$
ce President,	2008	$ 1,000,250	$ 3,750,000	$0	$ 1,309,327	$ 1,586,474	$ 18,372	$
Technology	2007	$ 960,333	$ 3,000,000	$0	$ 1,534,613	$ 738,461	$ 13,500	$
, Lilly Research								
mine	2009	$ 916,667	$ 4,500,000	$0	$ 1,410,750	$ 1,776,537	$ 57,001	$
ce President and	2008	$ 783,113	$ 3,750,000	$0	$ 1,006,135	$ 1,158,720	$ 53,497	$
ly Bio-Medicines								
ce	2009	$ 892,500	$ 4,500,000	$0	$ 1,220,940	$ 977,741	$ 54,838	$
ce President,	2008	$ 834,117	$ 3,000,000	$0	$ 1,027,632	$ 455,226	$ 86,034	$
ces and Chief	2007	$ 747,583	$ 2,137,500	$0	$ 1,054,093	$ 194,469	$ 78,787	$
ficer								
mitage	2009	$ 811,167	$ 3,000,000	$0	$ 1,109,676	$ 775,287	$ 49,902	$
President and	2008	$ 778,767	$ 2,137,500	$0	$ 959,441	$ 536,284	$ 53,138	$
nsel	2007	$ 741,667	$ 2,137,500	$0	$ 1,045,750	$ 297,722	$ 45,551	$

[1] *Supplement to the Summary Compensation Table.* As discussed in the Compensation Discussion and Analysis, both a one-year and a two-year PA were granted in 2009, as part of our transition to a two-year award, which was implemented in response to shareholder feedback. The two grants in 2009 provided the opportunity for participants to receive *one and only one* PA payout each year without skipping a year. For each member of global management (including executive officers), the grant date fair market value of the one-year and two-year awards was the same. The supplemental table below shows total 2009 compensation for Dr. Lechleiter, including one PA grant, which the company believes is more representative of his annual compensation. In addition, changes in interest rates resulted in a significant change in pension value in 2009 (see footnote 4 below). The change in pension value has been restated using the same interest-rate assumption used in 2008.

Non-Equity	Change in	All Other

Principal Position	Year	Salary ($)	Stock Awards ($)	Option Awards ($)	Incentive Plan Compensation ($)	Pension Value ($)	Compensation ($)	Con
chleiter, Ph.D.	2009	$ 1,483,333	**$ 7,500,000**	$ 0	**$ 3,551,100**	$ 3,280,584	$ 90,091	**$ 1**
President and Chief	2008	$ 1,339,125	$ 8,125,000	$ 0	$ 2,709,053	$ 2,221,597	$ 87,107	$ 1
Officer	2007	$ 1,149,083	$ 4,972,500	$ 0	$ 2,160,277	$ 921,394	$ 70,761	$

Without these two factors, Dr. Lechleiter s reported compensation would have increased 9.8 percent over 2008, which is consistent with his promotion to CEO during 2008, his assumption of the role of chairman of the board in 2009, and the company s strong financial performance for 2009. The increase in Dr. Lechleiter s 2009 total compensation includes increases to his base salary, bonus target, and equity grant targets and reflects strong company performance measured by growth in revenue and EPS, but lagging performance in total shareholder return. (See the Compensation Discussion and Analysis for key company performance metrics and their impact on Dr. Lechleiter s 2009 compensation.)

[2] These columns show the grant date fair value of awards computed in accordance with stock-based compensation accounting rules (FASB ASC Topic 718). Values for awards subject to performance conditions (PAs) are computed based upon the probable outcome of the performance condition as of the grant date. (See the table on page 34 for target grant values for the 2008 and 2009 equity awards.) A discussion of assumptions used in calculating award values may be found in Note 8 to our 2009 audited financial statements in our Form 10-K.

The table below shows the minimum and maximum possible payout for each PA grant included in the Stock Awards column of the Summary Compensation Table (actual payouts for 2009 PAs are shown on page 44).

Name	**Award Type**	**Payout Date**	**Minimum Payout**	**Maximum Payout**
Dr. Lechleiter	2009 PA	January 2010	$0	$7,500,000
	2009-2010 PA	January 2011	$0	$7,500,000
Dr. Paul	2009 PA	January 2010	$0	$3,000,000
	2009-2010 PA	January 2011	$0	$3,000,000
Mr. Carmine	2009 PA	January 2010	$0	$3,000,000
	2009-2010 PA	January 2011	$0	$3,000,000
Mr. Rice	2009 PA	January 2010	$0	$3,000,000
	2009-2010 PA	January 2011	$0	$3,000,000
Mr. Armitage	2009 PA	January 2010	$0	$2,000,000
	2009-2010 PA	January 2011	$0	$2,000,000

[3] Payments for 2009 performance were made in March 2010 under the bonus plan. No bonus was paid to a named executive officer except as part of a non-equity incentive plan.

[4] The amounts in this column are the change in pension value for each individual, calculated by our actuary. The increase in incremental values in 2009 over 2008 was driven largely by the decrease in the discount rate from 6.9 percent in 2008 to 6.0 percent in 2009, reflecting changes in interest rates. The impact of this change is shown for Dr. Lechleiter in the supplemental table in footnote 1 above. Dr. Paul s increase in value was also affected by 10 years of additional service credit described on page 48. No named executive officer received preferential or above-market earnings on deferred compensation.

[5] The table below shows the components of the All Other Compensation column for 2007 through 2009, which includes the company match for each individual s savings plan contributions, tax reimbursements, and perquisites.

Name	**Year**	**Savings Plan Match**	**Tax Reimbursements[1]**	**Perquisites**	**Other**	**Total All Other Compensation**
	2009	$89,000	$1,091	$0	$0	$90,091
Dr. Lechleiter	2008	$80,348	$6,759	$0	$0	$87,107
	2007	$68,945	$1,816	$0	$0	$70,761
	2009	$14,700	$1,982	$0	$0	$16,682
Dr. Paul	2008	$13,800	$4,572	$0	$0	$18,372
	2007	$13,500	$0	$0	$0	$13,500

Mr. Carmine	2009	$55,000	$2,001	$0	$0	$57,001
	2008	$46,987	$6,510	$0	$0	$53,497
	2009	$53,550	$1,288	$0	$0	$54,838
Mr. Rice	2008	$50,047	$6,246	$29,741	$0	$86,034
	2007	$44,855	$15,030 [3]	$0 [2]	$18,902 [4]	$78,787
	2009	$48,670	$1,232	$0	$0	$49,902
Mr. Armitage	2008	$46,726	$6,412	$0	$0	$53,138
	2007	$44,500	$1,051	$0	$0	$45,551

[1] These amounts reflect tax reimbursements for expenses for each executive s spouse to attend certain company functions involving spouse participation. Beginning in 2010, the company will no longer reimburse executive officers for these taxes. For Mr. Rice, these amounts include taxes on income imputed for use of the corporate aircraft to attend outside board meetings.

[2] The incremental cost of Mr. Rice s use of the corporate aircraft was $25,839 in 2008. The amount in this column also includes Mrs. Nelson-Rice s expenses to attend certain company functions involving spouse participation. We calculate the incremental cost to the company of any personal use of the corporate aircraft based on the cost of fuel, trip-related maintenance, crew travel expenses, on-board catering, landing fees, trip-related hangar and parking costs, and smaller variable costs, offset by any time-share lease payments by the executive. Since the company-owned aircraft are used primarily for business travel, we do not include the fixed costs that do not change based on usage, such as pilots salaries, the purchase costs of the company-owned aircraft, and the cost of maintenance not related to trips. As of March 1, 2009, executive officers are no longer permitted to use corporate aircraft to attend outside board meetings.

[3] For Mr. Rice, this amount includes $13,051 in tax reimbursements in 2007 for the payment described in footnote 4 below.

[4] Reimbursement for an over-withholding of taxes by the company in a prior year when Mr. Rice was on an overseas assignment.

We have no employment agreements with our named executive officers. However, Dr. Paul and Mr. Armitage have been credited with additional years of service (see page 48).

Grants of Plan-Based Awards During 2009

The compensation plans under which the grants in the following table were made are generally described in the Compensation Discussion and Analysis and include the bonus plan (a non-equity incentive plan) and the 2002 Lilly Stock Plan (which provides for PAs, SVAs, stock options, restricted stock grants, and stock units).

		Estimated Possible Payouts Under Non-Equity Incentive Plan Awards[1]			Estimated Possible and Future Payouts Under Equity Incentive Plan Awards[2]			All Other Option Awards Numbe of Securiti
Grant Date	Compensation Committee Action Date	Threshold ($)	Target ($)	Maximum ($)	Threshold (# shares)	Target (# shares)	Maximum (# shares)	Underlyi Options
		$51,917	$2,076,667	$4,153,333				
2/9/2009[4]	12/15/2008				51,839	103,677	207,354	
2/9/2009[5]	12/15/2008				54,953	109,906	219,812	
2/9/2009[6]	12/15/2008				48,749	121,872	170,621	
								0
		$23,028	$921,105	$1,842,210				
2/9/2009[4]	12/15/2008				20,736	41,471	82,942	
2/9/2009[5]	12/15/2008				21,981	43,962	87,924	
2/9/2009[6]	12/15/2008				19,500	48,749	68,250	
								0
		$20,625	$825,000	$1,650,000				
2/9/2009[4]	12/15/2008				20,736	41,471	82,942	
2/9/2009[5]	12/15/2008				21,981	43,962	87,924	
2/9/2009[6]	12/15/2008				19,500	48,749	68,250	
								0
		$17,850	$714,000	$1,428,000				
2/9/2009[4]	12/15/2008				20,736	41,471	82,942	
2/9/2009[5]	12/15/2008				21,981	43,962	87,924	
2/9/2009[6]	12/15/2008				19,500	48,749	68,250	
								0
		$16,223	$648,933	$1,297,867				
2/9/2009[4]	12/15/2008				13,824	27,647	55,294	
2/9/2009[5]	12/15/2008				14,654	29,308	58,616	

2/9/2009[6]	12/15/2008	13,000	32,499	45,499	0

[1] These columns show the threshold, target, and maximum payouts for performance under the bonus plan. As described in the section titled Cash Incentive Bonuses in the Compensation Discussion and Analysis, bonus payouts range from zero to 200 percent of target. The bonus payment for 2009 performance has been made based on the metrics described, at 171 percent of target, and is included in the Summary Compensation Table in the column titled Non-Equity Incentive Plan Compensation.

[2] These columns show the range of payouts targeted for 2009 performance under the 2002 Lilly Stock Plan as described in the sections titled: Equity Incentives Performance Awards and Equity Incentives Shareholder Value Awards in the Compensation Discussion and Analysis. PA payouts range from zero to 200 percent of target. SVA payouts range from zero to 140 percent of target.

[3] No stock options were granted in 2009. The company stopped granting stock options in 2007.

[4] These rows show the 2009 PA grants. The 2009 PA payout is shown in more detail below.

[5] These rows show the 2009-2010 PA grants. The 2009-2010 PA payout will be determined in January 2011.

[6] These rows show the 2009-2011 SVA grants. The payout for the 2009-2011 SVA will be determined in January 2012.

The two-year PA, granted in 2009, will pay out in January 2011 based on cumulative EPS for 2009 and 2010. The transitional one-year PA, granted in 2009, paid out in January 2010, and the named executive officers received the restricted share units shown in the table below. For 2009 performance, payouts were 200 percent of target. To receive a PA payout, a participant must have remained employed with the company through December 31, 2009 (except in the case of death, disability, or retirement). In addition, an employee who was an executive officer at the time of grant and an employee at the time of payout received payment in restricted share units. No dividends accrue on either PAs or SVAs during the performance period. Non-preferential dividends are accrued during the PAs one-year restriction period and are paid upon vesting. Each executive was awarded the restricted stock units identified in the table below, and the units will remain restricted (and subject to forfeiture if the executive resigns) until February 2011, at which time the units will be paid out in the form of shares. Beginning in 2010, the threshold payout for PAs will be 50 percent of target (rather than zero) and the maximum payout will be 150 percent of target (rather than 200 percent).

Name	**Performance Awards**	**Value at Payout**
Dr. Lechleiter	207,354	$7,497,921
Dr. Paul	82,942	$2,999,183
Mr. Carmine	82,942	$2,999,183
Mr. Rice	82,942	$2,999,183
Mr. Armitage	55,294	$1,999,431

SVAs granted in 2009 will pay out at the end of the three-year performance period according to the schedule on page 35 of the Compensation Discussion and Analysis.

Outstanding Equity Awards at December 31, 2009

	Option Awards			Stock Awards			
Name	**Number of Securities Underlying Unexercised Options (#)[1] Exercisable**	**Option Exercise Price ($)**	**Option Expiration Date**	**Number of Shares or Units of Stock That Have Not Vested (#)**	**Market Value of Shares or Units of Stock That Have Not Vested ($)**	**Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#)**	**Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested ($)**
Dr. Lechleiter						121,872[2]	$ 4,352,049
						86,413[3]	$ 3,085,808
						219,812[4]	$ 7,849,487
				207,354[5]	$ 7,404,611		

(1) N/A (0.01) — N/A

Crude revenue was $138 million in 2016, a decrease of $255 million, or 65%, from $393 million in 2015. This decrease was primarily due to a decline in volumes as a result of the fall in crude oil prices and an increase in available pipeline capacity, as well as lower fuel surcharge revenue as a result of lower fuel prices. The favourable impact of the change in FX partially offset this decrease.

Crude revenue was $393 million in 2015, a decrease of $91 million, or 19%, from $484 million in 2014. This decrease was primarily due to a decline in volume as a result of the fall in crude oil prices and lower fuel surcharge revenue, partially offset by the favourable impact of the change in FX.

Metals, Minerals and Consumer Products

				2016 vs. 2015			2015 vs. 2014		
For the year ended December 31	2016	2015	2014	Total Change	% Change	FX Adjusted % Change	Total Change	% Change	FX Adjusted % Change
Freight revenues (in millions)	$564	$643	$712	$(79)	(12)	(15)	$(69)	(10)	(20)
Carloads (in thousands)	196	217	253	(21)	(10)	N/A	(36)	(14)	N/A
Revenue ton-miles (in millions)	8,338	9,020	11,266	(682)	(8)	N/A	(2,246)	(20)	N/A
Freight revenue per carload (dollars)	$2,888	$2,963	$2,814	$(75)	(3)	N/A	$149	5	N/A
Freight revenue per revenue ton-mile (cents)	6.77	7.13	6.32	(0.36)	(5)	N/A	0.81	13	N/A

Metals, minerals and consumer products revenue was $564 million in 2016, a decrease of $79 million, or 12%, from $643 million in 2015. This decrease was primarily due to declines in the volume of aggregate products, steel, and waste products, and lower fuel surcharge revenue as a result of lower fuel prices, partially offset by the favourable impact of the change in FX. The decrease in average freight revenue per revenue ton-mile is primarily due to a change in mix of commodities.

Metals, minerals and consumer products revenue was $643 million in 2015, a decrease of $69 million, or 10%, from $712 million in 2014. This decrease was primarily due to declines in the volume of frac sand, steel and other aggregates traffic, partially offset by the favourable impact of the change in FX.

Automotive

For the year ended December 31	2016	2015	2014	2016 vs. 2015 Total Change	% Change	FX Adjusted % Change	2015 vs. 2014 Total Change	% Change	FX Adjusted % Change
Freight revenues (in millions)	$350	$349	$357	$1	—	(3)	$(8)	(2)	(11)
Carloads (in thousands)	124	131	134	(7)	(5)	N/A	(3)	(2)	N/A
Revenue ton-miles (in millions)	1,667	1,750	1,953	(83)	(5)	N/A	(203)	(10)	N/A
Freight revenue per carload (dollars)	$2,825	$2,659	$2,670	$166	6	N/A	$(11)	—	N/A
Freight revenue per revenue ton-mile (cents)	21.02	19.97	18.26	1.05	5	N/A	1.71	9	N/A

Automotive revenue was $350 million in 2016, a slight increase of $1 million from $349 million in 2015. The increase in average freight rates and the favourable impact of the change in FX were offset by declines in volume, and lower fuel surcharge revenue as a result of lower fuel prices.

Automotive revenue was $349 million in 2015, a decrease of $8 million, or 2%, from $357 million in 2014. This decrease was primarily due to lower fuel surcharge revenue and lower volumes driven by weaker traffic to Western Canada, partially offset by the favourable impact of the change in FX.

Domestic Intermodal

For the year ended December 31	2016	2015	2014	2016 vs. 2015 Total Change	% Change	FX Adjusted % Change	2015 vs. 2014 Total Change	% Change	FX Adjusted % Change
Freight revenues (in millions)	$721	$757	$787	$(36)	(5)	(5)	$(30)	(4)	(6)
Carloads (in thousands)	427	414	428	13	3	N/A	(14)	(3)	N/A
Revenue ton-miles (in millions)	11,992	12,072	11,867	(80)	(1)	N/A	205	2	N/A
Freight revenue per carload (dollars)	$1,688	$1,831	$1,837	$(143)	(8)	N/A	$(6)	—	N/A
Freight revenue per revenue ton-mile (cents)	6.01	6.27	6.63	(0.26)	(4)	N/A	(0.36)	(5)	N/A

Domestic intermodal revenue was $721 million in 2016, a decrease of $36 million, or 5%, from $757 million in 2015. This decrease was primarily due to lower fuel surcharge revenue as a result of lower fuel prices, and lower average freight revenue per revenue ton-mile as a result of fewer shipments using temperature controlled equipment. The favourable impact of the change in FX partially offset this decrease.

Domestic intermodal revenue was $757 million in 2015, a decrease of $30 million, or 4%, from $787 million in 2014. This decrease was primarily due to lower fuel surcharge revenue, partially offset by the favourable impact of the change in FX, and increased transcontinental traffic.

International Intermodal

For the year ended December 31	2016	2015	2014	2016 vs. 2015 Total Change	% Change	FX Adjusted % Change	2015 vs. 2014 Total Change	% Change	FX Adjusted % Change

Freight revenues (in millions)	$590	$592	$588	$(2)	—	(2)	$4	1	(5)
Carloads (in thousands)	549	559	546	(10)	(2)	N/A	13	2	N/A
Revenue ton-miles (in millions)	12,865	11,931	11,723	934	8	N/A	208	2	N/A
Freight revenue per carload (dollars)	$1,074	$1,061	$1,077	$13	1	N/A	$(16)	(1)	N/A
Freight revenue per revenue ton-mile (cents)	4.59	4.96	5.02	(0.37)	(7)	N/A	(0.06)	(1)	N/A

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International intermodal revenue was $590 million in 2016, a slight decrease of $2 million from $592 million in 2015. The decrease was primarily due to a decrease in freight revenue per revenue ton-mile due to fewer revenue generating moves of empty customer containers, and lower fuel surcharge revenue as a result of lower fuel prices. This decrease was offset by an increase in revenue ton-miles, as a result of longer haul shipments through the Port of Vancouver, and the favourable impact of the change in FX.

International intermodal revenue was $592 million in 2015, an increase of $4 million, or 1%, from $588 million in 2014. This increase was primarily due to the favourable impact of the change in FX, partially offset by lower fuel surcharge revenue.

Operating Expenses

(1) Purchased services and other includes a $68 million gain on sale of D&H South in 2015.

For the year ended December 31 (in millions)	2016	2015	2014	2016 vs. 2015 Total Change	2016 vs. 2015 % Change	2016 vs. 2015 FX Adjusted % Change[(1)]	2015 vs. 2014 Total Change	2015 vs. 2014 % Change	2015 vs. 2014 FX Adjusted % Change[(1)]
Compensation and benefits	$1,189	$1,371	$1,348	$(182)	(13)	(14)	$23	2	(3)
Fuel	567	708	1,048	(141)	(20)	(23)	(340)	(32)	(41)
Materials	180	184	193	(4)	(2)	(3)	(9)	(5)	(7)
Equipment rents	173	174	155	(1)	(1)	(3)	19	12	1
Depreciation and amortization	640	595	552	45	8	7	43	8	4
Purchased services and other	905	1,060	985	(155)	(15)	(16)	75	8	1
Gain on sale of D&H South	—	(68)	—	68	(100)	(100)	(68)	100	100
Total operating expenses	$3,654	$4,024	$4,281	$(370)	(9)	(11)	$(257)	(6)	(12)

(1) FX Adjusted % Change does not have any standardized meaning prescribed by GAAP and, therefore is unlikely to be comparable to similar measures presented by other companies. FX adjusted variance is defined and reconciled in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Operating expenses were $3,654 million in 2016, a decrease of $370 million, or 9%, from $4,024 million in 2015. This decrease was primarily due to:

- efficiencies generated from improved operating performance and asset utilization;
- lower volume variable expenses;
- change of $122 million in defined benefit pension plan from an expense of $32 million in 2015 to $90 million in income in 2016;
- the favourable impact of $100 million from lower fuel prices; and
- a $32 million increase in land sales.

This decrease was partially offset by:

- the unfavourable impact of the change in FX of $77 million;
- the gain on sale of D&H South of $68 million in 2015;
- higher depreciation and amortization due to a higher asset base; and
- the impact of wage and benefit inflation of approximately 3%.

Operating expenses were $4,024 million in 2015, a decrease of $257 million, or 6%, from $4,281 million in 2014. This decrease was primarily due to:

- the favourable impact of $403 million from lower fuel prices;
- efficiencies generated from improved operating performance and asset utilization;
- the favourable impact of $87 million from lower stock-based compensation primarily driven by the change in stock price and lower incentive-based compensation;
- the $68 million favourable gain on sale of D&H South;
- lower volume variable expenses; and
- a $42 million increase in land sales.

This decrease was partially offset by:

- the unfavourable impact of the change in FX of $306 million;
- a change of $84 million in defined benefit pension plan from $52 million in income in 2014 to an expense of $32 million in 2015;
- the impact of wage and benefit inflation of approximately 3%; and
- higher casualty expenses as a result of more costly incidents of $37 million.

Compensation and Benefits

Compensation and benefits expense includes employee wages, salaries, fringe benefits and stock-based compensation. Compensation and benefits expense was $1,189 million in 2016, a decrease of $182 million, or 13%, from $1,371 million in 2015. This decrease was primarily due to:

- change of $122 million in defined benefit pension plan from an expense of $32 million in 2015 to $90 million in income in 2016;
- lower costs achieved through job reductions;
- lower volume variable expenses as a result of a decrease in workload as measured by GTMs;
- road and yard efficiencies as a result of continuing strong operational performance; and
- the favourable impact of $20 million from lower stock-based compensation and incentive-based compensation.

This decrease was partially offset by the impact of wage and benefit inflation of approximately 3% and the unfavourable impact of the change in FX of $18 million.

Compensation and benefits expense was $1,371 million in 2015, an increase of $23 million, or 2%, from $1,348 million in 2014. This increase was primarily due to:

- a change of $84 million in defined benefit pension plan from $52 million in income in 2014 to an expense of $32 million in 2015;
- the unfavourable impact of the change in FX of $62 million; and
- the impact of wage and benefit inflation of approximately 3%.

This increase was partially offset by:

- the favourable impact of $87 million from lower stock-based compensation primarily driven by the change in stock price and lower incentive-based compensation;
- lower costs achieved through job reductions;
- road and yard efficiencies as a result of continuing strong operational performance; and
- lower volume variable expenses as a result of a decrease in workload as measured by GTMs.

Fuel

Fuel expense consists mainly of fuel used by locomotives and includes provincial, state and federal fuel taxes. Fuel expense was $567 million in 2016, a decrease of $141 million, or 20%, from $708 million in 2015. This decrease was primarily due to:

- lower fuel prices with a favourable impact of $100 million;
- a reduction in workload, as measured by GTMs; and
- improvements in fuel efficiency of approximately 2% as a result of increased locomotive productivity, operational fluidity and the advancement of the Company's fuel conservation strategies.

This decrease was partially offset by the unfavourable impact of the change in FX of $25 million.

Fuel expense was $708 million in 2015, a decrease of $340 million, or 32%, from $1,048 million in 2014. This decrease was primarily due to:

- lower fuel prices with a favourable impact of $403 million;
- a reduction in workload, as measured by GTMs; and
- improvements in fuel efficiency of approximately 3% as a result of increased locomotive productivity, operational fluidity and the advancement of the Company's fuel conservation strategies.

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This decrease was partially offset by the unfavourable impact of the change in FX of $143 million.

Materials

Materials expense includes the cost of material used for track, locomotive, freight car, building maintenance and software sustainment. Materials expense was $180 million in 2016, a decrease of $4 million, or 2%, from $184 million in 2015. This decrease was primarily due to lower car repair and locomotive maintenance costs.

Materials expense was $184 million in 2015, a decrease of $9 million, or 5%, from $193 million in 2014. This decrease was primarily due to lower locomotive units maintained.

Equipment Rents

Equipment rents expense includes the cost associated with using other companies' freight cars, intermodal equipment, and locomotives, net of rental income received from other railways for the use of CP's equipment. Equipment rents expense was $173 million in 2016, a decrease of $1 million, or 1%, from $174 million in 2015. This decrease was primarily due to the purchase or return of leased freight cars reducing rental expenses by $12 million. This decrease was partially offset by the return of subleased locomotives and freight cars reducing rental income by $6 million and the unfavourable impact of the change in FX of $5 million.

Equipment rents expense was $174 million in 2015, an increase of $19 million, or 12%, from $155 million in 2014. This increase was primarily due to the unfavourable impact of the change in FX of $18 million, a return of subleased locomotives reducing rental income by $15 million, and a decrease in car hire expense resulting from the lower use of CP's equipment by other railroads. This increase was largely offset by the purchase of previously leased freight cars reducing rental expenses by $21 million and lower use of foreign equipment.

Depreciation and Amortization

Depreciation and amortization expense represents the charge associated with the use of track and roadway, buildings, rolling stock, information systems and other depreciable assets. Depreciation and amortization expense was $640 million for 2016, an increase of $45 million, or 8%, from $595 million in 2015. This increase was primarily due to a higher depreciable asset base and the unfavourable impact of the change in FX of $5 million.

Depreciation and amortization expense was $595 million for 2015, an increase of $43 million, or 8%, from $552 million in 2014. This increase was primarily due to a higher depreciable asset base and the unfavourable impact of the change in FX of $18 million.

Purchased Services and Other

				2016 vs. 2015		2015 vs. 2014	
For the year ended December 31 (in millions)	2016[1]	2015	2014	% Change	Total Change	% Change	Total Change
Support and facilities	$ 271	$ 298	$ 297	(9)	$ (27)	—	$ 1
Track and operations	238	266	243	(11)	(28)	9	23
Intermodal	180	184	176	(2)	(4)	5	8
Equipment	165	196	166	(16)	(31)	18	30
Casualty	68	74	35	(8)	(6)	111	39
Property taxes	116	103	94	13	13	10	9

Other	(27)	13	6	(308)	(40)	117	7
Land sales	(106)	(74)	(32)	43	(32)	131	(42)
Total Purchased services and other	$ 905	$ 1,060	$ 985	(15)	$ (155)	8	$ 75

(1) Certain prior quarters' figures have been revised to conform with current presentation.

Purchased services and other expense encompasses a wide range of third-party costs, including contractor and consulting fees, locomotive and freight car repairs performed by third parties, property and other taxes, intermodal pickup and delivery services, casualty expense, expenses for joint facilities, and gains on land sales. Purchased services and other expense was $905 million in 2016, a decrease of $155 million, or 15%, from $1,060 million in 2015. This decrease was primarily due to:

- lower third party service costs, reported in Track and operations and Support and facilities;
- a $17 million gain on sale of surplus freight cars, and a reduction in accrued discontinuance costs for certain branch lines, reported in Other;
- higher land sales of $32 million resulting from optimization of the Company's assets, as discussed further below;
- lower crew travel and accommodations costs, reported in Track and operations;
- lower third-party freight car and locomotive maintenance costs, reported in Equipment; and
- lower casualty expenses of $8 million (excluding FX) as a result of lower third party claims and incident related environmental costs due to effective incident response and case management. This is partially offset by higher personal injury costs.

This decrease was partially offset by the unfavourable impact of the change in FX of $21 million and higher property taxes of $12 million (excluding FX).

Purchased services and other expense was $1,060 million in 2015, an increase of $75 million, or 8%, from $985 million in 2014. This increase was primarily due to:

- the unfavourable impact of the change in FX of $60 million;
- higher casualty expenses as a result of more costly incidents, reported in Casualty;
- higher intermodal expenses related to pickup and delivery service, reported in Intermodal;
- increased locomotive overhauls, reported in Equipment; and
- higher legal fees and support costs, reported in Support and facilities.

This increase was partially offset by higher land sales of $42 million and efficiencies generated from the insourcing of certain IT activities, included in Support and facilities.

As part of optimizing its assets, the Company may identify and dispose of property used or formerly used in operating activities. The Company includes as part of operating expenses the gains and losses that arise on disposal of such long-lived assets. The following disposals have impacted Purchased services and other during the current and comparative periods:

- in the fourth quarter of 2016, the Company completed the sale of CP's Obico rail yard for gross proceeds of $38 million and a gain on sale of $37 million;
- in the second quarter of 2016, the Company disposed of 1,000 surplus freight cars that had reached or were nearing the end of their useful life, in a non-monetary exchange for new freight cars. The Company recognized a gain on sale of $17 million from the transaction and the sale did not impact cash from investing activities;
- in the first quarter of 2016, the Company completed the sale of CP’s Arbutus Corridor to the City of Vancouver for gross proceeds of $55 million and a gain on sale of $50 million. The agreement allows the Company to share in future proceeds on the eventual development and/or sale of certain parcels of the Arbutus Corridor; and
- in the first quarter of 2015, the Company recorded gains on land sales totalling $60 million, including a gain of $31 million following the sale of a building after resolution of legal proceedings, and various sections of land in eastern Canada for transit purposes.

Gain on Sale of D&H South

On November 17, 2014, the Company announced a proposed agreement with NS for the sale of approximately 283 miles of the Delaware and Hudson Railway Company, Inc.'s line between Sunbury, Pennsylvania, and Schenectady, New York, ("D&H South").

During the first quarter of 2015, the Company finalized the sales agreement with NS for D&H South. The sale, which received approval by the STB on May 15, 2015, was completed on September 18, 2015 for proceeds of $281 million (U.S. $214 million). The Company recorded a gain on sale of $68 million ($42 million after tax) from the transaction during the third quarter of 2015.

Other Income Statement Items

Other Income and Charges

Other income and charges consists of gains and losses from the change in FX on long-term debt, working capital, various costs related to financing, shareholder costs, equity income and other non-operating expenditures. Other income and charges was a gain of $45 million in 2016, compared to an expense of $335 million in 2015, a change of $380 million, or 113%. This was primarily due to the favourable impact of FX translation of $79 million on U.S. dollar-denominated debt in 2016 compared to the unfavourable impact of FX translation of $297 million on U.S. dollar-denominated debt in 2015 and a $47 million premium charged upon early redemption of notes in the third quarter of 2015. This was partially offset by a legal settlement charge of $25 million in the third quarter of 2016. This is discussed further in Non-GAAP Measures of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Other income and charges was an expense of $335 million in 2015, compared with an expense of $19 million in 2014, a change of $316 million, or 1,663%. This increase was primarily due to the unfavourable impact of FX translation of $297 million on U.S. dollar-denominated debt and the loss of $47 million on early redemption of notes. The increase was partially offset by $24 million of other FX gains and losses.

Net Interest Expense

Net interest expense includes interest on long-term debt and capital leases. Net interest expense was $471 million in 2016, an increase of $77 million, or 20%, from $394 million in 2015. This increase was primarily due to interest on new debt issued during the third quarter in 2015 and the unfavourable impact of the change in FX of $11 million, partially offset by higher capitalized interest.

Net interest expense was $394 million in 2015, an increase of $112 million, or 40%, from $282 million in 2014. This increase was primarily due to the unfavourable impact of the change in FX of $37 million and interest on new debt issued during the third quarter in 2015.

Income Tax Expense

Income tax expense was $553 million in 2016. This represents a decrease of $54 million, or 9%, from $607 million in 2015. The decrease is due primarily to a lower effective income tax rate in 2016, partially offset by higher taxable earnings in 2016.

Income tax expense was $607 million in 2015. This represents an increase of $45 million, or 8%, from $562 million in 2014. The increase was due to a higher effective income tax rate, partially offset by lower taxable earnings in 2015.

The effective income tax rate for 2016 was 25.68% on reported income and 26.15% on Adjusted income. Adjusted income is a Non-GAAP measure, which is discussed further in Non-GAAP Measures of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

The effective income tax rate for 2015 was 30.95% on reported income and 27.25% on Adjusted income, compared with 27.59% on reported income and 27.58% on Adjusted income for 2014.

The Company expects a normalized 2017 income tax rate of approximately 26.50%. The Company’s 2017 outlook for its normalized income tax rate is based on certain assumptions about events and developments that may or may not materialize, or that may be offset entirely or partially by new events and developments. This is discussed further in Item 1A. Risk Factors.

Liquidity and Capital Resources

The Company believes adequate amounts of Cash and cash equivalents are available in the normal course of business to provide for ongoing operations, including the obligations identified in the tables in Contractual Commitments of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations. The Company is not aware of any trends or expected fluctuations in the Company's liquidity that would create any deficiencies. The Company's primary sources of liquidity include its Cash and cash equivalents, its bilateral letter of credit facilities, and its revolving credit facility.

As at December 31, 2016, the Company had $164 million of Cash and cash equivalents, U.S. $2.0 billion available under its revolving credit facilities and up to $280 million available under its letters of credit (December 31, 2015 – $650 million of Cash and cash equivalents, U.S. $2.0 billion available under revolving credit facilities and up to $225 million available under its letters of credit).

As at December 31, 2016, the Company's U.S. $2.0 billion revolving credit facility, which includes a U.S. $1.0 billion five-year portion and U.S. $1.0 billion one-year plus one-year term-out portion, was undrawn (December 31, 2015 – undrawn). On June 28, 2016, the maturity date on the U.S. $1.0 billion one-year plus one-year term-out portion was extended to June 28, 2018, and the maturity date on the U.S. $1.0 billion five year portion was extended to June 28, 2021. The Company did not draw significant amounts from its revolving credit facility during the year ended December 31, 2016 (December 31, 2015 – $nil). The revolving credit facility agreement requires the Company not to exceed a maximum debt to earnings before interest, tax, depreciation, and amortization ratio. As at December 31, 2016, the Company was in compliance with the threshold stipulated in this financial covenant.

The Company has a commercial paper program that enables it to issue commercial paper up to a maximum aggregate principal amount of U.S. $1.0 billion in the form of unsecured promissory notes. The commercial paper is backed by the U.S. $1.0 billion one-year plus one-year term-out portion of the revolving credit facility. During the year ended December 31, 2016, the maximum amount borrowed under the commercial paper program was $308 million. These borrowings were issued on a short-term basis to finance the Company's share repurchase program. The Company used cash from operations to repay the amounts borrowed during the year, such that there were no commercial paper borrowings outstanding as at December 31, 2016 (December 31, 2015 – $nil).

As at December 31, 2016, under its bilateral letter of credit facilities, the Company had letters of credit drawn of $320 million from a total available amount of $600 million. This compares to letters of credit drawn of $375 million from a total available amount of $600 million as at December 31, 2015. Under the bilateral letter of credit facilities, the Company has the option to post collateral in the form of Cash or cash equivalents, equal at least to the face value of the letters of credit issued. Collateral provided may include highly liquid investments purchased three months or less from maturity and is stated at cost, which approximates market value. As at December 31, 2016, the Company had posted $nil in collateral on the bilateral letter of credit facilities (December 31, 2015 – $nil).

The following discussion of operating, investing and financing activities describes the Company's indicators of liquidity and capital resources.

Operating Activities

Cash provided by operating activities was $2,089 million in 2016 compared to $2,459 million in 2015, a decrease of $370 million. The decrease in cash provided by operating activities is primarily due to lower cash generating income and an unfavourable change in working capital primarily as a result of higher income taxes paid in 2016 and an increase in interest payments resulting from debt issued in the third quarter of 2015.

Cash provided by operating activities was $2,459 million in 2015, an increase of $336 million from $2,123 million in 2014. This increase was primarily due to higher cash generating earnings, and improvements in working capital as a result of a decrease in Accounts receivable attributable to higher collection rates and lower income taxes paid, partially offset by an increase in interest payments resulting from debt issued in the third quarter of 2015.

Investing Activities

Cash used in investing activities was $1,069 million in 2016, a decrease of $54 million from $1,123 million in 2015. This decrease was largely due to lower additions to properties ("capital programs") during 2016 partially offset by the proceeds from the sale of D&H South that occurred in 2015.
Cash used in investing activities was $1,123 million in 2015, a decrease of $38 million from $1,161 million in 2014. This decrease was primarily due to higher proceeds from line sales, including $281 million for D&H South in 2015 compared to $236 million for DM&E West in 2014, and the sale of other assets for higher proceeds of $114 million in 2015 compared to $52 million in 2014. This increase was partially offset by higher additions to properties in 2015.

Additions to properties were $1,182 million in 2016, a decrease of $340 million from $1,522 million in 2015. The decrease, primarily in track and roadway investments, is reflective of the track upgrade programs completed in 2015.

Additions to properties were $1,522 million in 2015, an increase of $73 million from $1,449 million in 2014. The increase, primarily in track and roadway investments, reflects CP's strategy of reinvesting in the plant, enhancing throughput and capacity, and optimizing existing assets.

Capital Programs

For the year ended December 31 (in millions, except for track miles and crossties)	2016	2015	2014
Additions to capital			
Track and roadway	$904	$1,119	$1,011
Rolling stock	105	158	219
Information systems[1]	88	79	96
Buildings and other	108	180	150
Total – accrued additions to capital	1,205	1,536	1,476
Less:			
Non-cash transactions	23	14	27

Cash invested in additions to properties (per Consolidated Statements of Cash Flows)	$1,182	$1,522	$1,449
Track installation capital programs			
Track miles of rail laid (miles)	252	468	492
Track miles of rail capacity expansion (miles)	2	22	21
Crossties installed (thousands)	1,008	1,009	1,040

(1) Information systems include hardware and software.

Track and roadway expenditures include the replacement and enhancement of the Company's track infrastructure. Of the $904 million additions in 2016, approximately $721 million was invested in the renewal of depleted assets, namely rail, ties, ballast, signals, and bridges. Approximately $33 million was spent on PTC compliance requirements and $150 million was invested in network improvements, which increased productivity and capacity.

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Rolling stock investments encompass locomotives and freight cars. In 2016, expenditures on locomotives were approximately $51 million and were focused on the remanufacture of older six-axle units. Freight car investments of approximately $54 million were largely focused on the acquisition of existing units previously held under operating leases.

In 2016, CP invested approximately $88 million in information systems primarily focused on rationalizing and enhancing business systems, providing real-time data, and modernizing core hardware and applications. Investments in buildings and other items were $108 million, and include items such as facility upgrades and renovations, vehicles, containers, and shop equipment.

For 2017, CP expects to invest approximately $1.25 billion in its capital programs, which will be financed with cash generated from operations and leverages the considerable network upgrade and improvement investments that have been made over the last several years. Approximately 70% of planned capital programs are for track and roadway, including approximately $48 million for PTC. Approximately 10% to 15% is expected to be allocated to rolling stock assets, including locomotive improvements and the continued acquisition of freight cars previously held under operating leases. Between 5% and 10% is expected to be allocated to information services, and 10% is expected to be allocated to buildings and other.

Financing Activities

Cash used in financing activities was $1,493 million in 2016, an increase of $536 million from $957 million in 2015. This increase in cash used in financing activities was primarily due to issuance of long-term debt in 2015. This increase was partially offset by higher payments to buy back shares under the Company's share repurchase program and the net repayment of commercial paper and long-term debt in 2015.

Cash used in financing activities was $957 million in 2015, as compared to $1,630 million in 2014. This decrease was largely due to the issuance of long-term debt in 2015 and was partially offset by higher payments to buy back shares under the Company's share repurchase program and the net repayment of commercial paper compared to net issuances in 2014, and the early redemption of notes.

Interest Coverage Ratio

At December 31, 2016, the Company’s interest coverage ratio was 5.6, compared with 6.0 at December 31, 2015. This decrease was primarily due to an increase in Net interest expense of $77 million compared to the prior year, partially offset by a year over year improvement in Earnings before interest and taxes ("EBIT"). In 2016, EBIT was negatively impacted by a legal settlement charge and positively impacted by FX translation on U.S. dollar-denominated debt, while in 2015 EBIT was negatively impacted by FX translation on U.S. dollar-denominated debt and the early redemption premium on notes, and positively impacted by the gain on sale of D&H South.

Excluding these significant items from EBIT, Adjusted interest coverage ratio was 5.5 at December 31, 2016, compared with 6.7 at December 31, 2015. This decrease was primarily due to an increase in Net interest expense, as well as a year over year decrease in Adjusted EBIT. Interest coverage ratio, Adjusted interest coverage ratio, EBIT, Adjusted EBIT, and significant items are defined and reconciled in Non-GAAP Measures of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Credit Measures

Credit ratings provide information relating to the Company’s financing costs, liquidity and operations and affect the Company’s ability to obtain short-term and long-term financing and/or the cost of such financing.

A mid-investment grade credit rating is an important measure in assessing the Company’s ability to maintain access to public financing and to minimize the cost of capital. It also affects the ability of the Company to engage in certain collateralized business activities on a cost-effective basis.

Credit ratings and outlooks are based on the rating agencies’ methodologies and can change from time to time to reflect their views of CP. Their views are affected by numerous factors including, but not limited to, the Company’s financial position and liquidity along with external factors beyond the Company’s control.

As at December 31, 2016, CP's credit rating from Standard & Poor's Rating Services ("Standard & Poor's") and Moody's Investor Service ("Moody's") remains unchanged from December 31, 2015. During the second quarter of 2016, Moody's changed the outlook on CP's Senior unsecured debt to negative from stable, and Dominion Bond Rating Service Limited ("DBRS") changed the outlook on CP's Unsecured debentures and Medium-term notes from BBB (high) stable outlook to BBB (high) negative outlook. Subsequently, on August 2, 2016, DBRS downgraded the Company's credit rating from BBB (high) negative outlook to BBB with a stable outlook for unsecured debentures and medium-term notes and from R-2 (high) to R-2 (middle) for the $1 billion Commercial paper program. Standard & Poor's affirmed a stable rating on CP's Long-term corporate credit, Senior secured debt and Senior unsecured debt.

Credit ratings as at December 31, 2016[1]		
Long-term debt		Outlook
Standard & Poor's		
Long-term corporate credit	BBB+	stable
Senior secured debt	A	stable
Senior unsecured debt	BBB+	stable
Moody's		
Senior unsecured debt	Baa1	negative
DBRS		
Unsecured debentures	BBB	stable
Medium-term notes	BBB	stable
$1 billion Commercial paper program		
Standard & Poor's	A-2	N/A
Moody's	P-2	N/A
DBRS	R-2 (middle)	N/A

[1] Credit ratings are not recommendations to purchase, hold or sell securities and do not address the market price or suitability of a specific security for a particular investor. Credit ratings are based on the rating agencies' methodologies and may be subject to revision or withdrawal at any time by the rating agencies.

The Adjusted net debt to Adjusted earnings before interest, tax, depreciation and amortization (“EBITDA”) ratio for the years ended December 31, 2016, 2015, and 2014 was 2.9, 2.8 and 2.2, respectively. The increase between 2016 and 2015 was primarily due to a lower ending cash balance as at December 31, 2016 compared to December 31, 2015, as well as a decrease in Adjusted EBITDA for 2016. The increase between 2015 and 2014 was due to additional debt issued during the 2015 fiscal year, partially offset by the improved Adjusted income for the year ended December 31, 2015. Adjusted net debt to Adjusted EBITDA ratio and the Adjusted income are defined and reconciled in Non-GAAP Measures of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Free Cash

CP generated positive Free cash of $1,007 million in 2016, a decrease of $374 million from $1,381 million in 2015. The decrease was primarily due to lower cash provided by operating activities and proceeds from the sale of D&H South in the third quarter of 2015, partially offset by lower additions to properties in 2016. Free cash is affected by seasonal fluctuations and by other factors including the size of the Company's capital programs. The 2016 capital programs are discussed further above in Investing Activities. Free cash is defined and reconciled in the Non-GAAP Measures of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Share Capital

At February 14, 2017, the latest practicable date, there were 146,366,093 Common Shares and no preferred shares issued and outstanding, which consists of 14,931 holders of record of the Company's Common Shares. In addition, CP has a Management Stock Option Incentive Plan (“MSOIP”), under which key officers and employees are granted options to purchase CP Common Shares. Each option granted can be exercised for one Common Share. At February 14, 2017, 2.0 million options were outstanding under the Company’s MSOIP and stand-alone option agreements entered into with Mr. Keith Creel and former CEO, Mr. E. Hunter Harrison. There are 1.5 million options available to be issued by the Company’s MSOIP in the future.

CP has a Director's Stock Option Plan (“DSOP”), under which directors are granted options to purchase CP Common Shares. There are no outstanding options under the DSOP, which has 0.3 million options available to be issued in the future.

Non-GAAP Measures

The Company presents non-GAAP measures and cash flow information to provide a basis for evaluating underlying earnings and liquidity trends in the Company’s business that can be compared with the results of operations in prior periods. In addition, these non-GAAP measures facilitate a multi-period assessment of long-term profitability, allowing management and other external users of the Company’s consolidated financial information to compare profitability on a long-term basis, including assessing future profitability, with that of the Company’s peers.

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These non-GAAP measures have no standardized meaning and are not defined by GAAP and, therefore may not be comparable to similar measures presented by other companies. The presentation of these non-GAAP measures is not intended to be considered in isolation from, as a substitute for, or as superior to the financial information presented in accordance with GAAP.

Adjusted Performance Measures

The Company uses Adjusted income, Adjusted diluted earnings per share, Adjusted operating income, and Adjusted operating ratio to evaluate the Company's operating performance and for planning and forecasting future business operations and future profitability. These non-GAAP measures are presented in Item 6. Selected Financial Data and discussed further in other sections of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. These non-GAAP measures provide meaningful supplemental information regarding operating results because they exclude certain significant items that are not considered indicative of future financial trends either by nature or amount. As a result, these items are excluded for management assessment of operational performance, allocation of resources and preparation of annual budgets. These significant items may include, but are not limited to, restructuring and asset impairment charges, individually significant gains and losses from sales of assets, and certain items outside the control of management. These items may not be non-recurring. However, excluding these significant items from GAAP results allows for a consistent understanding of the Company's consolidated financial performance when performing a multi-period assessment including assessing the likelihood of future results. Accordingly, these non-GAAP financial measures may provide insight to investors and other external users of the Company's consolidated financial information.

In 2016, there were two significant items included in Net income as follows:
- in the third quarter, a $25 million expense ($18 million after current tax) related to a legal settlement that unfavourably impacted Diluted EPS by 12 cents; and
- during the course of the year, a net non-cash gain of $79 million ($68 million after deferred tax) due to FX translation of the Company's U.S. dollar-denominated debt as follows:
- in the fourth quarter, a $74 million loss ($64 million after deferred tax) that unfavourably impacted Diluted EPS by 43 cents;
- in the third quarter, a $46 million loss ($40 million after deferred tax) that unfavourably impacted Diluted EPS by 27 cents;
- in the second quarter, a $18 million gain ($16 million after deferred tax) that favourably impacted Diluted EPS by 10 cents; and
- in the first quarter, a $181 million gain ($156 million after deferred tax) that favourably impacted Diluted EPS by $1.01.

In 2015, there were four significant items included in Net income as follows:
- in the third quarter, a $68 million gain ($42 million after current tax) related to the sale of D&H South that favourably impacted Diluted EPS by 26 cents;
- in the third quarter, a $47 million charge ($35 million after deferred tax) related to the early redemption premium on notes that unfavourably impacted Diluted EPS by 22 cents;
- in the second quarter, a deferred income tax expense of $23 million as a result of the change in the Alberta provincial corporate income tax rate that unfavourably impacted Diluted EPS by 14 cents; and
- during the course of the year, a net non-cash loss of $297 million ($257 million after deferred tax) due to FX translation of the Company's U.S. dollar-denominated debt as follows:
- in the fourth quarter, a $115 million loss ($100 million after deferred tax) that unfavourably impacted Diluted EPS by 64 cents;

- in the third quarter, a $128 million loss ($111 million after deferred tax) that unfavourably impacted Diluted EPS by 69 cents;
- in the second quarter, a $10 million gain ($9 million after deferred tax) that favourably impacted Diluted EPS by 5 cents; and
- in the first quarter, a $64 million loss ($55 million after deferred tax) that unfavourably impacted Diluted EPS by 34 cents.

In 2014, there were two significant items included in Net income as follows:

- in the fourth quarter, a net non-cash loss of $12 million ($9 million after deferred tax) due to FX translation on the Company's U.S. dollar-denominated debt that unfavourably impacted Diluted EPS by 5 cents; and
- in the first quarter, a recovery of $4 million ($3 million after current tax) was recorded for the Company's 2012 labour restructuring initiative due to favourable experience gains, recorded in Compensation and benefits that favourably impacted Diluted EPS by 1 cent.

In 2013, there were five significant items included in Net income as follows:

- in the fourth quarter, an asset impairment charge and accruals for future costs totalling \$435 million (\$257 million after deferred tax) relating to the sale of DM&E West, which closed in the second quarter of 2014 and unfavourably impacted Diluted EPS by \$1.46;
- in the fourth quarter, management transition costs related to the retirement of the Company's CFO and the appointment of the new CFO of \$5 million (\$4 million after current tax) that unfavourably impacted Diluted EPS by 2 cents;
- in the fourth quarter, a recovery of \$7 million (\$5 million after current tax) of the Company's 2012 labour restructuring initiative due to favourable experience gains that favourably impacted Diluted EPS by 3 cents;
- in the third quarter, a deferred income tax expense of \$7 million as a result of the change in the province of British Columbia's corporate income tax rate that unfavourably impacted Diluted EPS by 4 cents; and
- in the first quarter, a recovery of U.S. \$9 million (U.S. \$6 million after current tax) related to settlement of certain management transition amounts, which had been subject to legal proceedings, that favourably impacted Diluted EPS by 3 cents.

In 2012, there were six significant items included in Net income as follows:

- in the fourth quarter, an asset impairment charge of \$185 million (\$111 million after deferred tax) with respect to the option to build into the Powder River Basin and another investment that unfavourably impacted Diluted EPS by 64 cents;
- in the fourth quarter, an asset impairment charge of \$80 million (\$59 million after deferred tax) related to a certain series of locomotives that unfavourably impacted Diluted EPS by 34 cents;
- in the fourth quarter, a labour restructuring charge of \$53 million (\$39 million after current tax) as part of a restructuring initiative that unfavourably impacted Diluted EPS by 22 cents;
- in the second quarter, a charge of \$42 million (\$29 million after current tax) with respect to compensation and other management transition costs that unfavourably impacted Diluted EPS by 17 cents;
- in the first and second quarters, advisory fees of \$27 million (\$20 million after current tax) related to shareholder matters that unfavourably impacted Diluted EPS by 12 cents; and
- in the second quarter, a deferred income tax expense of \$11 million as a result of the change in the province of Ontario's corporate income tax rate that unfavourably impacted Diluted EPS by 6 cents.

Reconciliation of Non-GAAP Performance Measures to GAAP Performance Measures

The following tables reconcile non-GAAP measures presented in Item 6. Selected Financial Data and discussed further in other sections of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations to the most directly comparable measures presented in accordance with GAAP for the years ended December 31, 2016, 2015, 2014, 2013 and 2012:

Adjusted income is calculated as Net income reported on a GAAP basis less significant items.

Net income	For the year ended December 31				
(in millions)	2016	2015	2014	2013	2012
Adjusted income	$1,549	$1,625	$1,482	$1,132	$753
Add significant items (pretax):					
Legal settlement charge	(25)	—	—	—	—
Gain on sale of D&H South	—	68	—	—	—
Labour restructuring	—	—	4	7	(53)
Asset impairments	—	—	—	(435)	(265)
Management transition costs	—	—	—	4	(42)

Advisory fees related to shareholder matters	—	—	—	—	(27)
Impact of FX translation on U.S. dollar-denominated debt	79	(297)	(12)	—	—
Early redemption premium on notes	—	(47)	—	—	—
Income tax rate change	—	(23)	—	(7)	(11)
Tax effect of adjustments[1]	(4)	26	2	174	129
Net income as reported	$1,599	$1,352	$1,476	$875	$484

[1] Tax effect of adjustments was calculated as the pretax effect of the adjustments multiplied by the effective tax rate for each of the above items for the periods presented.

Adjusted diluted earnings per share is calculated using Adjusted income, as defined above, divided by the weighted-average diluted shares outstanding during the period as determined in accordance with GAAP.

Diluted earnings per share	For the year ended December 31				
	2016	2015	2014	2013	2012
Adjusted diluted earnings per share	$10.29	$10.10	$8.50	$6.42	$4.34
Add significant items (pretax):					
Legal settlement charge	(0.17)	—	—	—	—
Gain on sale of D&H South	—	0.42	—	—	—
Labour restructuring	—	—	0.02	0.04	(0.31)
Asset impairments	—	—	—	(2.47)	(1.53)
Management transition costs	—	—	—	0.02	(0.24)
Advisory fees related to shareholder matters	—	—	—	—	(0.16)
Impact of FX translation on U.S. dollar-denominated debt	0.53	(1.84)	(0.07)	—	—
Early redemption premium on notes	—	(0.30)	—	—	—
Income tax rate change	—	(0.14)	—	(0.04)	(0.06)
Tax effect of adjustments[1]	(0.02)	0.16	0.01	0.99	0.75
Diluted earnings per share as reported	$10.63	$8.40	$8.46	$4.96	$2.79

[1] Tax effect of adjustments was calculated as the pretax effect of the adjustments multiplied by the effective tax rate for each of the above items for the periods presented.

Adjusted operating income is calculated as Operating income reported on a GAAP basis less significant items.

Operating income (in millions)	For the year ended December 31				
	2016	2015	2014	2013	2012
Adjusted Operating income	$2,578	$2,620	$2,335	$1,844	$1,309
Add significant items:					
Gain on sale of D&H South	—	68	—	—	—
Labour restructuring	—	—	4	7	(53)
Asset impairments	—	—	—	(435)	(265)
Management transition costs	—	—	—	4	(42)
Operating income as reported	$2,578	$2,688	$2,339	$1,420	$949

Adjusted operating ratio excludes those significant items that are reported within Operating income.

Operating ratio	For the year ended December 31				
	2016	2015	2014	2013	2012
Adjusted operating ratio	58.6%	61.0%	64.7%	69.9%	77.0%
Add significant items:					
Gain on sale of D&H South	—%	(1.0)%	—%	—%	—%
Labour restructuring	—%	—%	—%	(0.1)%	0.9%
Asset impairments	—%	—%	—%	7.1%	4.7%
Management transition costs	—%	—%	—%	(0.1)%	0.7%
Operating ratio as reported	58.6%	60.0%	64.7%	76.8%	83.3%

ROIC and Adjusted ROIC

ROIC is calculated as Operating income less Other income and charges, tax effected at the Company's annualized effective tax rate, on a rolling twelve-month basis, divided by the sum of Total shareholders' equity, Long-term debt, Long-term debt maturing within one year and Short-term borrowing, as presented in the Company's Consolidated Financial Statements, averaged between the beginning and ending balance over a rolling twelve-month period. Adjusted ROIC excludes significant items reported in Operating income and Other income and charges in the Company's Consolidated Financial Statements, as these significant items are not considered indicative of future financial trends either by nature or amount. ROIC and Adjusted ROIC are all-encompassing performance measures that measure how productively the Company uses its long-term capital investments, representing critical indicators of good operating and investment decisions made by management and are important performance criteria in determining certain elements of the Company's long-term incentive plan. ROIC and Adjusted ROIC are presented in Item 6. Selected Financial

Data and discussed further in Results of Operations of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Calculation of ROIC and Adjusted ROIC

(in millions, except for percentages)	2016	2015	2014	2013	2012
Operating income for the year ended December 31	$2,578	$2,688	$2,339	$1,420	$949
Less:					
Other income and charges	(45)	335	19	17	37
Tax[(1)]	675	728	640	312	218
	$1,948	$1,625	$1,680	$1,091	$694
Average for the twelve months of total shareholders' equity, long-term debt, long-term debt maturing within one year and short-term borrowing	$13,532	$12,561	$11,653	$10,842	$9,564
ROIC	14.4 %	12.9 %	14.4 %	10.1 %	7.3 %

(1) Tax was calculated at the annualized effective tax rate of 25.72%, 30.95%, 27.59%, 22.21%, 23.95% for each of the above items for the years presented, respectively.

(in millions, except for percentages)	2016	2015	2014	2013	2012
Adjusted operating income for the year ended December 31	2,578	2,620	2,335	1,844	1,309
Less:					
Other income and charges	(45)	335	19	17	37
Add significant items (pretax):					
Legal settlement charge	25	—	—	—	—
Advisory fees related to shareholder matters	—	—	—	—	27
Impact of FX translation on U.S. dollar-denominated debt	(79)	297	12	—	—
Early redemption premium on notes	—	47	—	—	—
Less: tax[(1)]	673	716	642	491	344
	$1,896	$1,913	$1,686	$1,336	$955
Average for the twelve months of total shareholders' equity, long-term debt, long-term debt maturing within one year and short-term borrowing	$13,532	$12,561	$11,653	$10,842	$9,564
Adjusted ROIC	14.0 %	15.2 %	14.5 %	12.3 %	10.0 %

(1) Tax was calculated at the adjusted annualized effective tax rate of 26.20%, 27.25%, 27.58%, 26.88%, 26.49% for each of the above items for the years presented, respectively.

Free Cash

Free cash is calculated as Cash provided by operating activities, less Cash used in investing activities, adjusted for changes in cash and cash equivalents balances resulting from FX fluctuations. Free cash is a measure that management considers to be an indicator of liquidity. Free cash is useful to investors and other external users of the consolidated financial statements as it assists with the evaluation of the Company's ability to generate cash from its operations without incurring additional external financing. Positive Free cash indicates the amount of cash available for reinvestment in the business, or cash that can be returned to investors through dividends, stock repurchase programs, debt retirements or a combination of these. Conversely, negative Free cash indicates the amount of cash that must be raised from investors through new debt or equity issues, reduction in available cash balances or a combination of these. Free cash should be considered in addition to, rather than as a substitute for, Cash provided by operating activities. Free cash is presented in Item 6. Selected Financial Data and discussed further in Liquidity and

Capital Resources of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Reconciliation of Cash Provided by Operating Activities to Free Cash

(in millions)	For the year ended December 31 2016	2015	2014	2013	2012
Cash provided by operating activities	$2,089	$2,459	$2,123	$1,950	$1,328
Cash used in investing activities[1]	(1,069)	(1,123)	(1,161)	(1,186)	(1,011)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	(13)	45	7	10	(1)
Free cash[2]	$1,007	$1,381	$969	$774	$316

[1] 2013 and 2014 comparative figures have been restated by $411 million and ($411) million, respectively, due to the early adoption of Accounting Standards Update ("ASU") 2016-18. See further discussion in Item 8. Financial Statements and Supplemental Data, Note 2 Accounting changes. As a result of the change, the offsetting adjustments for changes in restricted cash were also removed from this calculation in both years, resulting in no net change to Free cash.
[2] The definition of Free cash has been revised to exclude the deduction of dividends paid. As a result of this change, Free cash was increased by $226 million in 2015, $244 million in 2014, $244 million in 2013, and $223 million in 2012.

Foreign Exchange Adjusted Variance

FX adjusted variance allows certain financial results to be viewed without the impact of fluctuations in foreign currency exchange rates, thereby facilitating period-to-period comparisons in the analysis of trends in business performance. Financial result variances at constant currency are obtained by translating the comparable period of the prior year results denominated in U.S. dollars at the foreign exchange rates of the current period. FX adjusted variances are discussed in Operating Revenues and Operating Expenses of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

				2016 vs. 2015			2015 vs. 2014		
(in millions)	Reported 2016	Reported 2015	Reported 2014	Variance due to FX	FX Adjusted 2015	FX Adj. %	Variance due to FX	FX Adjusted 2014	FX Adj. %
Freight revenues	$ 6,060	$ 6,552	$ 6,464	$ 145	$ 6,697	(10)	$ 549	$ 7,013	(7)
Non-freight revenues	172	160	156	1	161	7	4	160	—
Total revenues	6,232	6,712	6,620	146	6,858	(9)	553	7,173	(6)
Compensation and benefits	1,189	1,371	1,348	18	1,389	(14)	62	1,410	(3)
Fuel	567	708	1,048	25	733	(23)	143	1,191	(41)
Materials	180	184	193	2	186	(3)	5	198	(7)
Equipment rents	173	174	155	5	179	(3)	18	173	1
Depreciation and amortization	640	595	552	5	600	7	18	570	4
Purchased services and other	905	1,060	985	21	1,081	(16)	60	1,045	1
Gain on sale of D&H South	—	(68)	—	1	(67)	(100)	—	—	100
Total operating expenses	3,654	4,024	4,281	77	4,101	(11)	306	4,587	(12)
Operating income	$ 2,578	$ 2,688	$ 2,339	$ 69	$ 2,757	(6)	$ 247	$ 2,586	4

Interest Coverage Ratio

Interest coverage ratio is measured, on a rolling twelve-month basis, as EBIT divided by Net interest expense. This ratio provides investors, analysts, and lenders with useful information on how the Company's debt servicing capabilities have changed, period over period and in comparison to the Company’s peers. Interest coverage ratio is discussed further in Liquidity and Capital Resources of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Adjusted interest coverage ratio is calculated as Adjusted EBIT divided by Net interest expense. By excluding significant items which affect EBIT, Adjusted interest coverage ratio assists management in comparing the Company's performance over various reporting periods on a consistent basis. Adjusted interest coverage ratio is discussed further in Liquidity and Capital Resources of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Calculation of Interest Coverage Ratio and Adjusted Interest Coverage Ratio

(in millions, except for ratios)	2016	2015	2014
EBIT	$2,623	$2,353	$2,320
Adjusted EBIT	2,569	2,629	2,328
Net interest expense	471	394	282
Interest coverage ratio	5.6	6.0	8.2
Adjusted interest coverage ratio	5.5	6.7	8.3

Reconciliation of Adjusted earnings before interest, tax, depreciation and amortization and Earnings before interest and tax

Adjusted EBITDA is calculated as Adjusted EBIT plus Depreciation and amortization, net periodic pension and other benefit cost other than current service costs, and operating lease expense. EBIT is calculated as Operating income, less Other income and charges. Adjusted EBIT excludes significant items reported in Operating income and Other income and charges.

	For the year ended December 31				
(in millions)	2016	2015	2014	2013	2012
Adjusted EBITDA	$3,153	$3,281	$2,864	$2,464	$1,957
Add:					
Net periodic pension and other benefit cost other than current service costs	167	70	137	82	63
Operating lease expense	(111)	(127)	(121)	(154)	(182)
Depreciation and amortization	(640)	(595)	(552)	(565)	(539)
Adjusted EBIT	2,569	2,629	2,328	1,827	1,299
Add Significant items (pretax):					
Legal settlement charge	(25)	—	—	—	—
Gain on sale of D&H South	—	68	—	—	—
Labour restructuring	—	—	4	7	(53)
Asset impairments	—	—	—	(435)	(265)
Management transition	—	—	—	4	(42)
Advisory costs related to shareholder matters	—	—	—	—	(27)
Impact of FX translation on U.S. dollar-denominated debt	79	(297)	(12)	—	—
Early redemption premium on notes	—	(47)	—	—	—
EBIT	2,623	2,353	2,320	1,403	912
Less:					
Net interest expense	471	394	282	278	276
Income tax expense	553	607	562	250	152
Net income as reported	$1,599	$1,352	$1,476	$875	$484

Adjusted Net Debt to Adjusted EBITDA Ratio

Adjusted net debt is defined as Long-term debt, Long-term debt maturing within one year and Short-term borrowing as reported on the Company's Consolidated Balance Sheets adjusted for pension plans deficit, the net present value of operating leases, which is discounted by the Company's effective interest rate for each of the years presented, and Cash and cash equivalents. Adjusted net debt to adjusted EBITDA ratio is calculated as Adjusted net debt divided by Adjusted EBITDA.

The Adjusted net debt to adjusted EBITDA ratio is one of the key metrics used by credit rating agencies in assessing the Company's financial capacities and constraints and determining the credit rating of the Company. By excluding the impact of certain items that are not considered by management in developing a minimum threshold, Adjusted net debt to Adjusted EBITDA ratio provides a metric that management uses to evaluate the Company's financial discipline with respect to capital markets credit sensitivities from management's perspective and communicates it publicly with investors, analysts and credit rating agencies. Adjusted net debt to Adjusted EBITDA ratio is discussed further in Liquidity and Capital Resources of this Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

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Calculation of Adjusted Net Debt to Adjusted EBITDA Ratio

(in millions, except for ratios)	2016	2015	2014
Adjusted net debt as at December 31	$9,154	$9,041	$6,268
Adjusted EBITDA for the year ended December 31	3,153	3,281	2,864
Adjusted net debt to Adjusted EBITDA ratio	2.9	2.8	2.2

Reconciliation of Adjusted Net Debt to Long-term Debt

(in millions)	2016	2015	2014
Adjusted net debt as at December 31	$9,154	$9,041	$6,268
Add:			
Pension plans deficit	(273)	(295)	(288)
Net present value of operating leases[1]	(361)	(439)	(447)
Cash and cash equivalents	164	650	226
Long-term debt including long-term debt maturing within one year as at December 31	$8,684	$8,957	$5,759

[1] Operating leases were discounted at the Company's effective interest rate for each of the years presented.

Off-Balance Sheet Arrangements

Guarantees

At December 31, 2016, the Company had residual value guarantees on operating lease commitments of $19 million, compared to $28 million at December 31, 2015. The maximum amount that could be payable under these and all of the Company's other guarantees cannot be reasonably estimated due to the nature of certain guarantees. All or a portion of amounts paid under certain guarantees could be recoverable from other parties or through insurance. As at December 31, 2016, the fair value of these guarantees recognized as a liability was $5 million, compared to $4 million at December 31, 2015.

Contractual Commitments

The accompanying table indicates the Company's obligations and commitments to make future payments for contracts, such as debt, capital lease and commercial arrangements as at December 31, 2016

Payments due by period (in millions)	Total	2017	2018 & 2019	2020 & 2021	2022 & beyond
Contractual commitments					
Interest on long-term debt and capital lease	$12,526	$491	$889	$803	$10,343
Long-term debt	8,614	20	1,259	443	6,892
Capital leases	166	4	10	11	141
Operating lease[1]	450	97	118	84	151
Supplier purchase	2,476	609	1,083	177	607
Other long-term liabilities[2]	519	72	108	103	236
Total contractual commitments	$24,751	$1,293	$3,467	$1,621	$18,370

[1] Residual value guarantees on certain leased equipment with a maximum exposure of $19 million are not included in the minimum payments shown above, as management believes that CP will not be required to make payments under these residual guarantees.

(2) Includes expected cash payments for restructuring, environmental remediation, asset retirement obligations, post-retirement benefits, workers' compensation benefits, long-term disability benefits, pension benefit payments for the Company's non-registered supplemental pension plan and certain other long-term liabilities. Projected payments for post-retirement benefits, workers' compensation benefits and long-term disability benefits include the anticipated payments for years 2017 to 2026. Pension contributions for the Company's registered pension plans are not included due to the volatility in calculating them. Pension payments are discussed further in Critical Accounting Estimates of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Certain Other Financial Commitments

In addition to the financial commitments mentioned previously in Off-Balance Sheet Arrangements and Contractual Commitments of this Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, the Company is party to certain other financial commitments discussed below.

Letters of Credit

Letters of credit are obtained mainly to provide security to third parties under the terms of various agreements, including the supplemental pension plan. CP is liable for these contractual amounts in the case of non-performance under these agreements. Letters of credit are accommodated through a revolving credit facility and the Company's bilateral letter of credit facilities.

Capital Commitments

The Company remains committed to maintaining the current high level of plant quality and renewing the franchise. As part of this commitment, CP has entered into contracts with suppliers to make various capital purchases related to track programs. Payments for these commitments are due in 2017 through 2020. These expenditures are expected to be financed by cash generated from operations or by issuing new debt.

The accompanying table indicates the Company's commitments to make future payments for letters of credit and capital expenditures as at December 31, 2016

Payments due by period (in millions)	Total	2017	2018 & 2019	2020 & 2021	2022 & beyond
Certain other financial commitments					
Letters of credit	$320	$320	$ —	$ —	$ —
Capital commitments	186	129	53	4	—
Total certain other financial commitments	$506	$449	$ 53	$ 4	$ —

Critical Accounting Estimates

To prepare consolidated financial statements that conform with GAAP, the Company is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reported periods. Using the most current information available, the Company reviews estimates on an ongoing basis, including those related to environmental liabilities, pensions and other benefits, property, plant and equipment, deferred income taxes, and legal and personal injury liabilities.

The development, selection and disclosure of these estimates, and this MD&A, have been reviewed by the Board of Directors' Audit Committee, which is composed entirely of independent directors.

Environmental Liabilities

CP estimates the probable cost to be incurred in the remediation of property contaminated by past railway use. The Company screens and classifies sites according to typical activities and scale of operations conducted, and develops remediation strategies for each property based on the nature and extent of the contamination, as well as the location of the property and surrounding areas that may be adversely affected by the presence of contaminants. CP also considers available technologies, treatment and disposal facilities and the acceptability of site-specific plans based on the local regulatory environment. Site-specific plans range from containment and risk management of the contaminants through to the removal and treatment of the contaminants and affected soils and groundwater. The details of the estimates reflect the environmental liability at each property. The Company is committed to fully meeting regulatory and legal obligations with respect to environmental matters.

Liabilities for environmental remediation may change from time to time as new information about previously untested sites becomes known. The net liability may also vary as the courts decide legal proceedings against outside parties responsible for contamination. These potential charges, which cannot be quantified at this time, are not expected to be material to the Company’s financial position, but may materially affect income in the period in which a charge is recognized. Material increases to costs would be reflected as increases to "Other long-term liabilities" and "Accounts payable and accrued liabilities" on the Company’s Consolidated Balance Sheets and to "Purchased services and other" within Operating expenses on the Company's Consolidated Statements of Income.

At December 31, 2016 and 2015, the accrual for environmental remediation on the Company’s Consolidated Balance Sheets amounted to $85 million and $93 million respectively, of which the long-term portion amounting to $76 million in 2016 and $80 million in 2015 was included in "Other long-term liabilities" and the short-term portion amounting to $9 million in 2016 and $13 million in 2015 was included in "Accounts payable and accrued liabilities". Cash payments related to the Company’s environmental remediation program totalled $12 million in 2016, compared with $18 million in 2015. The U.S. dollar-denominated portion of the liability was affected by the change in FX, resulting in a decrease in environmental liabilities of $2 million in 2016 and an increase $12 million in 2015.

Cash payments for environmental initiatives are estimated to be approximately $9 million in 2017, $10 million in 2018, $11 million in 2019 and a total of approximately $55 million over the remaining years through 2026, which will be paid in decreasing amounts. All payments will be funded from general operations.

CP continues to be responsible for remediation work on portions of a property in the state of Minnesota and continues to retain liability accruals for remaining future expected costs. The costs are expected to be incurred over approximately 10 years. The state regulators will oversee the work to ensure it is completed in accordance with applicable standards.

Pensions and Other Benefits

CP has defined benefit and defined contribution pension plans. Other benefits include post-retirement medical and life insurance for pensioners, and some post-employment workers' compensation and long-term disability benefits in Canada. Workers' compensation and long-term disability benefits are discussed in the Legal and Personal Injury Liabilities section below. Pension and post-retirement benefits liabilities are subject to various external influences and uncertainties.

Information concerning the measurement of costs for pensions and other benefits is discussed in Item 8. Financial Statements and Supplementary Data, Note 1 Summary of significant accounting policies.

Pension Liabilities and Pension Assets

As at December 31, 2016, the Company included on its Consolidated Balance Sheet:

- pension benefit liabilities of $263 million ($285 million in 2015) in "Pension and other benefit liabilities" and $10 million ($10 million in 2015) in "Accounts payable and accrued liabilities";
- post-retirement benefits liabilities of $383 million ($387 million in 2015) in "Pension and other benefit liabilities" and $21 million ($21 million in 2015) in "Accounts payable and accrued liabilities";
- accruals for self-insured workers' compensation and long-term disability benefit plans, including $88 million ($86 million in 2015) in "Pension and other benefit liabilities", which are discussed in the Legal and Personal Injury Liabilities section below; and
- pension benefit assets of $1,070 million ($1,401 million in 2015) in "Pension assets".

Net Periodic Benefit Costs

Net periodic benefit costs for pensions and post-retirement benefits were included in "Compensation and benefits" on the Company's Consolidated Statements of Income. Combined net periodic benefit credits for pensions and post-retirement benefits (excluding self-insured workers' compensation and long-term disability benefits) were $55 million in 2016, compared with net periodic benefit costs of $66 million in 2015.

Net periodic benefit credits for pensions were $81 million in 2016, compared with net periodic benefit costs of $41 million in 2015. The benefit credit portion related to defined benefit pensions was $90 million in 2016, compared with the benefit cost portion of $32 million in 2015. The benefit cost portion related to defined contribution pensions (equal to contributions) was $9 million in 2016, compared with $9 million for 2015. Net periodic benefit costs for post-retirement benefits were $26 million in 2016, compared with $25 million in 2015.

CP estimates net periodic benefit credits for defined benefit pensions to be approximately $190 million in 2017, and net periodic benefit costs for defined contribution pensions to be approximately $8 million in 2017. Net periodic benefit costs for post-retirement benefits in 2017 are not expected to differ materially from the 2016 costs.

Pension Plan Contributions

The Company made contributions of $48 million to the defined benefit pension plans in 2016, compared with $81 million in 2015. The Company's main Canadian defined benefit pension plan accounts for 96% of CP's pension obligation and can produce significant volatility in pension funding requirements, given the pension fund's size, the many factors that drive the pension plan's funded status, and Canadian statutory pension funding requirements. The Company made voluntary prepayments of $600 million in 2011, $650 million in 2010 and $500 million in 2009 to the Company's main Canadian defined benefit pension plan. CP has applied $1,281 million of these voluntary prepayments to reduce its pension funding requirements in 2012–2016, leaving $469 million of the voluntary prepayments still available at December 31, 2016 to reduce CP's pension funding requirements in 2017 and future years. CP continues to have significant flexibility with respect to the rate at which the remaining voluntary prepayments are applied to reduce future years' pension contribution requirements, which allows CP to manage the volatility of future pension funding requirements. At this time, CP estimates it will apply $50 million of the remaining voluntary prepayments against its 2017 pension funding requirements.

CP estimates its aggregate pension contributions, including its defined benefit and defined contribution plans, to be in the range of $50 million to $60 million in 2017, and in the range of $50 million to $100 million per year from 2018 to 2020. These estimates reflect the Company's current intentions with respect to the rate at which CP will apply the remaining voluntary prepayments against contribution requirements in the next few years.

Future pension contributions will be highly dependent on the Company's actual experience with such variables as investment returns, interest rate fluctuations and demographic changes, on the rate at which previous years' voluntary prepayments are applied against pension contribution requirements, and on any changes in the regulatory environment. CP will continue to make contributions to the pension plans that, at a minimum, meet pension legislative requirements.

Pension Plan Risks

Fluctuations in the liability and net periodic benefit costs for pensions result from favourable or unfavourable investment returns and changes in long-term interest rates. The impact of favourable or unfavourable investment returns is moderated by the use of a market-related asset value for the main Canadian defined benefit pension plan's public equity securities and absolute return strategies. The impact of changes in long-term rates on pension obligations is partially offset by their impact on the pension funds' investments in fixed income assets.

The plans' investment policy provides a target allocation of approximately 46% of the plans' assets to be invested in public equity securities. As a result, stock market performance is a key driver in determining the pension funds' asset performance. If the rate of investment return on the plans' public equity securities in 2016 had been 10 percentage points higher (or lower) than the actual 2016 rate of investment return on such securities, 2017 net periodic benefit costs for pensions would be lower (or higher) by approximately $25 million.

Changes in bond yields can result in changes to discount rates and to changes in the value of fixed income assets. If the discount rate as at December 31, 2016 had been higher (or lower) by 0.1% with no related changes in the value of the pension funds' investment in fixed income assets, 2017 net periodic benefit costs for pensions would be lower (or higher) by approximately $13 million. However, a change in bond yields would also lead to a change in the value of the pension funds' investment in fixed income assets, and this change would partially offset the impact on net periodic benefit costs noted above.

The Company estimates that an increase in the discount rate of 0.1% would decrease the defined benefit pension plans' projected benefit obligations by approximately $155 million, and estimates that a decrease in the discount rate of 0.1% would increase the defined benefit pension plans' projected benefit obligations by approximately $157 million. Similarly, for every 0.1% the actual return on assets varies above (or below) the estimated return for the year, the value of the defined benefit pension plans' assets would increase (or decrease) by approximately $12 million.

Adverse experience with respect to these factors could eventually increase funding and pension expense significantly, while favourable experience with respect to these factors could eventually decrease funding and pension expense significantly.

Fluctuations in the post-retirement benefit obligation also can result from changes in the discount rate used. A 0.1% increase (decrease) in the discount rate would decrease (increase) the obligation by approximately $5 million.

CP reviews its pensioner mortality experience to ensure that the mortality assumption continues to be appropriate, or to determine what changes to the assumption is needed.

Property, Plant and Equipment

The Company follows the group depreciation method under which a single depreciation rate is applied to the total cost in a particular class of property, despite differences in the service life or salvage value of individual properties within the same class. CP performs depreciation studies of each property group approximately every three years to update depreciation rates. The depreciation studies are based on statistical analysis of historical retirements of properties in the group and incorporate engineering estimates of changes in current operations and of technological advances. CP depreciates the cost of properties, net of salvage, on a straight-line basis over the estimated useful life of the property group. The estimates of economic lives are uncertain and can vary due to technological changes or in the rate of wear. Additionally, the depreciation rates are updated to reflect the change in residual values of the assets in the class. Under the group depreciation method, retirements or disposals of properties in the normal course of business are accounted for by charging the cost of the property less any net salvage to accumulated depreciation. For the sale or retirement of larger groups of depreciable assets that are unusual that were not predicted in the Company's depreciation studies, CP records a gain or loss for the difference between net proceeds and net book value of the assets sold or retired.

Due to the capital intensive nature of the railway industry, depreciation represents a significant part of operating expenses. The estimated useful lives of properties have a direct impact on the amount of depreciation recorded as a component of Properties on the Company's Consolidated Balance Sheets. At December 31, 2016 and 2015, accumulated depreciation was $7,125 million and $6,952 million, respectively.

Revisions to the estimated useful lives and net salvage projections for properties constitute a change in accounting estimate and are addressed prospectively by amending depreciation rates. It is anticipated that there will be changes in the estimates of weighted average useful lives and net salvage for each property group as assets are acquired, used and retired. Substantial changes in either the useful lives of properties or the salvage assumptions could result in significant changes to depreciation expense. For example, if the estimated average life of road locomotives, the largest asset group, increased (or decreased) by 5%, annual depreciation expense would decrease (or increase) by approximately $3 million.

The Company reviews the carrying amounts of properties when circumstances indicate that such carrying amounts may not be recoverable based on future undiscounted cash flows. When such properties are determined to be impaired, recorded asset values are revised to their fair values and an impairment loss is recognized.

Deferred Income Taxes

CP accounts for deferred income taxes based on the liability method. This method focuses on the Company's balance sheet and the temporary differences otherwise calculated from the comparison of book versus tax values. It is assumed that such temporary differences will be settled in the deferred income tax assets and liabilities at the balance sheet date.

In determining deferred income taxes, the Company makes estimates and assumptions regarding deferred tax matters, including estimating the timing of the realization and settlement of deferred income tax assets (including the benefit of tax losses) and liabilities. Deferred income taxes are calculated using enacted federal, provincial, and state future income tax rates, which may differ in future periods.

A deferred income tax expense of $320 million was included in "Income tax expense" for 2016 and $234 million in 2015 on the Company's Consolidated Statements of Income. The increase in deferred income tax expense in 2016 was primarily due to the 2015 reclassification of deferred tax expense to current tax expense related to the D&H South sale. In addition, the Company recorded deferred income tax expense related to FX translation on U.S. dollar-denominated debt, whereas this was a recovery in 2015. At December 31, 2016 and 2015, deferred income tax liabilities of $3,571 million and $3,391 million, respectively, were recorded as a long-term liability and are composed largely of temporary differences related to accounting for properties.

Legal and Personal Injury Liabilities

The Company is involved in litigation related to CP's business in Canada and the U.S. Management is required to establish estimates of the potential liability arising from incidents, claims and pending litigation, including personal injury claims by employees and third parties, and certain occupation-related claims and property damage claims.

Accruals for incidents, claims and litigation, including workers' compensation benefit accruals, totalled $130 million, net of insurance recoveries, at December 31, 2016 and $133 million at December 31, 2015. At December 31, 2016 and 2015 respectively, the total accrual included $88 million and $86 million in "Pension and other benefit liabilities", $18 million and $18 million in "Other long-term liabilities" and $26 million and $30 million in "Accounts payable and accrued liabilities", partially offset by $2 million and $1 million in "Other assets" on the Company's Consolidated Balance Sheets. An expense totalling $67 million in 2016 and $62 million in 2015 was included in "Purchased services and other" on the Company's Consolidated Statements of Income.

These estimates are determined on a case-by-case basis with input from defense counsel and are based on an assessment of the actual damages incurred and current legal advice with respect to settlements in other similar cases. CP employs experienced claims adjusters and experts who investigate and assess the validity of individual claims made against CP and estimate the damages incurred.

A provision for lawsuits or other claims will be accrued according to applicable accounting standards, reflecting the assessment of the actual damages incurred based upon the facts and circumstances known at the time. CP accrues for likely claims when the facts of an incident become known and investigation results provide a reasonable basis for estimating the liability. The lower end of the range is accrued if the facts and circumstances permit only a range of reasonable estimates and no single amount in that range is a better estimate than any other. Additionally, for administrative expediency, a general provision for lesser value injury cases is kept. Facts and circumstances related to asserted claims can change, and a process is in place to monitor accruals for changes in accounting estimates.

In the Canadian provinces of Quebec, Ontario, Manitoba and B.C., occupational-injury claims are administered through the Workers' Compensation Board ("WCB") and are actuarially determined. In the provinces of Saskatchewan and Alberta, the Company is assessed an annual WCB contribution on a premium basis and this amount is not subject to estimation by management.

U.S. railway employees are covered by federal law under the FELA rather than workers compensation programs. Accruals are set for individual cases based on facts, legal opinion and statistical analysis. U.S. accruals are also set and include alleged occupational exposure or injury.

Forward-Looking Information

This MD&A and Annual Report on Form 10-K contains certain forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and other relevant securities legislation. These forward-looking statements include, but are not limited to, statements concerning the Company’s defined benefit pension expectations for 2017 and through 2020, our expectations for 2017 which includes: adjusted diluted EPS growth to be in the high single-digit percentages from full-year 2016 Adjusted diluted EPS of $10.29, capital expenditures of $1.25 billion, an increase of 6% over the $1.18 billion spent in 2016, assumptions regarding the Canadian-to-U.S. dollar exchange rate being in the range of $1.30 to $1.35, the average price of WTI being approximately U.S. $45 to $55 per barrel, as well as statements concerning the Company’s operations, anticipated financial

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performance, business prospects and strategies, including statements concerning the anticipation that cash flow from operations and various sources of financing will be sufficient to meet debt repayments and obligations in the foreseeable future and concerning anticipated capital programs, statements regarding future payments including income taxes and pension contributions, and capital expenditures. Forward-looking information typically contains statements with words such as “financial expectations”, “key assumptions”, “anticipate”, “believe”, “expect”, “plan”, “will”, “c “should” or similar words suggesting future outcomes. To the extent that CP has provided guidance using non-GAAP financial measures, the Company may not be able to provide a reconciliation to a GAAP measure, due to unknown variables and uncertainty related to future results.

Readers are cautioned not to place undue reliance on forward-looking information because it is possible that CP will not achieve predictions, forecasts, projections and other forms of forward-looking information. Current economic conditions render assumptions, although reasonable when made, subject to greater uncertainty. In addition, except as required by law, CP undertakes no obligation to update publicly or otherwise revise any forward-looking information, whether as a result of new information, future events or otherwise.

By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, including but not limited to the following factors: changes in business strategies; general North American and global economic, credit and business conditions; risks in agricultural production such as weather conditions and insect populations; the availability and price of energy commodities; the effects of competition and pricing pressures; industry capacity; shifts in market demand; inflation; changes in laws and regulations, including regulation of rates; changes in taxes and tax rates; potential increases in maintenance and operating costs; uncertainties of investigations, proceedings or other types of claims and litigation; labour disputes; risks and liabilities arising from derailments; transportation of dangerous goods; timing of completion of capital and maintenance projects; currency and interest rate fluctuations; effects of changes in market conditions on the financial position of pension plans and investments; and various events that could disrupt operations, including severe weather, droughts, floods, avalanches and earthquakes as well as security threats and the governmental response to them, and technological changes.

There are more specific factors that could cause actual results to differ materially from those described in the forward-looking statements contained in this MD&A. These more specific factors are identified and discussed in Item 1A. Risk Factors. Other risks are detailed from time to time in reports filed by CP with securities regulators in Canada and the United States.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Risk

Although CP conducts business primarily in Canada, a significant portion of its revenues, expenses, assets and liabilities including debt are denominated in U.S. dollars. The value of the Canadian dollar is affected by a number of domestic and international factors, including, without limitation, economic performance, and Canadian, U.S. and international monetary policies. Consequently, the Company's results are affected by fluctuations in the exchange rate between these currencies. On an annualized basis, a $0.01 weakening (or strengthening) of the Canadian dollar positively (or negatively) impacts freight revenues by approximately $25 million and negatively (or positively) impacts operating expenses by approximately $13 million.

CP uses U.S. denominated debt to hedge its net investment in U.S. operations. As at December 31, 2016, the net investment in U.S. operations is less than the total U.S. denominated debt. Consequently, FX translation on the Company's undesignated U.S. dollar-denominated long-term debt causes additional impacts on earnings in Other income and charges.

To manage this exposure to fluctuations in exchange rates between Canadian and U.S. dollars, CP may sell or purchase U.S. dollar forwards at fixed rates in future periods. In addition, changes in the exchange rate between the Canadian dollar and other currencies (including the U.S. dollar) make the goods transported by the Company more or less competitive in the world marketplace and may in turn positively or negatively affect revenues.

Share Price Impact on Stock-Based Compensation

Based on information available at December 31, 2016 and expectations for 2017 grants, for every $1.00 change in share price, stock-based compensation expense has a corresponding change of approximately $0.4 million to $0.6 million. This excludes the impact of changes in share price relative to the S&P/TSX 60 index and relative to Class I railways, which may trigger different performance share unit payouts. Share based compensation may also be impacted by non-market performance conditions.

Additional information concerning stock based compensation is included in Item 8. Financial Statements and Supplementary Data, Note 21 Stock-based compensation.

Interest Rate Risk

In order to meet the Company's capital structure requirements, CP may enter into long-term debt agreements. These debt agreements expose CP to increased interest costs on future fixed debt instruments and existing variable rate debt instruments, should market rates increase. In addition, the present value of the Company's assets and liabilities will also vary with interest rate changes. To manage interest rate exposure, CP may enter into forward rate agreements such as treasury rate locks or bond forwards that lock in rates for a future date, thereby protecting against interest rate increases. CP may also enter into swap agreements whereby one party agrees to pay a fixed rate of interest while the other party pays a floating rate. Contingent on the direction of interest rates, the Company may incur higher costs depending on the contracted rate.

As at December 31, 2016 and 2015, the Company had forward starting floating-to-fixed interest rate swap agreements totalling a notional U.S. $700 million to fix the benchmark rate on cash flows associated with highly probable forecasted issuances of long-term notes.

Information concerning market risks is supplemented in Item 8. Financial Statements and Supplementary Data, Note 17 Financial Instruments.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and the Shareholders of Canadian Pacific Railway Limited:

We have audited the accompanying consolidated balance sheets of Canadian Pacific Railway Limited and subsidiaries (the "Company") as of December 31, 2016 and 2015 and the related consolidated statements of income, comprehensive income, cash flows and changes in shareholders' equity for each of the three years in the period ended December 31, 2016. Our audits also included the financial statement schedule listed in the index at Item 15. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Canadian Pacific Railway Limited and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 16, 2017 expressed an unqualified opinion on the Company’s internal control over financial reporting.

/s/ Deloitte LLP

Chartered Professional Accountants
February 16, 2017
Calgary, Canada

CONSOLIDATED STATEMENTS OF INCOME

Year ended December 31 (in millions of Canadian dollars, except per share data)	2016	2015	2014
Revenues			
Freight	$6,060	$6,552	$6,464
Non-freight	172	160	156
Total revenues	6,232	6,712	6,620
Operating expenses			
Compensation and benefits	1,189	1,371	1,348
Fuel	567	708	1,048
Materials	180	184	193
Equipment rents	173	174	155
Depreciation and amortization	640	595	552
Purchased services and other (Note 10)	905	1,060	985
Gain on sale of Delaware & Hudson South (Note 10)	—	(68)	—
Total operating expenses	3,654	4,024	4,281
Operating income	2,578	2,688	2,339
Less:			
Other income and charges (Note 3)	(45)	335	19
Net interest expense (Note 4)	471	394	282
Income before income tax expense	2,152	1,959	2,038
Income tax expense (Note 5)	553	607	562
Net income	$1,599	$1,352	$1,476
Earnings per share (Note 6)			
Basic earnings per share	$10.69	$8.47	$8.54
Diluted earnings per share	$10.63	$8.40	$8.46
Weighted-average number of shares (millions) (Note 6)			
Basic	149.6	159.7	172.8
Diluted	150.5	161.0	174.4

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year ended December 31 (in millions of Canadian dollars)	2016	2015	2014
Net income	$1,599	$1,352	$1,476
Net gain (loss) in foreign currency translation adjustments, net of hedging activities	18	(86)	(32)
Change in derivatives designated as cash flow hedges	(2)	(69)	(49)
Change in pension and post-retirement defined benefit plans	(434)	1,059	(941)
Other comprehensive (loss) income before income taxes (Note 7)	(418)	904	(1,022)
Income tax recovery (expense) on above items (Note 7)	96	(162)	306
Other comprehensive (loss) income (Note 7)	(322)	742	(716)
Comprehensive income	$1,277	$2,094	$760

See Notes to Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS

As at December 31 (in millions of Canadian dollars, except Common Shares)	2016	2015
Assets		
Current assets		
Cash and cash equivalents	$164	$650
Accounts receivable, net (Note 9)	591	645
Materials and supplies	184	188
Other current assets	70	54
	1,009	1,537
Investments (Note 11)	194	152
Properties (Note 12)	16,689	16,273
Goodwill and intangible assets (Note 13)	202	211
Pension asset (Note 20)	1,070	1,401
Other assets (Note 14)	57	63
Total assets	$19,221	$19,637
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable and accrued liabilities (Note 15)	$1,322	$1,417
Long-term debt maturing within one year (Note 16)	25	30
	1,347	1,447
Pension and other benefit liabilities (Note 20)	734	758
Other long-term liabilities (Note 18)	284	318
Long-term debt (Note 16)	8,659	8,927
Deferred income taxes (Note 5)	3,571	3,391
Total liabilities	14,595	14,841
Shareholders' equity		
Share capital (Note 19)		
Authorized unlimited Common Shares without par value. Issued and outstanding are 146.3 million and 153.0 million at December 31, 2016 and 2015, respectively.	2,002	2,058
Authorized unlimited number of first and second preferred shares; none outstanding.		
Additional paid-in capital	52	43
Accumulated other comprehensive loss (Note 7)	(1,799)	(1,477)
Retained earnings	4,371	4,172
	4,626	4,796
Total liabilities and shareholders' equity	$19,221	$19,637

Commitments and contingencies (Note 23).

Subsequent event (Note 27).

See Notes to Consolidated Financial Statements.

Approved on behalf of the Board:

/s/ Andrew F. Reardon	/s/ Matthew H. Paull
Andrew F. Reardon, Director,	Matthew H. Paull, Director,
Chair of the Board	Chair of the Audit Committee

CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31 (in millions of Canadian dollars)	2016	2015	2014
Operating activities			
Net income	$1,599	$1,352	$1,476
Reconciliation of net income to cash provided by operating activities:			
Depreciation and amortization	640	595	552
Deferred income taxes (Note 5)	320	234	354
Pension funding in excess of expense (Note 20)	(138)	(49)	(132)
Foreign exchange (gain) loss on long-term debt (Note 3)	(79)	297	11
Other operating activities, net	(198)	(245)	(14)
Change in non-cash working capital balances related to operations (Note 8)	(55)	275	(124)
Cash provided by operating activities	2,089	2,459	2,123
Investing activities			
Additions to properties	(1,182)	(1,522)	(1,449)
Proceeds from the sale of west end of Dakota, Minnesota and Eastern Railroad (Note 10)	—	—	236
Proceeds from the sale of Delaware & Hudson South (Note 10)	—	281	—
Proceeds from sale of properties and other assets (Note 10)	116	114	52
Other	(3)	4	—
Cash used in investing activities[1]	(1,069)	(1,123)	(1,161)
Financing activities			
Dividends paid	(255)	(226)	(244)
Issuance of CP Common Shares (Note 19)	21	43	62
Purchase of CP Common shares (Note 19)	(1,210)	(2,787)	(2,050)
Issuance of long-term debt, excluding commercial paper (Note 16)	—	3,411	—
Repayment of long-term debt, excluding commercial paper (Note 16)	(38)	(505)	(183)
Net (repayment) issuance of commercial paper (Note 16)	(8)	(893)	771
Settlement of foreign exchange forward on long-term debt	—	—	17
Other	(3)	—	(3)
Cash used in financing activities	(1,493)	(957)	(1,630)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	(13)	45	7
Cash position			
(Decrease) increase in cash, cash equivalents, and restricted cash[1]	(486)	424	(661)
Cash, cash equivalents, and restricted cash at beginning of year[1]	650	226	887
Cash, cash equivalents, and restricted cash at end of year[1]	$164	$650	$226

Supplemental disclosures of cash flow information:			
Income taxes paid	$322	$176	$226
Interest paid	$488	$336	$309

[1]Certain figures have been reclassified due to a retrospective change in accounting policy (Note 2).

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(in millions of Canadian dollars except per share data)	Share capital	Additional paid-in capital	Accumulated other comprehensive loss	Retained earnings	Total shareholders' equity
Balance at December 31, 2013	$2,240	$ 34	$ (1,503)	$ 6,326	$ 7,097
Net income	—	—	—	1,476	1,476
Other comprehensive loss (Note 7)	—	—	(716)	—	(716)
Dividends declared ($1.4000 per share)	—	—	—	(241)	(241)
Effect of stock-based compensation expense	—	19	—	—	19
CP Common Shares repurchased (Note 19)	(136)	—	—	(1,953)	(2,089)
Shares issued under stock option plan (Note 19)	81	(17)	—	—	64
Balance at December 31, 2014	2,185	36	(2,219)	5,608	5,610
Net income	—	—	—	1,352	1,352
Other comprehensive income (Note 7)	—	—	742	—	742
Dividends declared ($1.4000 per share)	—	—	—	(221)	(221)
Effect of stock-based compensation expense	—	17	—	—	17
CP Common Shares repurchased (Note 19)	(181)	—	—	(2,567)	(2,748)
Shares issued under stock option plan (Note 19)	54	(10)	—	—	44
Balance at December 31, 2015	2,058	43	(1,477)	4,172	4,796
Net income	—	—	—	1,599	1,599
Other comprehensive loss (Note 7)	—	—	(322)	—	(322)
Dividends declared ($1.8500 per share)	—	—	—	(274)	(274)
Effect of stock-based compensation expense	—	14	—	—	14
CP Common Shares repurchased (Note 19)	(84)	—	—	(1,126)	(1,210)
Shares issued under stock option plan (Note 19)	28	(5)	—	—	23
Balance at December 31, 2016	$2,002	$ 52	$ (1,799)	$ 4,371	$ 4,626

See Notes to Consolidated Financial Statements.

CANADIAN PACIFIC RAILWAY LIMITED
Notes to Consolidated Financial Statements
December 31, 2016

Canadian Pacific Railway Limited ("CPRL"), through its subsidiaries (collectively referred to as "CP" or "the Company"), operates a transcontinental railway in Canada and the United States. CP provides rail and intermodal transportation services over a network of approximately 12,400 miles, serving the principal business centres of Canada from Montreal, Quebec, to Vancouver, British Columbia, and the U.S. Northeast and Midwest regions. CP's railway network feeds directly into the U.S. heartland from the East and West coasts. Agreements with other carriers extend the Company's market reach east of Montreal in Canada, throughout the U.S. and into Mexico. CP transports bulk commodities, merchandise freight and intermodal traffic. Bulk commodities include grain, coal, fertilizers and sulphur. Merchandise freight consists of finished vehicles and automotive parts, as well as forest, industrial and consumer products. Intermodal traffic consists largely of retail goods in overseas containers that can be transported by train, ship and truck, and in domestic containers and trailers that can be moved by train and truck.

1 Summary of significant accounting policies

Accounting principles generally accepted in the United States of America ("GAAP")

These consolidated financial statements are expressed in Canadian dollars and have been prepared in accordance with GAAP.

Principles of consolidation

These consolidated financial statements include the accounts of CP and all its subsidiaries. The Company's investments in which it has significant influence are accounted for using the equity method. All intercompany accounts and transactions have been eliminated.

Use of estimates

The preparation of these consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of revenues and expenses during the year, the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements. Management regularly reviews its estimates, including those related to environmental liabilities, pensions and other benefits, depreciable lives of properties, deferred income tax assets and liabilities, as well as legal and personal injury liabilities based upon currently available information. Actual results could differ from these estimates.

Principal subsidiaries

The following list sets out CPRL's principal railway operating subsidiaries, including the jurisdiction of incorporation. All of these subsidiaries are wholly owned, directly or indirectly, by CPRL as at December 31, 2016.

Principal subsidiary	Incorporated under the laws of
Canadian Pacific Railway Company	Canada
Soo Line Railroad Company ("Soo Line")	Minnesota
Delaware and Hudson Railway Company, Inc. ("D&H")	Delaware
Dakota, Minnesota & Eastern Railroad Corporation ("DM&E")	Delaware

Mount Stephen Properties Inc. (“MSP”)	Canada

Revenue recognition

Railway freight revenues are recognized based on the percentage of completed service method. The allocation of revenue between reporting periods is based on the relative transit time in each reporting period with expenses recognized as incurred. Volume rebates to customers are accrued as a reduction of freight revenues based on estimated volume and contract terms as freight service is provided. Other revenues, including passenger revenue, revenue from leasing certain assets, switching fees, and revenue from logistics services, are recognized as service is performed or contractual obligations are met. Revenues are presented net of taxes collected from customers and remitted to government authorities.

Cash and cash equivalents

Cash and cash equivalents include highly liquid short-term investments that are readily convertible to cash with original maturities of three months or less, but exclude cash and cash equivalents subject to restrictions.

Restricted cash and cash equivalents

Cash and cash equivalents that are restricted as to withdrawal or usage, in accordance with specific agreements, are presented as restricted cash and cash equivalents on the balance sheets when applicable.

Foreign currency translation

Assets and liabilities denominated in foreign currencies, other than those held through foreign subsidiaries, are translated into Canadian dollars at the year-end exchange rate for monetary items and at the historical exchange rates for non-monetary items. Foreign currency revenues and expenses are translated at the exchange rates in effect on the dates of the related transactions. Foreign exchange ("FX") gains and losses, other than those arising from the translation of the Company's net investment in foreign subsidiaries, are included in income.

The accounts of the Company's foreign subsidiaries are translated into Canadian dollars using the year-end exchange rate for assets and liabilities and the average exchange rates during the year for revenues, expenses, gains and losses. FX gains and losses arising from the translation of the foreign subsidiaries' assets and liabilities are included in "Other comprehensive income (loss)". A portion of U.S. dollar-denominated long-term debt has been designated as a hedge of the net investment in foreign subsidiaries. As a result, unrealized FX gains and losses on U.S. dollar-denominated long-term debt, designated as a hedge, are offset against FX gains and losses arising from the translation of foreign subsidiaries' accounts in "Other comprehensive income (loss)".

Pensions and other benefits

Pension costs are actuarially determined using the projected-benefit method pro-rated over the credited service periods of employees. This method incorporates management's best estimates of expected plan investment performance, salary escalation and retirement ages of employees. The expected return on fund assets is calculated using market-related asset values developed from a five-year average of market values for the fund's public equity securities and absolute return strategies (with each prior year's market value adjusted to the current date for assumed investment income during the intervening period) plus the market value of the fund's fixed income, real estate and infrastructure securities, subject to the market-related asset value not being greater than 120% of the market value nor being less than 80% of the market value. The discount rate used to determine the projected-benefit obligation is based on blended market interest rates on high-quality corporate debt instruments with matching cash flows. Unrecognized actuarial gains and losses in excess of 10% of the greater of the benefit obligation and the market-related value of plan assets are amortized over the expected average remaining service period of active employees expected to receive benefits under the plan (approximately 11 years). Prior service costs arising from collectively bargained amendments to pension plan benefit provisions are amortized over the term of the applicable union agreement. Prior service costs arising from all other sources are amortized over the expected average remaining service period of active employees who are expected to receive benefits under the plan at the date of amendment.

Costs for post-retirement and post-employment benefits other than pensions, including post-retirement health care and life insurance and some workers' compensation and long-term disability benefits in Canada, are actuarially determined on a basis similar to pension costs.

The over or under funded status of defined benefit pension and other post-retirement benefit plans are measured as the difference between the fair value of the plan assets and the benefit obligation, and are recognized on the balance sheets. In addition, any unrecognized actuarial gains and losses and prior service costs and credits that arise during the period are recognized as a component of "Other comprehensive income (loss)", net of tax.

Gains and losses on post-employment benefits that do not vest or accumulate, including some workers' compensation and long-term disability benefits in Canada, are included immediately in income as "Compensation and benefits".

Materials and supplies

Materials and supplies are carried at the lower of average cost or market value and consist primarily of fuel and parts used in the repair and maintenance of track structures, equipment, locomotives and freight cars.

Properties

Fixed asset additions and major renewals are recorded at cost, including direct costs, attributable indirect costs and carrying costs, less accumulated depreciation and any impairment. When there is a legal obligation associated with the retirement of property, a liability is initially recognized at its fair value and a corresponding asset retirement cost is added to the gross book value of the related asset and amortized to expense over the estimated term to retirement. The Company reviews the carrying amounts of its properties whenever changes in circumstances indicate that such carrying amounts may not be recoverable based on future undiscounted cash flows. When such properties are determined to be impaired, recorded asset values are revised to their fair value.

The Company recognizes expenditures as additions to properties or operating expenses based on whether the expenditures increase the output or service capacity, lower the associated operating costs or extend the useful life of the properties and whether the expenditures exceed minimum physical and financial thresholds.

Much of the additions to properties, both new and replacement properties, are self-constructed. These are initially recorded at cost, including direct costs and attributable indirect costs, overheads and carrying costs. Direct costs include, among other things, labour costs, purchased services, equipment costs and material costs. Attributable indirect costs and overheads include incremental long-term variable costs resulting from the execution of capital projects. Indirect costs mainly include work trains, material distribution, highway vehicles and work equipment. Overheads primarily include a portion of the engineering department's costs, which plans, designs and administers these capital projects. These costs are allocated to projects by applying a measure consistent with the nature of the cost, based on cost studies. For replacement properties, the project costs are allocated to dismantling and installation based on cost studies. Dismantling work is performed concurrently with the installation.

Ballast programs including undercutting, shoulder ballasting and renewal programs that form part of the annual track program are capitalized as this work, and the related added ballast material, significantly improves drainage, which in turn extends the life of ties and other track materials. These costs are tracked separately from the underlying assets and depreciated over the period to the next estimated similar ballast program. Spot replacement of ballast is considered a repair which is expensed as incurred.

The costs of large refurbishments are capitalized and locomotive overhauls are expensed as incurred, except where overhauls represent a betterment of the locomotive in which case costs are capitalized.

The Company capitalizes development costs for major new computer systems.

The Company follows group depreciation which groups assets which are similar in nature and have similar economic lives. The property groups are depreciated on a straight-line basis reflecting their expected economic lives determined by studies of historical retirements of properties in the group and engineering estimates of changes in current operations and of technological advances. Actual use and retirement of assets may vary from current estimates, which would impact the amount of depreciation expense recognized in future periods. Rail and other track material in the U.S. are depreciated based directly on usage.

When depreciable property is retired or otherwise disposed of in the normal course of business, the book value, less net salvage proceeds, is charged to accumulated depreciation and if different than the assumptions under the depreciation study could potentially result in adjusted depreciation expense over a period of years. However, when removal costs exceed the salvage value on assets and the Company has no legal obligation to remove the assets, the removal costs incurred are charged to income in the period in which the assets are removed and are not charged to accumulated depreciation.

For the sale or retirement of larger groups of depreciable assets that are unusual and were not considered in depreciation studies, CP records a gain or loss for the difference between net proceeds and net book value of the assets sold or retired.

Equipment under capital lease is included in Properties and depreciated over the period of expected use.

Assets held for sale

Assets to be disposed that meet the held for sale criteria are reported at the lower of their carrying amount and fair value, less costs to sell, and are no longer depreciated.

Goodwill and intangible assets

Goodwill represents the excess of the purchase price over the fair value of identifiable net assets upon acquisition of a business. Goodwill is assigned to the reporting units that are expected to benefit from the business acquisition which, after integration of operations with the railway network, may be different than the acquired business.

The carrying value of goodwill, which is not amortized, is assessed for impairment annually in the fourth quarter of each year as at October 1st, or more frequently as economic events dictate. The Company has the option of performing an assessment of certain qualitative factors ("Step 0") to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying value or proceeding directly to a quantitative impairment test ("Step 1"). Qualitative factors include but are not limited to, economic, market and industry conditions, cost factors and overall financial performance of the reporting unit. If Step 0 indicates that the carrying value is less than the fair value, then performing the two-step impairment test is unnecessary. Under Step 1, the fair value of the reporting unit is compared to its carrying value, including goodwill. If the fair value of the reporting unit is less than its carrying value, goodwill is potentially impaired. The impairment charge that would be recognized is the excess of the carrying value of the goodwill over the fair value of the goodwill, determined in the same manner as in a business combination.

Intangible assets with finite lives are amortized on a straight-line basis over the estimated useful lives of the respective assets. Favourable leases, customer relationships and interline contracts have amortization periods ranging from 15 to 20 years. When there is a change in the estimated useful life of an intangible asset with a finite life, amortization is adjusted prospectively.

Financial instruments

Financial instruments are contracts that give rise to a financial asset of one party and a financial liability or equity instrument of another party.

Financial instruments are recognized initially at fair value, which is the amount of consideration that would be agreed upon in an arm's-length transaction between willing parties.

Subsequent measurement depends on how the financial instruments have been classified. Accounts receivable and investments, classified as loans and receivables, are measured at amortized cost, using the effective interest method. Cash and cash equivalents and derivatives are classified as held for trading and are measured at fair value. Accounts payable, accrued liabilities, short-term borrowings, dividends payable, other long-term liabilities and long-term debt, classified as other liabilities, are also measured at amortized cost.

Derivative financial instruments

Derivative financial and commodity instruments may be used from time to time by the Company to manage its exposure to risks relating to foreign currency exchange rates, stock-based compensation, interest rates and fuel prices. When CP utilizes derivative instruments in hedging relationships, CP identifies, designates and documents those hedging transactions and regularly tests the transactions to demonstrate effectiveness in order to continue hedge accounting.

All derivative instruments are classified as held for trading and recorded at fair value. Any change in the fair value of derivatives not designated as hedges is recognized in the period in which the change occurs in the Consolidated Statements of Income in the line item to which the derivative instrument is related. On the Consolidated Balance Sheets they are classified in "Other assets", "Other long-term liabilities", "Other current assets" or "Accounts payable and accrued liabilities" as applicable. Gains and losses arising from derivative instruments may affect the following lines on the Consolidated Statements of Income: "Revenues", "Compensation and benefits", "Fuel", "Other income and charges", and "Net interest expense".

For fair value hedges, the periodic changes in values are recognized in income, on the same line as the changes in values of the hedged items are also recorded. For a cash flow hedge, the change in value of the effective portion is recognized in "Other comprehensive income (loss)". Any ineffectiveness within an effective cash flow hedge is recognized in income as it arises in the same income account as the hedged item. Should a cash flow hedging relationship become ineffective, previously unrealized gains and losses remain within "Accumulated other comprehensive loss" until the hedged item is settled and, prospectively, future changes in value of the derivative are recognized in income. The change in value of the effective portion of a cash flow hedge remains in "Accumulated other comprehensive loss" until the related hedged item settles, at which time amounts recognized in "Accumulated other comprehensive loss" are reclassified to the same income or balance sheet account that records the hedged item.

In the Consolidated Statements of Cash Flows, cash flows relating to derivative instruments designated as hedges are included in the same line as the related hedged items.

Environmental remediation

Environmental remediation accruals, recorded on an undiscounted basis unless a reliably determinable estimate as to amount and timing of costs can be established, cover site-specific remediation programs. The accruals are recorded when the costs to remediate are probable and reasonably estimable. Certain future costs to monitor sites are discounted at an adjusted risk free rate. Provisions for environmental remediation costs are recorded in “Other long-term liabilities”, except for the current portion, which is recorded in “Accounts payable and accrued liabilities”.

Income taxes

The Company follows the liability method of accounting for income taxes. Deferred income tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities using enacted tax rates and laws that will be in effect when the differences are expected to reverse.

The effect of a change in income tax rates on deferred income tax assets and liabilities is recognized in income in the period during which the change occurs.

When appropriate, the Company records a valuation allowance against deferred tax assets to reflect that these tax assets may not be realized. In determining whether a valuation allowance is appropriate, CP considers whether it is more likely than not that all or some portion of CP’s deferred tax assets will not be realized, based on management’s judgment using available evidence about future events.

At times, tax benefit claims may be challenged by a tax authority. Tax benefits are recognized only for tax positions that are more likely than not sustainable upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50% likely to be realized upon settlement. A liability for “unrecognized tax benefits” is recorded for any tax benefits claimed in CP’s tax returns that do not meet these recognition and measurement standards.

Investment and other similar tax credits are deferred on the Consolidated Balance Sheets and amortized to “Income tax expense” as the related asset is recognized in income.

Earnings per share

Basic earnings per share are calculated using the weighted average number of common shares outstanding during the year. Diluted earnings per share are calculated using the treasury stock method for determining the dilutive effect of options.

Stock-based compensation

CP follows the fair value based approach to account for stock options. Compensation expense and an increase in “Additional paid-in capital” are recognized for stock options over their vesting period, or over the period from the grant date to the date employees become eligible to retire when this is shorter than the vesting period, based on their estimated fair values on the grant date, as determined using the Black-Scholes option-pricing model.

Any consideration paid by employees on exercise of stock options is credited to “Share capital” when the option is exercised and the recorded fair value of the option is removed from “Additional paid-in capital“ and credited to “Share capital”.

Compensation expense is also recognized for deferred share units (“DSUs”), performance share units (“PSUs”) and restricted share units (“RSUs”) using the fair value method. Compensation expense is recognized over the vesting period, or for PSUs and DSUs only, over the period from the grant date to the date employees become eligible to retire when this is shorter than the vesting period. Forfeitures of DSUs, PSUs and RSUs are estimated at issuance and subsequently at the balance sheet date.

The employee share purchase plan (“ESPP”) gives rise to compensation expense that is recognized using the issue price by amortizing the cost over the vesting period or over the period from the grant date to the date employees become eligible to retire when this is shorter than the vesting period.

2 Accounting changes

Implemented in 2016

Early Adoption of Restricted Cash

In November 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update (“ASU”) 2016-18, Restricted Cash a consensus of the FASB Emerging Issues Task Force under FASB Accounting Standards Codification ("ASC")Topic 230 Statement of Cash Flows. The amendments required the statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash and restricted cash equivalents. Restricted cash will therefore be included in beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The updated standard does not provide a definition of restricted cash and restricted cash equivalents. This ASU is effective retrospectively for public entities for fiscal years and interim periods within those years, beginning on or after December 15, 2017. Early adoption of this ASU is permitted. The Company adopted the provisions of this ASU during the fourth quarter of 2016. As a result of the adoption of ASU 2016-18, the 2014 comparative Statement of Cash Flows has been restated to reflect $411 million in restricted cash and cash equivalents used to collateralize letters of credit in the beginning-of-period total cash and cash equivalents, with the corresponding change in restricted cash and cash equivalents of the year removed from investing activities. There was no restricted cash balance remaining at the end of both comparative periods.

Amendments to the Consolidation Analysis

In February 2015, the FASB issued ASU 2015-02, Amendments to the Consolidation Analysis under FASB ASC Topic 810 Consolidation. The amendments required reporting entities to evaluate whether they should consolidate certain legal entities under the revised consolidation model. Specifically, the amendments modify the evaluation of whether limited partnerships and similar legal entities are variable interest entities (“VIEs”) or voting interest entities, eliminated the presumption that a general partner should consolidate a limited partnership and affected the consolidation analysis of reporting entities involved with VIEs, particularly those that have fee arrangements and related party relationships. This ASU was effective for public entities for fiscal years, and interim periods within those years, beginning on or after December 15, 2015. Entities had the option of using either a full retrospective or a modified retrospective approach to adopt this ASU. The Company evaluated all existing VIEs and all arrangements that might give rise to a VIE; no changes to consolidation, disclosure or financial statement presentation were required as a result of this evaluation.

Future changes

Simplifying the Subsequent Measurement of Inventory

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory under FASB ASC Topic 330 Inventory. The amendments require reporting entities to measure inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The amendments apply to inventory that is measured using the first-in, first-out or average cost basis. This ASU will be effective for public entities for fiscal years, and interim periods within those years, beginning after December 15, 2016, and will be applied prospectively. The Company does not anticipate that the adoption of this ASU will have an impact on the consolidated financial statements.

Leases

In February 2016, the FASB issued ASU 2016-02, Leases. The new FASB ASC Topic 842 Leases supersedes the lease recognition and measurement requirements in Topic 840 Leases. This new standard requires recognition of right-of-use assets and lease liabilities by lessees for those leases classified as finance and operating leases with a maximum term exceeding 12 months. This ASU will be effective for public entities for fiscal years, and interim periods within those years, beginning on or after December 15, 2018. Entities are required to use a modified retrospective approach to adopt this ASU. The Company is assessing contractual arrangements through a cross functional team and assessing potential system changes required to deliver required accounting changes. There will be a material increase to right of use assets and lease liabilities on the Consolidated balance sheet, but the Company does not anticipate a material impact on the Consolidated statement of income.

Revenue from Contracts with Customers

In March 2016, the FASB issued ASU 2016-08, Revenue from Contracts with Customers: Principal versus Agent Considerations under FASB ASC Topic 606. The amendments clarify the principal versus agent guidance in determining whether to recognize revenue on a gross or net basis. The amendments are effective for public entities for annual reporting periods beginning on or after December 15, 2017, including interim periods within that reporting period. Entities have the option of using either a full retrospective or a modified retrospective approach to adopt this ASU. CP is currently assessing the transition methods for adoption in the first quarter of 2018. CP expects to continue to recognize freight revenue, which represents greater than 95% of CP's annual revenues, over time and is currently reviewing agreements to determine the impact of the new standard on non-freight revenue.

Compensation – Stock Compensation

In March 2016, the FASB issued ASU 2016-09, Compensation – Stock Compensation, under ASC Topic 718. The amendments clarify the guidance relating to treatment of excess tax benefits and deficiencies, acceptable forfeiture rate policies, and treatment of cash paid by an employer when directly withholding shares for tax-withholding purposes and the requirement to treat such cash flows as a financing activity. This ASU will be effective for public entities for fiscal years, and interim periods within those years, beginning on or after December 15, 2016. Early adoption is permitted. The Company does not anticipate the adoption of this ASU will have an impact on the consolidated financial statements.

3 Other income and charges

(in millions of Canadian dollars)	2016	2015	2014

Foreign exchange (gain) loss on long-term debt	$(79)	$297	$ 11
Other foreign exchange gains	(5)	(24)	—
Early redemption premium on notes (Note 16)	—	47	—
Legal settlement	25	—	—
Other	14	15	8
Total other income and charges	$(45)	$335	$ 19

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4 Net interest expense

(in millions of Canadian dollars)	2016	2015	2014
Interest cost	$497	$409	$301
Interest capitalized to Properties	(25)	(14)	(15)
Interest expense	472	395	286
Interest income	(1)	(1)	(4)
Net interest expense	$471	$394	$282

Interest expense includes interest on capital leases of $11 million for the year ended December 31, 2016 (2015 – $11 million; 2014 – $12 million).

5 Income taxes

The following is a summary of the major components of the Company’s income tax expense:

(in millions of Canadian dollars)	2016	2015	2014
Current income tax expense	$233	$373	$208
Deferred income tax expense			
Origination and reversal of temporary differences	336	105	317
Effect of tax rate increases	—	23	—
Effect of hedge of net investment in foreign subsidiaries	(20)	100	42
Other	4	6	(5)
Total deferred income tax expense	320	234	354
Total income taxes	$553	$607	$562
Income before income tax expense			
Canada	$1,513	$1,099	$1,269
Foreign	639	860	769
Total income before income tax expense	$2,152	$1,959	$2,038
Income tax expense			
Current			
Canada	$165	$173	$50
Foreign	68	200	158
Total current income tax expense	233	373	208
Deferred			
Canada	207	163	292
Foreign	113	71	62
Total deferred income tax expense	320	234	354
Total income taxes	$553	$607	$562

The provision for deferred income taxes arises from temporary differences in the carrying values of assets and liabilities for financial statement and income tax purposes and the effect of loss carry forwards. The items comprising the deferred income tax assets and liabilities are as follows:

(in millions of Canadian dollars)	2016	2015
Deferred income tax assets		
Amount related to tax losses carried forward	$18	$16
Liabilities carrying value in excess of tax basis	149	89
Future environmental remediation costs	30	33
Tax credits carried forward including minimum tax	—	—
Other	58	72
Total deferred income tax assets	255	210
Deferred income tax liabilities		
Properties carrying value in excess of tax basis	3,796	3,553
Other	30	48
Total deferred income tax liabilities	3,826	3,601
Total net deferred income tax liabilities	$3,571	$3,391

The Company's consolidated effective income tax rate differs from the expected Canadian statutory tax rates. Expected income tax expense at statutory rates is reconciled to income tax expense as follows:

(in millions of Canadian dollars, except percentage)	2016	2015	2014
Statutory federal and provincial income tax rate (Canada)	26.65%	26.47%	26.31%
Expected income tax expense at Canadian enacted statutory tax rates	$573	$519	$536
Increase (decrease) in taxes resulting from:			
(Gains) losses not subject to tax	(23)	28	(5)
Canadian tax rate differentials	—	1	(1)
Foreign tax rate differentials	—	39	36
Effect of tax rate increases	—	23	—
Other	3	(3)	(4)
Income tax expense	$553	$607	$562

The Company has no unrecognized tax benefits from capital losses at December 31, 2016 and 2015.

The Company has not provided a deferred liability for the income taxes, if any, which might become payable on any temporary difference associated with its foreign investments because the Company intends to indefinitely reinvest in its foreign investments and has no intention to realize this difference by a sale of its interest in foreign investments. It is not practical to calculate the amount of the deferred tax liability.

During the second quarter of 2015, legislation was enacted to increase the province of Alberta's corporate income tax rate. As a result, the Company recalculated its deferred income taxes as at January 1, 2015 based on this change and recorded an income tax expense of $23 million in the second quarter of 2015.

At December 31, 2016, the Company had income tax operating losses carried forward of $48 million, which have been recognized as a deferred tax asset. Certain of these losses carried forward will begin to expire in 2027, with the majority expiring between 2029 and 2035. The Company also has minimum tax credits of approximately $1 million that are carried forward indefinitely without expiration. The Company did not have any investment tax credits carried forward.

It is more likely than not that the Company will realize the majority of its deferred income tax assets from the generation of future taxable income, as the payments for provisions, reserves and accruals are made and losses and tax credits carried forward are utilized.

The following table provides a reconciliation of uncertain tax positions in relation to unrecognized tax benefits for Canada and the United States for the year ended December 31, 2016:

(in millions of Canadian dollars)	2016	2015	2014
Unrecognized tax benefits at January 1	$15	$17	$16
Increase in unrecognized:			
Tax benefits related to the current year	—	4	2
Dispositions:			
Gross uncertain tax benefits related to prior years	(2)	(6)	(1)
Unrecognized tax benefits at December 31	$13	$15	$17

If these uncertain tax positions were recognized, all of the amount of unrecognized tax positions as at December 31, 2016 would impact the Company's effective tax rate.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as a component of income tax expense in the Company's Consolidated Statements of Income. The total amount of accrued interest and penalties in 2016 was $1 million (2015 – $4 million; 2014 – $1 million). The total amount of accrued interest and penalties associated with the unrecognized tax benefit at December 31, 2016 was $10 million (2015 – $9 million; 2014 – $5 million).

The Company and its subsidiaries are subject to either Canadian federal and provincial income tax, U.S. federal, state and local income tax, or the relevant income tax in other international jurisdictions. The Company has substantially concluded all Canadian federal and provincial income tax matters for the years through 2012. The federal and provincial income tax returns filed for 2013 and subsequent years remain subject to examination by the Canadian taxation authorities. The Internal Revenue Service ("IRS") of the United States has completed their examinations and issued notices of deficiency for the tax years 2012 and 2013. The Company disagrees with many of their proposed adjustments, and is at the IRS Appeals for those years. The income tax returns for 2014 and subsequent years continue to remain subject to examination by the IRS. Additionally, various U.S. state tax authorities are examining the Company's state income tax returns for the years 2011 through 2015. The Company believes that it has recorded sufficient income tax reserves at December 31, 2016 with respect to these income tax examinations.

The Company does not anticipate any material changes to the unrecognized tax benefits previously disclosed within the next twelve months as at December 31, 2016.

6 Earnings per share

Basic earnings per share have been calculated using net income for the year divided by the weighted average number of shares outstanding during the year.

Diluted earnings per share have been calculated using the treasury stock method which assumes that any proceeds received from the exercise of in-the-money options would be used to purchase CP Common Shares at the average market price for the period. For purposes of this calculation, at December 31, 2016, there were 2.2 million dilutive options outstanding (2015 – 2.5 million; 2014 – 3.1 million).

The number of shares used and the earnings per share calculations are reconciled as follows:

(in millions of Canadian dollars, except per share data)	2016	2015	2014
Net income	$1,599	$1,352	$1,476
Weighted average basic shares outstanding (millions)	149.6	159.7	172.8

Dilutive effect of weighted average number of stock options (millions)	0.9	1.3	1.6
Weighted average diluted shares outstanding (millions)	150.5	161.0	174.4
Earnings per share – basic	$10.69	$8.47	$8.54
Earnings per share – diluted	$10.63	$8.40	$8.46

In 2016, the number of options excluded from the computation of diluted earnings per share because their effect was not dilutive was 0.4 million (2015 – 0.2 million; 2014 – 0.1 million).

7 Other comprehensive income (loss) and accumulated other comprehensive loss

The components of “Accumulated other comprehensive loss”, net of tax, are as follows:

(in millions of Canadian dollars)	2016	2015
Unrealized foreign exchange gain on translation of the net investment in U.S. subsidiaries	$738	$870
Unrealized foreign exchange loss on translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries	(611)	(741)
Deferred losses on settled hedge instruments	(3)	(11)
Unrealized effective losses on cash flow hedges	(99)	(89)
Amounts for defined benefit pension and other post-retirement plans not recognized in income (Note 20)	(1,822)	(1,504)
Equity accounted investments	(2)	(2)
Accumulated other comprehensive loss	$(1,799)	$(1,477)

The components of Other comprehensive (loss) income and the related tax effects are as follows:

(in millions of Canadian dollars)	Before tax amount	Income tax recovery (expense)	Net of tax amount
For the year ended December 31, 2016			
Unrealized foreign exchange gain (loss) on:			
Translation of the net investment in U.S. subsidiaries	$ (132)	$ —	$ (132)
Translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries (Note 17)	150	(20)	130
Change in derivatives designated as cash flow hedges:			
Realized loss on cash flow hedges recognized in income	10	(2)	8
Unrealized loss on cash flow hedges	(12)	2	(10)
Change in pension and other benefits actuarial gains and losses	(422)	113	(309)
Change in prior service pension and other benefit costs	(12)	3	(9)
Other comprehensive loss	$ (418)	$ 96	$ (322)
For the year ended December 31, 2015			
Unrealized foreign exchange gain (loss) on:			
Translation of the net investment in U.S. subsidiaries	$ 671	$ —	$ 671
Translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries (Note 17)	(757)	100	(657)
Change in derivatives designated as cash flow hedges:			
Realized loss on cash flow hedges recognized in income	7	(2)	5
Unrealized loss on cash flow hedges	(76)	21	(55)
Change in pension and other benefits actuarial gains and losses	1,058	(281)	777
Change in prior service pension and other benefit costs	1	—	1
Other comprehensive income	$ 904	$ (162)	$ 742
For the year ended December 31, 2014			
Unrealized foreign exchange gain (loss) on:			
Translation of the net investment in U.S. subsidiaries	$ 287	$ —	$ 287
Translation of the U.S. dollar-denominated long-term debt designated as a hedge of the net investment in U.S. subsidiaries (Note 17)	(319)	42	(277)
Change in derivatives designated as cash flow hedges:			
Realized gain on cash flow hedges recognized in income	(3)	—	(3)

Unrealized loss on cash flow hedges	(46)	12	(34)
Change in pension and other benefits actuarial gains and losses	(873)	234	(639)
Change in prior service pension and other benefit costs	(68)	18	(50)
Other comprehensive loss	$ (1,022)	$ 306	$ (716)

Changes in accumulated other comprehensive loss by component:

(in millions of Canadian dollars)	Foreign currency net of hedging activities[1]	Derivatives and other[1]	Pension and post-retirement defined benefit plans[1]	Total[1]
Opening balance, 2016	$ 129	$ (102)	$ (1,504)	$(1,477)
Other comprehensive (loss) income before reclassifications	(2)	(10)	(456)	(468)
Amounts reclassified from accumulated other comprehensive loss	—	8	138	146
Net current-period other comprehensive income (loss)	(2)	(2)	(318)	(322)
Closing balance, 2016	$ 127	$ (104)	$ (1,822)	$(1,799)
Opening balance, 2015	$ 115	$ (52)	$ (2,282)	$(2,219)
Other comprehensive income (loss) before reclassifications	14	(55)	585	544
Amounts reclassified from accumulated other comprehensive loss	—	5	193	198
Net current-period other comprehensive income (loss)	14	(50)	778	742
Closing balance, 2015	$ 129	$ (102)	$ (1,504)	$(1,477)

[1] Amounts are presented net of tax.

Amounts in Pension and post-retirement defined benefit plans reclassified from Accumulated other comprehensive loss

	2016	2015
Amortization of prior service costs[1]	$(6)	$(5)
Recognition of net actuarial loss[1]	194	269
Total before income tax	$188	$264
Income tax recovery	(50)	(71)
Net of income tax	$138	$193

[1] Impacts Compensation and benefits on the Consolidated Statements of Income.

8 Change in non-cash working capital balances related to operations

(in millions of Canadian dollars)	2016	2015	2014
Source (use) of cash:			
Accounts receivable, net	$44	$80	$(112)
Materials and supplies	14	15	7
Other current assets	(18)	55	(75)
Accounts payable and accrued liabilities	(95)	125	56
Change in non-cash working capital	$(55)	$275	$(124)

9 Accounts receivable, net

(in millions of Canadian dollars)	2016	2015
Freight	$461	$491
Non-freight	162	185
	623	676
Allowance for doubtful accounts	(32)	(31)
Total accounts receivable, net	$591	$645

The Company maintains an allowance for doubtful accounts based on expected collectability of accounts receivable. Credit losses are based on specific identification of uncollectable accounts, the application of historical percentages by aging category and an assessment of the current economic environment. At December 31, 2016, allowances of $32 million (2015 – $31 million) were recorded in "Accounts receivable, net". During 2016, provisions of $7 million of accounts receivable (2015 – $7 million; 2014 – $2 million) were recorded within “Purchased services and other”.

10 Dispositions of properties

Gain on sale of Obico

During the fourth quarter of 2016, the Company completed the sale of its Obico rail yard, for gross proceeds of $38 million. The Company recorded a gain on sale of $37 million ($33 million after tax) within "Purchased services and other" from the transaction.

Gain on sale of Arbutus Corridor

In March 2016, the Company completed the sale of CP's Arbutus Corridor (the "Arbutus Corridor") to the City of Vancouver for gross proceeds of $55 million. The agreement allows the Company to share in future proceeds on the eventual development and/or sale of certain parcels of the Arbutus Corridor. The Company recorded a gain on sale of $50 million ($43 million after tax) within "Purchased services and other" from the transaction during the first quarter of 2016.

Gain on sale of Delaware & Hudson South

During the first quarter of 2015, the Company finalized a sales agreement with Norfolk Southern Corporation ("NS") for approximately 283 miles of the Delaware and Hudson Railway Company, Inc.'s line between Sunbury, Pennsylvania, and Schenectady, New York ("D&H South"). The sale, which received approval by the U.S. Surface Transportation Board ("STB") on May 15, 2015, was completed on September 18, 2015 for proceeds of $281 million (U.S. $214 million). The Company recorded a gain on sale of $68 million ($42 million after tax) from the transaction during the third quarter of 2015.

Gain on settlement of legal proceedings related to the purchase and sale of a building

In 2013, CP provided an interest free loan pursuant to a court order to a corporation owned by a court appointed trustee ("the judicial trustee") to facilitate the acquisition of a building. The building was held in trust during the legal proceedings with regard to CP's entitlement to an exercised purchase option of the building ("purchase option"). As at December 31, 2014, the loan of $20 million and the purchase option with a carrying value of $8 million, were recorded as "Other assets" in the Company's Consolidated Balance Sheets.

In the first quarter of 2015, CP reached a settlement with a third party that, following the sale of the building to an arm's-length third party, resulted in resolution of legal proceedings. CP received $59 million for the sale of the building which included repayment of the aforementioned loan to the judicial trustee. A gain of $31 million ($27 million after tax) was recorded as a credit within "Purchased services and other".

Dakota, Minnesota & Eastern Railroad – West

On January 2, 2014, the Company executed an agreement with Genesee & Wyoming Inc. ("G&W") for the sale of a portion of CP's DM&E line between Tracy, Minnesota; Rapid City, South Dakota; Colony, Wyoming; and Crawford, Nebraska to connecting branch lines ("DM&E West"). The sale was subject to regulatory approval by the STB.

On May 30, 2014, the Company completed the sale of DM&E West to G&W for net proceeds of $236 million (U.S. $218 million). As the assets of DM&E West had previously been written down to the estimated transaction amount in 2013, the transaction did not give rise to a significant earnings impact in 2014.

11 Investments

(in millions of Canadian dollars)	2016	2015
Rail investments accounted for on an equity basis	$136	$115
Other investments	58	37
Total investments	$194	$152

12 Properties

(in millions of Canadian dollars except percentages)	2016	2016			2015		
	Average annual depreciation rate	Cost	Accumulated depreciation	Net book value	Cost	Accumulated depreciation	Net book value
Track and roadway	2.8 %	$16,817	$ 4,573	$12,244	$16,303	$ 4,427	$11,876
Buildings	3.0 %	662	178	484	642	165	477
Rolling stock	2.8 %	4,060	1,524	2,536	4,041	1,524	2,517
Information systems[1]	11.7 %	584	299	285	599	291	308
Other	5.3 %	1,691	551	1,140	1,640	545	1,095
Total		$23,814	$ 7,125	$16,689	$23,225	$ 6,952	$16,273

[1] During 2016, CP capitalized costs attributable to the design and development of internal-use software in the amount of $46 million (2015 – $42 million; 2014 – $69 million). Current year depreciation expense related to internal use software was $63 million (2015 – $69 million; 2014 – $70 million).

Capital leases included in properties

(in millions of Canadian dollars)	2016			2015		
	Cost	Accumulated depreciation	Net book value	Cost	Accumulated depreciation	Net book value
Buildings	$1	$ 1	$ —	$1	$ 1	$ —
Rolling stock	311	105	206	311	96	215
Total assets held under capital lease	$312	$ 106	$ 206	$312	$ 97	$ 215

13 Goodwill and intangible assets

(in millions of Canadian dollars)	Goodwill	Intangible assets: Cost	Intangible assets: Accumulated amortization	Intangible assets: Net carrying amount	Total goodwill and intangible assets
Balance at December 31, 2014	$ 164	$22	$ (10)	$ 12	$ 176
Amortization	—	—	(1)	(1)	(1)
Foreign exchange impact	31	—	2	2	33
Additions	3	—	—	—	3
Balance at December 31, 2015	$ 198	$22	$ (9)	$ 13	$ 211
Amortization	—	—	(1)	(1)	(1)
Foreign exchange impact	(7)	—	(1)	(1)	(8)
Balance at December 31, 2016	$ 191	$22	$ (11)	$ 11	$ 202

14 Other assets

(in millions of Canadian dollars)	2016	2015
Long-term materials	$ 22	$ 20
Prepaid leases	6	9
Unamortized fees on credit facility	7	6
Contracted customer incentives	2	5
Long-term receivables	2	2
Other	18	21

Total other assets	$ 57	$ 63

Fees on credit facility and contracted customer incentives are amortized to income over the term of the related facility and over the term of the related revenue contract, respectively.

15 Accounts payable and accrued liabilities

(in millions of Canadian dollars)	2016	2015
Trade payables	$352	$339
Accrued charges	282	293
Income and other taxes payable	146	218
Accrued interest	137	147
Financial derivative liability (Note 17)	69	60
Payroll-related accruals	73	88
Accrued vacation	65	69
Dividends payable	73	53
Personal injury and other claims provision	26	30
Provision for environmental remediation (Note 18)	9	13
Stock-based compensation liabilities	40	48
Other	50	59
Total accounts payable and accrued liabilities	$1,322	$1,417

16 Debt

(in millions of Canadian dollars)		Maturity	Currency in which payable	2016	2015
6.500%	10-year Notes (A)	2018-05	U.S.$	$369	$380
6.250%	10-year Medium Term Notes (A)	2018-06	CDN$	375	374
7.250%	10-year Notes (A)	2019-05	U.S.$	469	484
9.450%	30-year Debentures (A)	2021-08	U.S.$	336	346
5.100%	10-year Medium Term Notes (A)	2022-01	CDN$	125	125
4.500%	10-year Notes (A)	2022-01	U.S.$	333	343
4.450%	12.5-year Notes (A)	2023-03	U.S.$	469	483
7.125%	30-year Debentures (A)	2031-10	U.S.$	470	484
5.750%	30-year Debentures (A)	2033-03	U.S.$	328	339
5.950%	30-year Notes (A)	2037-05	U.S.$	597	615
6.450%	30-year Notes (A)	2039-11	CDN$	400	400
5.750%	30-year Notes (A)	2042-01	U.S.$	330	340
2.900%	10-year Notes (A)	2025-02	U.S.$	940	968
3.700%	10.5-year Notes (A)	2026-02	U.S.$	335	345
4.800%	30-year Notes (A)	2045-08	U.S.$	736	759
4.800%	20-year Notes (A)	2035-09	U.S.$	401	413
6.125%	100-year Notes (A)	2115-09	U.S.$	1,208	1,246
5.41%	Senior Secured Notes (B)	2024-03	U.S.$	126	138
6.91%	Secured Equipment Notes (C)	2024-10	CDN$	133	145
7.49%	Equipment Trust Certificates (D)	2021-01	U.S.$	56	64
Other long-term loans (nil% – 5.50%)		2016 – 2025	U.S.$/CDN$	—	10
Obligations under capital leases					
	(6.313% – 6.99%) (E)	2022 – 2026	U.S.$	163	172
	(12.77%) (E)	2031-01	CDN$	3	3
				8,702	8,976
Perpetual 4% Consolidated Debenture Stock (F)			U.S.$	41	42
Perpetual 4% Consolidated Debenture Stock (F)			G.B.£	6	7
				8,749	9,025
Less: Unamortized fees on long-term debt				65	68
				8,684	8,957
Less: Long-term debt maturing within one year				25	30
				$8,659	$8,927

At December 31, 2016, the gross amount of long-term debt denominated in U.S. dollars was U.S. $5,763 million (2015 – U.S. $5,788 million).

Annual maturities and principal repayment requirements, excluding those pertaining to capital leases, for each of the five years following 2016 are (in millions): 2017 – $21; 2018 – $766; 2019 – $493; 2020 – $66; 2021 – $377.

Fees on long-term debt are amortized to income over the term of the related debt.

During the year ended December 31, 2015, the Company repaid Senior Secured Notes in advance of their maturities for a total of U.S. $285 million ($379 million). The repayments were inclusive of the remaining principal of the notes, totalling U.S. $247 million ($329 million), early redemption premiums of U.S. $34 million ($45 million), and accrued interest of U.S. $4 million ($5 million). The early redemption premiums and accrued interest are included in “Other income and charges” and “Net interest expense” on the Company's Consolidated Statements of Income, respectively. The Company also expensed the unamortized financing fees of $2 million to “Other income and charges” upon payments of the notes.

A. These debentures and notes pay interest semi-annually and are unsecured, but carry a negative pledge.

During the first quarter of 2015, the Company issued U.S. $700 million 2.900% 10-year Notes due February 1, 2025 for net proceeds of U.S. $694 million ($873 million). In addition, the Company settled a notional U.S. $700 million of forward starting floating-to-fixed interest rate swap agreements ("forward starting swaps") for a payment of U.S. $50 million ($63 million) cash (see Note 17). This payment was included in the same line item as the related hedged item on the Company's Consolidated Statements of Cash Flows. Inclusive of the settlement of the forward starting swap, the annualized effective yield at issuance was 3.61%.

During the third quarter of 2015, the Company issued U.S. $550 million 4.800% 30-year Notes due August 1, 2045 and U.S. $250 million 3.700% 10.5-year notes due February 1, 2026 for a total of U.S. $800 million with net proceeds of U.S. $789 million ($1,032 million).

During the third quarter of 2015, the Company also issued U.S. $900 million 6.125% 100-year Notes due September 15, 2115 and U.S. $300 million 4.800% 20-year Notes due September 15, 2035 for a total of U.S. $1,200 million with net proceeds of U.S. $1,186 million ($1,569 million). At the time of the debt issuance the Company de-designated the hedging relationship for U.S. $700 million of the existing forward starting swaps. The Company did not cash settle these swaps and therefore recorded a non-cash loss of U.S. $36 million ($47 million) in "Accumulated other comprehensive loss" (see Note 17). Subsequently, the Company re-designated U.S. $700 million forward starting swaps as a hedging relationship to fix the benchmark rate on cash flows associated with a highly probable forecasted issuance of long-term notes.

B. The 5.41% Senior Secured Notes are collateralized by specific locomotive units with a carrying value of $124 million at December 31, 2016. The Company pays equal blended semi-annual payments of principal and interest. Final repayment of the remaining principal of U.S. $44 million is due in March 2024.

C. The 6.91% Secured Equipment Notes are full recourse obligations of the Company collateralized by a first charge on specific locomotive units with a carrying value of $115 million at December 31, 2016. The Company pays equal blended semi-annual payments of principal and interest. Final repayment of the remaining principal of $11 million is due in October 2024.

D. The 7.49% Equipment Trust Certificates are secured by specific locomotive units with a carrying value of $117 million at December 31, 2016. The Company makes semi-annual payments that vary in amount and are interest-only payments or blended principal and interest payments. Final repayment of the remaining principal of U.S. $11 million is due in January 2021.

E. At December 31, 2016, capital lease obligations included in long-term debt were as follows:

(in millions of Canadian dollars)	Year	Capital leases
Minimum lease payments in:		
	2017	$ 16
	2018	16
	2019	16
	2020	16
	2021	16
	Thereafter	152
Total minimum lease payments		232
Less: Imputed interest		(66)
Present value of minimum lease payments		166
Less: Current portion		(4)

Long-term portion of capital lease obligations	$	162

During 2016, the Company had no additions to property, plant and equipment under capital lease obligations (2015 – $nil; 2014 – $nil).

The carrying value of the assets collateralizing the capital lease obligations was $206 million at December 31, 2016.

F. The Consolidated Debenture Stock, authorized by an Act of Parliament of 1889, constitutes a first charge upon and over the whole of the undertaking, railways, works, rolling stock, plant, property and effects of the Company, with certain exceptions.

Credit facility

CP has a revolving credit facility (the "facility") agreement with 15 highly rated financial institutions for a commitment amount of U.S. $2 billion. The facility includes a U.S. $1 billion one-year plus one-year term-out portion and a U.S. $1 billion five-year portion. The facility can accommodate draws of cash and/or letters of credit at market competitive pricing. The agreement requires the Company not to exceed a maximum debt to earnings before interest, tax, depreciation, and amortization ratio.

Effective June 28, 2016, the Company extended the maturity date by one year on its credit facility. The maturity date on the first U.S. $1 billion tranche was extended to June 28, 2018; the maturity date on the second U.S. $1 billion tranche was extended to June 28, 2021. As at December 31, 2016 and 2015, the Company was in compliance with all terms and conditions of the credit facility arrangements and satisfied the threshold stipulated in the amended financial covenant. As at December 31, 2016 and 2015, the facility was undrawn.

The amount available under the terms of the credit facility was U.S. $2 billion at December 31, 2016 (December 31, 2015 – U.S. $2 billion).
The Company has also established a commercial paper program which enables it to issue commercial paper up to a maximum aggregate principal amount of U.S. $1 billion in the form of unsecured promissory notes. The commercial paper program is backed by the U.S. $1 billion committed, revolving credit facility tranche which matures on June 28, 2018. The Company had no commercial paper borrowings as at December 31, 2016 (December 31, 2015 – $nil).

CP has bilateral letter of credit facilities with 6 highly rated financial institutions to support its requirement to post letters of credit in the ordinary course of business. Under these agreements, the Company has the option to post collateral in the form of cash or cash equivalents, equal at least to the face value of the letter of credit issued. These agreements permit CP to withdraw amounts posted as collateral at any time; therefore, the amounts posted as collateral are presented as “Cash and cash equivalents” on the Company’s Consolidated Balance Sheets.

At December 31, 2016, under its bilateral facilities the Company had letters of credit drawn of $320 million (December 31, 2015 – $375 million) from a total available amount of $600 million (December 31, 2015 – $600 million). At December 31, 2016, under the terms of the bilateral letter of credit facilities, no cash and cash equivalents was recorded as “Restricted cash and cash equivalents” (December 31, 2015 – $nil).

17 Financial instruments

A. Fair values of financial instruments

The Company categorizes its financial assets and liabilities measured at fair value into a three-level hierarchy established by GAAP that prioritizes those inputs to valuation techniques used to measure fair value based on the degree to which they are observable. The three levels of the fair value hierarchy are as follows: Level 1 inputs are quoted prices in active markets for identical assets and liabilities; Level 2 inputs, other than quoted prices included within Level 1, are observable for the asset or liability either directly or indirectly; and Level 3 inputs are not observable in the market.

When possible, the estimated fair value is based on quoted market prices and, if not available, estimates from third-party brokers. For non-exchange traded derivatives classified in Level 2, the Company uses standard valuation techniques to calculate fair value. Primary inputs to these techniques include observable market prices (interest, FX and commodity) and volatility, depending on the type of derivative and nature of the underlying risk. The Company uses inputs and data used by willing market participants when valuing derivatives and considers its own credit default swap spread as well as those of its counterparties in its determination of fair value.

The carrying values of financial instruments equal or approximate their fair values with the exception of long-term debt which has a fair value of approximately $9,981 million at December 31, 2016 (December 31, 2015 – $9,750 million) and a carrying value of $8,684 million (December 31, 2015 – $8,957 million). The estimated fair value of current and long-term borrowings has been determined based on market information where available, or by discounting future payments of interest and principal at estimated interest rates expected to be available to the

Company at period end. All derivatives and long-term debt are classified as Level 2.

As at December 31, 2016 and 2015, the Company did not have any deposits in the form of short-term investments with financial institutions.

B. Financial risk management

Derivative financial instruments

Derivative financial instruments may be used to selectively reduce volatility associated with fluctuations in interest rates, FX rates, the price of fuel and stock-based compensation expense. Where derivatives are designated as hedging instruments, the relationship between the hedging instruments and their associated hedged items is documented, as well as the risk management objective and strategy for the use of the hedging instruments. This documentation includes linking the derivatives that are designated as fair value or cash flow hedges to specific assets or liabilities on the Consolidated Balance Sheets, commitments or forecasted transactions. At the time a derivative contract is entered into and at least quarterly thereafter, an assessment is made as to whether the derivative item is effective in offsetting the changes in fair value or cash flows of the hedged items. The derivative qualifies for hedge accounting treatment if it is effective in substantially mitigating the risk it was designed to address.

It is not the Company’s intent to use financial derivatives or commodity instruments for trading or speculative purposes.

Credit risk management

Credit risk refers to the possibility that a customer or counterparty will fail to fulfill its obligations under a contract and as a result create a financial loss for the Company.

The railway industry predominantly serves financially established customers and the Company has experienced limited financial losses with respect to credit risk. The credit worthiness of customers is assessed using credit scores supplied by a third party, and through direct monitoring of their financial well-being on a continual basis. The Company establishes guidelines for customer credit limits and should thresholds in these areas be reached, appropriate precautions are taken to improve collectability.

Counterparties to financial instruments expose the Company to credit losses in the event of non-performance. Counterparties for derivative and cash transactions are limited to high credit quality financial institutions, which are monitored on an ongoing basis. Counterparty credit assessments are based on the financial health of the institutions and their credit ratings from external agencies. The Company does not anticipate non-performance that would materially impact the Company’s financial statements. In addition, the Company believes there are no significant concentrations of credit risk.

FX management

The Company conducts business transactions and owns assets in both Canada and the United States. As a result, the Company is exposed to fluctuations in value of financial commitments, assets, liabilities, income or cash flows due to changes in FX rates. The Company may enter into FX risk management transactions primarily to manage fluctuations in the exchange rate between Canadian and U.S. currencies. FX exposure is primarily mitigated through natural offsets created by revenues, expenditures and balance sheet positions incurred in the same currency. Where appropriate, the Company may negotiate with customers and suppliers to reduce the net exposure.

Occasionally the Company will enter into short-term FX forward contracts as part of its cash management strategy.

Net investment hedge

The FX gains and losses on long-term debt are mainly unrealized and can only be realized when U.S. dollar-denominated long-term debt matures or is settled. The Company also has long-term FX exposure on its investment in U.S. affiliates. The majority of the Company’s U.S. dollar-denominated long-term debt has been designated as a hedge of the net investment in foreign subsidiaries. This designation has the effect of mitigating volatility on net income by offsetting long-term FX gains and losses on U.S. dollar-denominated long-term debt and gains and losses on its net investment. The effective portion recognized in “Other comprehensive income” in 2016 was an FX gain of $150 million, the majority of which was unrealized (2015 – loss of $757 million, the majority of which was unrealized; 2014 – unrealized loss of $319 million) (see Note 7). There was no ineffectiveness during 2016 (2015 – $nil; 2014 – $nil).

FX forward contracts

The Company may enter into FX forward contracts to lock-in the amount of Canadian dollars it has to pay on U.S. dollar-denominated debt maturities.

At December 31, 2016, the Company had net unamortized gains related to FX forward contracts to fix the exchange rate on U.S. dollar-denominated debt maturities settled in previous years totalling $1 million (December 31, 2015 – $2 million). During 2016, $1 million of pretax gain related to these previously settled derivatives has been amortized from "Accumulated other comprehensive loss" to “Other income and charges” (December 31, 2015 – $1 million). At December 31, 2016, the Company expected that, during the next 12 months, a $1 million pretax gain will be reclassified to “Other income and charges”.

At December 31, 2016 and 2015, the Company had no remaining FX forward contracts to fix the exchange rate on U.S. dollar-denominated debt maturities.

Interest rate management

The Company is exposed to interest rate risk, which is the risk that the fair value or future cash flows of a financial instrument will vary as a result of changes in market interest rates. In order to manage funding needs or capital structure goals, the Company enters into debt or capital lease agreements that are subject to either fixed market interest rates set at the time of issue or floating rates determined by ongoing market conditions. Debt subject to variable interest rates exposes the Company to variability in interest expense, while debt subject to fixed interest rates exposes the Company to variability in the fair value of debt.

To manage interest rate exposure, the Company accesses diverse sources of financing and manages borrowings in line with a targeted range of capital structure, debt ratings, liquidity needs, maturity schedule, and currency and interest rate profiles. In anticipation of future debt issuances, the Company may enter into forward rate agreements, that are designated as cash flow hedges, to substantially lock in all or a portion of the effective future interest expense. The Company may also enter into swap agreements, designated as fair value hedges, to manage the mix of fixed and floating rate debt.

Forward starting swaps

As at December 31, 2016 and 2015, the Company had forward starting floating-to-fixed interest rate swap agreements ("forward starting swaps") totalling a notional U.S. $700 million to fix the benchmark rate on cash flows associated with highly probable forecasted issuances of long-term notes. The effective portion of changes in fair value on the forward starting swaps is recorded in "Accumulated other comprehensive loss", net of tax, as cash flow hedges until the highly probable forecasted notes are issued. Subsequent to the notes issuance, amounts in "Accumulated other comprehensive loss" are reclassified to "Net interest expense".

During the first quarter of 2015, the Company settled a notional U.S. $700 million of forward starting swaps related to the U.S. $700 million 2.900% 10-year notes issued in the same period.

During the third quarter of 2015, the Company de-designated the hedging relationship for U.S. $700 million of forward starting swaps related to a portion of the U.S. $900 million 6.125% 100-year notes issued. The Company did not cash settle these swaps and concurrently re-designated the forward starting swaps totalling U.S. $700 million to fix the benchmark rate on cash flows associated with a highly probable forecasted issuance of long-term notes.

During the second quarter of 2016, the Company rolled the notional U.S. $700 million forward starting swaps. The Company de-designated the hedging relationship for U.S. $700 million of forward starting swaps. The Company did not cash settle these swaps. There was no ineffectiveness to record upon de-designation.

Concurrently the Company re-designated the forward starting swaps totalling U.S. $700 million to fix the benchmark rate on cash flows associated with a highly probable forecasted debt issuance of long-term notes.

As at December 31, 2016, the total fair value loss of $69 million (December 31, 2015 – fair value loss of $60 million) derived from the forward starting swaps was included in "Accounts payable and accrued liabilities". Changes in fair value from the forward starting swaps for the year ended December 31, 2016 was a loss of $9 million (2015 – a loss of $77 million). The effective portion for the year ended December 31, 2016 was a loss of $12 million (2015 – loss of $75 million) and was recorded in "Other comprehensive income". For the year ended December 31, 2016, the ineffective portion was a $3 million gain (2015 – $2 million loss) and is recorded to "Net interest expense" on the Consolidated Statements of Income.

For the year ended December 31, 2016, a loss of $11 million related to previous forward starting swap hedges has been amortized to "Net interest expense" (2015 – a loss of $6 million). The Company expects that during the next 12 months $11 million of losses will be amortized to "Net interest expense".

Treasury rate locks

At December 31, 2016, the Company had net unamortized losses related to interest rate locks, which are accounted for as cash flow hedges, settled in previous years totalling $21 million (December 31, 2015 – $21 million). This amount is composed of various unamortized gains and losses related to specific debts which are reflected in "Accumulated other comprehensive loss" and are amortized to "Net interest expense" in the period that interest on the related debt is charged. The amortization of these gains and losses resulted in a negligible increase to "Net interest expense" and "Other comprehensive income" in 2016 (2015 – negligible; 2014 – negligible). At December 31, 2016, the Company expected that, during the next 12 months, a negligible amount of loss related to these previously settled derivatives would be reclassified to "Net interest expense".

Fuel price management

The Company is exposed to commodity risk related to purchases of diesel fuel and the potential reduction in net income due to increases in the price of diesel. Fuel expense constitutes a large portion of the Company's operating costs and volatility in diesel fuel prices can have a significant impact on the Company's income. Items affecting volatility in diesel prices include, but are not limited to, fluctuations in world markets for crude oil and distillate fuels, which can be affected by supply disruptions and geopolitical events.

The impact of variable fuel expense is mitigated substantially through fuel cost adjustment programs, which apportion incremental changes in fuel prices to shippers through price indices, tariffs, and by contract, within agreed-upon guidelines. While these programs provide effective and meaningful coverage, residual exposure remains as the fuel expense risk may not be completely recovered from shippers due to timing and volatility in the market.

18 Other long-term liabilities

(in millions of Canadian dollars)	2016	2015
Provision for environmental remediation, net of current portion[1]	$76	$80
Stock-based compensation liabilities, net of current portion	72	73
Deferred revenue on rights-of-way licence agreements, net of current portion	29	33
Deferred retirement compensation	29	28
Deferred gains on sale leaseback transactions	19	22
Other, net of current portion	59	82
Total other long-term liabilities	$284	$318

[1] As at December 31, 2016, the aggregate provision for environmental remediation, including the current portion was $85 million (2015 – $93 million).

The deferred revenue on rights-of-way licence agreements, and deferred gains on sale leaseback transactions are being amortized to income on a straight-line basis over the related lease terms.

Environmental remediation accruals

Environmental remediation accruals cover site-specific remediation programs. The estimate of the probable costs to be incurred in the remediation of properties contaminated by past railway use reflects the nature of contamination at individual sites according to typical activities and scale of operations conducted. CP has developed remediation strategies for each property based on the nature and extent of the contamination, as well as the location of the property and surrounding areas that may be adversely affected by the presence of contaminants, considering available technologies, treatment and disposal facilities and the acceptability of site-specific plans based on the local regulatory environment. Site-specific plans range from containment and risk management of the contaminants through to the removal and treatment of the contaminants and affected soils and groundwater. The details of the estimates reflect the environmental liability at each property. Provisions for environmental remediation costs are recorded in “Other long-term liabilities”, except for the current portion which is recorded in “Accounts payable and accrued liabilities” (see Note 15). Payments are expected to be made over 10 years to 2026.

The accruals for environmental remediation represent CP’s best estimate of its probable future obligation and include both asserted and unasserted claims, without reduction for anticipated recoveries from third parties. Although the recorded accruals include CP’s best estimate of all probable costs, CP’s total environmental remediation costs cannot be predicted with certainty. Accruals for environmental remediation may change from time to time as new information about previously untested sites becomes known, environmental laws and regulations evolve and advances are made in environmental remediation technology. The accruals may also vary as the courts decide legal proceedings against outside parties responsible for contamination. These potential charges, which cannot be quantified at this time, may materially affect income in the particular period in which a charge is recognized. Costs related to existing, but as yet unknown, or future contamination will be accrued in the period in which they become probable and reasonably estimable. Changes to costs are reflected as changes to “Other long-term liabilities” or “Accounts payable and accrued liabilities” on the Company's Consolidated Balance Sheets and to “Purchased services and other” within operating expenses on the Company's Consolidated Statements of Income. The amount charged to income in 2016 was $6 million (2015 – $7 million; 2014 – $4 million).

19 Shareholders’ equity

Authorized and issued share capital

The Company is authorized to issue an unlimited number of Common Shares, an unlimited number of First Preferred Shares and unlimited number of Second Preferred Shares. At December 31, 2016, no First or Second Preferred Shares had been issued.

An analysis of Common Share balances is as follows:

(number of shares in millions)	2016	2015	2014
Share capital, January 1	153.0	166.1	175.4
CP Common Shares repurchased	(6.9)	(13.7)	(10.3)
Shares issued under stock option plan	0.2	0.6	1.0
Share capital, December 31	146.3	153.0	166.1

The change in the “Share capital” balances includes $1 million (2015 – $2 million; 2014 – $3 million) related to the cancellation of the tandem share appreciation rights liability on exercise of tandem stock options, and $5 million (2015 – $10 million; 2014 – $17 million) of stock-based compensation transferred from “Additional paid-in capital”.

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Share repurchase

On March 11, 2014, the Company announced a new share repurchase program to implement a normal course issuer bid (“NCIB”) to purchase, for cancellation, up to 5.3 million Common Shares before March 16, 2015. On September 29, 2014, the Company announced the amendment of the bid to increase the maximum number of its Common Shares that may be purchased from 5.3 million to 12.7 million of its outstanding Common Shares. The Company completed the purchase of 10.5 million Common Shares in 2014. An additional 2.2 million Common Shares were purchased for $490 million in the first quarter of 2015 prior to the March 16, 2015 expiry date of the program.

On March 16, 2015, the Company announced the renewal of its NCIB, commencing March 18, 2015, to purchase up to 9.1 million of its outstanding Common Shares for cancellation before March 17, 2016. On August 31, 2015, the Company amended the NCIB to increase the maximum number of its Common Shares that may be purchased from 9.1 million to 11.9 million of its outstanding Common Shares. As at December 31, 2015, the Company had purchased 11.3 million Common Shares for $2,258 million under this NCIB program.

On April 20, 2016, the Company announced a new NCIB, commencing May 2, 2016 to May 1, 2017, to purchase up to 6.9 million of its outstanding Common Shares for cancellation. The Company completed this NCIB on September 28, 2016.

All purchases are made in accordance with the respective NCIB at prevalent market prices plus brokerage fees, or such other prices that may be permitted by the Toronto Stock Exchange, with consideration allocated to share capital up to the average carrying amount of the shares, and any excess allocated to "Retained earnings". The following table provides the activities under the share repurchase programs:

	2016	2015	2014
Number of Common Shares repurchased(1)	6,910,000	13,549,977	10,476,074
Weighted-average price per share(2)	$ 175.08	$ 202.79	$ 199.42
Amount of repurchase (in millions)(2)	$ 1,210	$ 2,748	$ 2,089

(1) Excludes shares repurchased and not yet cancelled in the prior year.
(2) Includes brokerage fees.

20 Pensions and other benefits

The Company has both defined benefit (“DB”) and defined contribution (“DC”) pension plans. At December 31, 2016, the Canadian pension plans represent approximately 99% of total combined pension plan assets and approximately 98% of total combined pension plan obligations.

The DB plans provide for pensions based principally on years of service and compensation rates near retirement. Pensions for Canadian pensioners are partially indexed to inflation. Annual employer contributions to the DB plans, which are actuarially determined, are made on the basis of being not less than the minimum amounts required by federal pension supervisory authorities.

The Company has other benefit plans including post-retirement health and life insurance for pensioners, and post-employment long-term disability and workers’ compensation benefits, which are based on Company-specific claims. At December 31, 2016, the Canadian other benefits plans represent approximately 96% of total combined other plan obligations.

The Finance Committee of the Board of Directors has approved an investment policy that establishes long-term asset mix targets which take into account the Company's expected risk tolerances. Pension plan assets are managed by a suite of independent investment managers, with the allocation by manager reflecting these asset mix targets. Most of the assets are actively managed with the objective of outperforming applicable benchmarks. In accordance with the investment policy, derivative instruments may be used to hedge or adjust existing or anticipated exposures.

To develop the expected long-term rate of return assumption used in the calculation of net periodic benefit cost applicable to the market-related value of assets, the Company considers the expected composition of the plans' assets, past experience and future estimates of long-term investment returns. Future estimates of investment returns reflect the expected annual yield on applicable fixed income capital market indices, and the long-term return expectation for public equity, real estate, infrastructure and absolute return investments and the expected added value (relative to applicable benchmark indices) from active management of pension fund assets.

The Company has elected to use a market-related value of assets for the purpose of calculating net periodic benefit cost, developed from a five-year average of market values for the plans' public equity and absolute return investments (with each prior year's market value adjusted to the current date for assumed investment income during the intervening period) plus the market value of the plans' fixed income, real estate and infrastructure securities.

The benefit obligation is discounted using a discount rate that is a blended yield to maturity for a hypothetical portfolio of high-quality corporate debt instruments with cash flows matching project benefit payments. The discount rate is determined by management.

Net periodic benefit cost

The elements of net periodic benefit cost for DB pension plans and other benefits recognized in the year include the following components:

	Pensions			Other benefits		
(in millions of Canadian dollars)	2016	2015	2014	2016	2015	2014
Current service cost (benefits earned by employees in the year)	$106	$126	$106	$11	$ 12	$ 14
Interest cost on benefit obligation	467	463	477	21	21	23
Expected return on fund assets	(846)	(816)	(757)	—	—	—
Recognized net actuarial loss (gain)	190	265	190	7	2	(2)
Amortization of prior service costs	(7)	(6)	(68)	1	1	—
Net periodic benefit (recovery) cost	$(90)	$32	$(52)	$40	$ 36	$ 35

Projected benefit obligation, fund assets, and funded status

Information about the Company's DB pension plans and other benefits, in aggregate, is as follows:

	Pensions		Other benefits	
(in millions of Canadian dollars)	2016	2015	2016	2015
Change in projected benefit obligation:				
Benefit obligation at January 1	$11,194	$11,360	$513	$517
Current service cost	106	126	11	12
Interest cost	467	463	21	21
Employee contributions	40	43	1	1
Benefits paid	(645)	(608)	(31)	(34)
Foreign currency changes	(7)	42	—	4
Plan amendments and other	6	(6)	—	—
Actuarial loss (gain)	238	(226)	(5)	(8)
Projected benefit obligation at December 31	$11,399	$11,194	$510	$513

	Pensions		Other benefits	
(in millions of Canadian dollars)	2016	2015	2016	2015
Change in fund assets:				
Fair value of fund assets at January 1	$12,300	$11,376	$6	$7
Actual return on fund assets	461	1,374	(1)	(1)
Employer contributions	48	81	30	33
Employee contributions	40	43	1	1
Benefits paid	(645)	(608)	(31)	(34)
Foreign currency changes	(8)	34	—	—
Fair value of fund assets at December 31	$12,196	$12,300	$5	$6
Funded status – plan surplus (deficit)	$797	$1,106	$(505)	$(507)

	2016		2015	
(in millions of Canadian dollars)	Pension plans in surplus	Pension plans in deficit	Pension plans in surplus	Pension plans in deficit
Projected benefit obligation at December 31	$(10,902)	$ (497)	$(10,681)	$ (513)
Fair value of fund assets at December 31	11,972	224	12,082	218

Funded Status	$1,070	$ (273)	$1,401	$ (295)

All Other benefits plans were in a deficit position at December 31, 2016 and 2015.

Pension asset and liabilities in the Company's Consolidated Balance Sheets

Amounts recognized in the Company's Consolidated Balance Sheets are as follows:

	Pensions		Other benefits	
(in millions of Canadian dollars)	2016	2015	2016	2015
Pension asset	$1,070	$1,401	$—	$—
Accounts payable and accrued liabilities	(10)	(10)	(34)	(34)
Pension and other benefit liabilities	(263)	(285)	(471)	(473)
Total amount recognized	$797	$1,106	$(505)	$(507)

The defined benefit pension plans' accumulated benefit obligation as at December 31, 2016 was $11,143 million (2015 – $10,893 million). The accumulated benefit obligation is calculated on a basis similar to the projected benefit obligation, except no future salary increases are assumed in the projection of future benefits.

The measurement date used to determine the plan assets and the accrued benefit obligation is December 31. The most recent actuarial valuation for pension funding purposes for the Company's main Canadian pension plan was performed as at January 1, 2016. During 2017, the Company expects to file a new valuation with the pension regulator.

Accumulated other comprehensive losses

Amounts recognized in accumulated other comprehensive losses are as follows:

	Pensions		Other benefits	
(in millions of Canadian dollars)	2016	2015	2016	2015
Net actuarial loss:				
Other than deferred investment gains	$2,842	$3,144	$ 66	$ 77
Deferred investment gains	(366)	(1,101)	—	—
Prior service cost	(7)	(20)	3	4
Deferred income tax	(699)	(580)	(17)	(20)
Total (Note 7)	$1,770	$1,443	$ 52	$ 61

The unamortized actuarial loss and the unamortized prior service cost included in "Accumulated other comprehensive loss" that are expected to be recognized in net periodic benefit cost during 2017 are $153 million and a recovery of $5 million, respectively, for pensions and $2 million and $1 million, respectively, for other post-retirement benefits.

Actuarial assumptions

Weighted-average actuarial assumptions used were approximately:

(percentages)	2016	2015	2014
Benefit obligation at December 31:			
Discount rate	4.02	4.22	4.09
Projected future salary increases	2.75	3.00	3.00
Health care cost trend rate	7.00 (1)	7.00 (2)	7.00 (2)
Benefit cost for year ended December 31:			
Discount rate	4.22	4.09	4.90
Expected rate of return on fund assets	7.75	7.75	7.75
Projected future salary increases	3.00	3.00	3.00
Health care cost trend rate	7.00 (2)	7.00 (2)	7.50 (3)

(1) The health care cost trend rate is assumed to be 7.00% in 2017 and 2018, and then decreasing by 0.50% per year to an ultimate rate of 5.00% per year in 2022 and thereafter.
(2) The health care cost trend rate was previously assumed to be 6.50% in 2017 (7.00% in 2016 and 2015), and then decreasing by 0.50% per year to an ultimate rate of 5.00% per year in 2020 and thereafter.
(3) For the 2014 benefit cost, the health care cost trend rate was assumed to be 6.00% in 2017 (6.50% in 2016, 7.00% in 2015, 7.50% in 2014), and then decreasing by 0.50% per year to an ultimate rate of 5.00% per year in 2019 and thereafter.

Assumed health care cost trend rates affect the amounts reported for the health care plans. A one-percentage-point increase in the assumed health care cost trend rate would increase the post-retirement benefit obligation by $6 million, and a one-percentage-point decrease in the assumed health care cost trend rate would decrease the post-retirement benefit obligation by $5 million. A one-percentage-point increase or decrease in the assumed health care cost trend rate would have no material effect on the total of service and interest costs.

In 2014, the Canadian Institute of Actuaries and the Society of Actuaries each published updated mortality tables based on broad pension plan experience in Canada and the U.S., respectively. At December 31, 2014, the Company changed the basis for its obligations for defined benefit pension and post-retirement benefit plans to these new mortality tables, with adjustments to reflect actual plan mortality experience to the extent that credible experience data were available. The changes to the new mortality tables increased the obligations for pensions and post-retirement benefits at that date by approximately $225 million. The Company's obligations for defined benefit pension and post-retirement benefit plans continue to be based on the new mortality tables at December 31, 2016.

Plan assets

Plan assets are recorded at fair value. The major asset categories are public equity securities, fixed income securities, real estate, infrastructure and absolute return investments. The fair values of the public equity and fixed income securities are primarily based on quoted market prices. Real estate values are based on annual valuations performed by external parties, taking into account current market conditions and recent sales transactions where practical and appropriate. Infrastructure values are based on the fair value of each fund’s assets as calculated by the fund manager, generally using a discounted cash flow analysis that takes into account current market conditions and recent sales transactions where practical and appropriate. Absolute return investments are a portfolio of units of externally managed hedge funds and are valued by the fund administrators.

The Company’s pension plan asset allocation, the current weighted average asset allocation targets and the current weighted average policy range for each major asset class, were as follows:

	Current asset allocation target	Current policy range	Percentage of plan assets at December 31	
Asset allocation (percentage)			2016	2015
Cash and cash equivalents	0.5	0 – 5	1.1	1.1
Fixed income	29.5	20 – 40	21.4	21.0
Public equity	46.0	35 – 55	53.8	54.5
Real estate and infrastructure	12.0	4 – 20	7.5	5.8
Absolute return	12.0	0 – 18	16.2	17.6
Total	100.0		100.0	100.0

Summary of the assets of the Company's DB pension plans at fair values

The following is a summary of the assets of the Company's DB pension plans at fair values at December 31, 2016 and 2015:

(in millions of Canadian dollars)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Investments measured at NAV[1]	Total
December 31, 2016					
Cash and cash equivalents	$ 121	$ 11	$ —	$ —	$132
Fixed income					
• Government bonds[2]	—	1,357	—	—	1,357
• Corporate bonds[2]	—	1,186	—	—	1,186
• Mortgages[3]	—	71	—	—	71
Public equities					
• Canada	1,480	57	—	—	1,537
• U.S. and international	4,985	36	—	—	5,021
Real estate[4]	—	—	437	188	625
Derivative assets[5]	—	7	—	—	7
Absolute return[6]					
• Funds of hedge funds	—	—	—	668	668
• Multi-strategy funds	—	—	—	502	502
• Credit funds	—	—	—	505	505
• Equity funds	—	—	—	300	300
Infrastructure[7]	—	—	—	285	285
	$ 6,586	$ 2,725	$ 437	$ 2,448	$12,196
December 31, 2015					
Cash and cash equivalents	$ 129	$ 11	$ —	$ —	$140
Fixed income					
• Government bonds[2]	—	1,276	—	—	1,276
• Corporate bonds[2]	—	1,228	—	—	1,228
• Mortgages[3]	—	81	—	—	81
Public equities					
• Canada	1,449	46	—	—	1,495
• U.S. and international	5,169	34	—	—	5,203
Real estate[4]	—	—	451	—	451
Derivative assets[5]	—	—	—	—	—
Absolute return[6]					
• Funds of hedge funds	—	—	—	781	781
• Multi-strategy funds	—	—	—	517	517
• Credit funds	—	—	—	555	555
• Equity funds	—	—	—	311	311
Infrastructure[7]	—	—	—	262	262
	$ 6,747	$ 2,676	$ 451	$ 2,426	$12,300

[1] Investments measured at net asset value ("NAV"):
Amounts are comprised of certain investments measured at fair value using NAV (or its equivalent) as a practical expedient. These investments have not been classified in the fair value hierarchy.

(2) Government & Corporate Bonds:
Fair values for bonds are based on market prices supplied by independent sources as of the last trading day.

(3) Mortgages:
The fair value of mortgages of $71 million (2015 – $81 million) is based on current market yields of financial instruments of similar maturity, coupon and risk factors.

(4) Real estate:
The fair value of real estate investments of $437 million (2015 – $451 million) is based on property appraisals which use a number of approaches that typically include a discounted cash flow analysis, a direct capitalization income method and/or a direct comparison approach. Appraisals of real estate investments are generally performed semi-annually by qualified external accredited appraisers. There are $81 million of unfunded commitments for real estate investments as at December 31, 2016 (2015 – $278 million).

(5) Derivatives:
The Company's pension funds may utilize the following derivative instruments: equity futures to replicate equity index returns (Level 2); currency forwards to partially hedge foreign currency exposures (Level 2); bond forwards to reduce asset/liability interest rate risk exposures (Level 2); interest rate swaps to manage duration and interest rate risk (Level 2); credit default swaps to manage credit risk (Level 2); and options to manage interest rate risk and volatility (Level 2). There are currency forwards with a notional value of $937 million and a fair value of $7 million as at December 31, 2016 with maturities varying from three to fifteen months. These currency forwards reduce the funds' exposure to the U.S. dollar.

(6) Absolute return:
The fair value of absolute return fund investments of $1,975 million (2015 – $2,164 million) is based on the NAV reported by the fund administrators. The funds have different redemption policies and periods. There are no unfunded commitments for absolute return investments as at December 31, 2016 (2015 – $nil).

- Funds of hedge funds invest in a portfolio of hedge funds that allocate capital across a broad array of funds and/or investment managers, with monthly redemptions upon 95 days' notice.
- Multi-strategy funds include funds that invest in broadly diversified portfolios of equity, fixed income and derivative instruments with quarterly redemptions upon 60 days' notice.
- Credit funds invest in an array of fixed income securities with quarterly redemptions upon 60 days' notice.
- Equity funds invest primarily in U.S. and global equity securities. Redemptions range from quarterly upon 60 days' notice to triennially upon 45 days' notice.

(7) Infrastructure:
Infrastructure fund values of $285 million (2015 – $262 million) are based on the NAV of the funds that invest directly in infrastructure investments. The fair values of the investments have been estimated using the capital accounts representing the plans ownership interest in the funds. The investment in each fund is not subject to redemption and is normally returned through distributions as a result of the liquidation of the underlying infrastructure investments. It was estimated that the investments in these funds will be liquidated over the weighted-average period of approximately two years. As at December 31, 2016, unfunded commitments for infrastructure investments were $nil (2015 - $nil).

Portion of the assets of the Company's DB pension plans measured at fair value using unobservable inputs (Level 3)

During 2015 and 2016 the portion of the assets of the Company's DB pension plans measured at fair value using unobservable inputs (Level 3) changed as follows:

(in millions of Canadian dollars)	Real Estate
As at January 1, 2015	$ 654
Disbursements	(223)
Net realized gains	64
Decrease in net unrealized gains	(44)
As at December 31, 2015	$ 451

Disbursements	(36	)
Net realized gains	24	
Decrease in net unrealized gains	(2	)
As at December 31, 2016	$ 437	

Additional plan assets information

The Company's expected long-term target return is 7.75%, net of all fees and expenses. In identifying the asset allocation ranges, consideration was given to the long-term nature of the underlying plan liabilities, the solvency and going-concern financial position of the plan, long-term return expectations and the risks associated with key asset classes as well as the relationships of returns on key asset classes with each other, inflation and interest rates. When advantageous and with due consideration, derivative instruments may be utilized, provided the total value of the underlying assets represented by financial derivatives, excluding currency forwards, is limited to 30% of the market value of the fund.

When investing in foreign securities, the plans are exposed to foreign currency risk; the effect of which is included in the valuation of the foreign securities. CP has entered into currency forward contracts to partially offset pension plan exposure to the U.S. dollar. At December 31, 2016 the plans were 34% exposed to the U.S. dollar net of the currency forwards (42% excluding the currency forwards), 14% exposed to European currencies, and 5% exposed to various other currencies.

At December 31, 2016, fund assets consisted primarily of listed stocks and bonds, including 109,630 of the Company's Common Shares (2015 –188,276) at a market value of $21 million (2015 – $33 million) and Unsecured Notes issued by the Company at a par value of $3 million (2015 – $3 million) and a market value of $3 million (2015 – $3 million).

Cash flows

In 2016, the Company contributed $57 million to its pension plans (2015 – $90 million; 2014 – $88 million), including $9 million to the DC plans (2015 – $9 million; 2014 – $8 million), $36 million to the Canadian registered and U.S. qualified DB pension plans (2015 – $69 million; 2014 – $67 million), and $12 million to the Canadian non-registered supplemental pension plan (2015 – $12 million; 2014 – $13 million). In addition, the Company made payments directly to employees, their beneficiaries or estates or to third-party benefit administrators of $30 million in 2016 (2015 – $33 million; 2014 – $26 million) with respect to other benefits.

Estimated future benefit payments

The estimated future defined benefit pension and other benefit payments to be paid by the plans for each of the next five years and the subsequent five-year period are as follows:

(in millions of Canadian dollars)	Pensions	Other benefits
2017	$ 616	$ 33
2018	626	32
2019	634	32
2020	641	31
2021	649	31
2022 – 2026	3,315	147

The benefit payments from the Canadian registered and U.S. qualified DB pension plans are payable from their respective pension funds. Benefit payments from the supplemental pension plan and from the other benefits plans are payable directly from the Company.

Defined contribution plan

Canadian non-unionized employees hired prior to July 1, 2010 had the option to participate in the Canadian DC plan. All Canadian non-unionized employees hired after such date must participate in this plan. Employee contributions are based on a percentage of salary. The Company matches employee contributions to a maximum percentage each year.

Effective July 1, 2010, a new U.S. DC plan was established. All U.S. non-unionized employees hired after such date must participate in this plan. Employees do not contribute to the plan. The Company annually contributes a percentage of salary.

The DC plans provide a pension based on total employee and employer contributions plus investment income earned on those contributions.

In 2016, the net cost of the DC plans, which generally equals the employer's required contribution, was $9 million (2015 – $9 million; 2014 – $8 million).

Contributions to multi-employer plans

Some of the Company’s unionized employees in the U.S. are members of a U.S. national multi-employer benefit plan. Contributions made by the Company to this plan in 2016 in respect of post-retirement medical benefits were $4 million (2015 – $4 million; 2014 – $4 million).

21 Stock-based compensation

At December 31, 2016, the Company had several stock-based compensation plans, including a stock option plan, various cash settled liability plans and an employee stock savings plan. These plans resulted in an expense in 2016 of $51 million (2015 – $66 million; 2014 – $110 million). The information in this note excludes the effects of the subsequent event described in Note 27.

A. Stock Option Plan

Summary of stock options

The following table summarizes the Company's stock option plan as at December 31, 2016:

	Options outstanding		Nonvested options	
	Number of options	Weighted average exercise price	Number of options	Weighted average grant date fair value
Outstanding, January 1, 2016	2,407,973	$ 113.01	984,979	$ 41.88
New options granted	403,740	161.06	403,740	39.01
Exercised	(269,491)	74.99	—	—
Vested	—	—	(449,712)	33.70
Forfeited	(90,340)	186.95	(88,840)	42.42
Expired	(1,800)	60.84	—	—
Outstanding, December 31, 2016	2,450,082	$ 121.95	850,167	$ 44.49
Vested or expected to vest at December 31, 2016[(1)]	2,437,475	$ 121.62	N/A	N/A
Exercisable, December 31, 2016	1,599,915	$ 93.79	N/A	N/A

[(1)] As at December 31, 2016, the weighted average remaining term of vested or expected to vest options was 6.9 years with an aggregate intrinsic value of $181 million.

The following table provides the number of stock options outstanding and exercisable as at December 31, 2016 by range of exercise price and their related intrinsic aggregate value, and for options outstanding, the weighted-average years to expiration. The table also provides the aggregate intrinsic value for in-the-money stock options, which represents the amount that would have been received by option holders had they exercised their options on December 31, 2016 at the Company's closing stock price of $191.56.

Range of exercise prices	Options outstanding				Options exercisable		
	Number of options	Weighted average years to expiration	Weighted average exercise price	Aggregate intrinsic value (millions)	Number of options	Weighted average exercise price	Aggregate intrinsic value (millions)
$36.29 – $72.54	304,025	2.3	$ 60.59	$ 40	304,025	$ 60.59	$ 40
$72.55 – $86.71	747,445	5.4	73.69	88	747,445	73.69	88
$86.72 – $161.38	678,416	7.0	127.62	44	347,061	111.34	28
$161.39 – $236.50	720,196	8.5	192.56	(1)	201,384	188.23	—
Total[(1)]	2,450,082	6.2	$ 121.94	$ 171	1,599,915	$ 93.79	$ 156

[(1)] As at December 31, 2016, the total number of in-the-money stock options outstanding was 2,140,692 with a weighted-average exercise price of $107.27. The weighted-average years to expiration of exercisable stock options is 5.1 years.

Pursuant to the employee plan, options may be exercised upon vesting, which is between 12 months and 48 months after the grant date, and will expire after 10 years. Under the fair value method, the fair value of options at the grant date was approximately $16 million for options issued in 2016 (2015 – $18 million; 2014 – $21 million). The weighted average fair value assumptions were approximately:

	2016	2015	2014
Expected option life (years)[(1)]	5.25	5.25	5.98

Risk-free interest rate[2]	1.21 %	1.10 %	1.66 %
Expected stock price volatility[3]	27 %	26 %	29 %
Expected annual dividends per share[4]	$1.40	$1.40	$1.40
Estimated forfeiture rate[5]	2.0 %	1.2 %	1.2 %
Weighted average grant date fair value of options granted during the year	$39.01	$55.28	$48.88

[1] Represents the period of time that awards are expected to be outstanding. Historical data on exercise behaviour or, when available, specific expectations regarding future exercise behaviour were used to estimate the expected life of the option.

[2] Based on the implied yield available on zero-coupon government issues with an equivalent remaining term at the time of the grant.

[3] Based on the historical stock price volatility of the Company's stock over a period commensurate with the expected term of the option.

(4) Determined by the current annual dividend at the time of grant. The Company does not employ different dividend yields throughout the contractual term of the option. On April 20, 2016, the Company announced an increase in its quarterly dividend to $0.50 per share, representing $2.00 on an annual basis.
(5) The Company estimated forfeitures based on past experience. The rate is monitored on a periodic basis.

In 2016, the expense for stock options (regular and performance) was $14 million (2015 – $15 million; 2014 – $18 million). At December 31, 2016, there was $8 million of total unrecognized compensation related to stock options which is expected to be recognized over a weighted-average period of approximately 1.1 years.

The total fair value of shares vested for the stock option plan during 2016 was $15 million (2015 – $17 million; 2014 – $15 million).

The following table provides information related to all options exercised in the stock option plan during the years ended December 31:

(in millions of Canadian dollars)	2016	2015	2014
Total intrinsic value	$ 30	$ 72	$115
Cash received by the Company upon exercise of options	21	43	62

B. Other Share-based Plans

Performance share units plan

During 2016, the Company issued 147,157 PSUs with a grant date fair value of $25 million. These units attract dividend equivalents in the form of additional units based on the dividends paid on the Company's Common Shares. PSUs vest and are settled in cash or in CP Common Shares, approximately three years after the grant date, contingent upon CP's performance (performance factor). Grant recipients who are eligible to retire and have provided six months of service during the performance period are entitled to the full award. The fair value of PSUs is measured periodically until settlement, using a latticed-based valuation model.

The performance period of the PSUs issued in 2016 is January 1, 2016 to December 31, 2018, and the performance period for the PSUs issued in 2015 is January 1, 2015 to December 31, 2017. The performance factors for these PSUs are Operating Ratio, Return on Invested Capital, Total Shareholder Return ("TSR") compared to the S&P/TSX60 index, and TSR compared to Class 1 railways.

The performance period for the PSUs issued in 2014 was January 1, 2014 to December 31, 2016. The performance factors for these PSUs were Operating Ratio, Free cash flow, TSR compared to the S&P/TSX60 index, and TSR compared to Class I railways. The resulting estimated payout was 118% on 134,063 total outstanding awards at December 31, 2016 resulting in a liability of $31 million at December 31, 2016 and was calculated using the Company's average share price using the last 30 trading days preceding December 31, 2016.

The performance period for the PSUs issued in the fourth quarter of 2012 and in 2013 was January 1, 2013 to December 31, 2014. The performance factors for these PSUs were Operating Ratio, Free cash flow, TSR compared to the S&P/TSX60 index, and TSR compared to Class I railways. All performance factors met the 200% payout thresholds, in effect resulting in a target payout of 200% on 300,095 total outstanding awards as at December 31, 2015. A payout of $79 million on 217,179 outstanding awards, occurred on December 31, 2015 and was calculated using the Company's average share price using the last 30 trading days preceding December 31, 2015. In the first quarter of 2016, final payouts occurred on the total outstanding awards, including dividends reinvested, totalling $31 million on 83,466 outstanding awards

The following table summarizes information related to the Company's PSUs as at December 31:

	2016	2015
Outstanding, January 1	348,276	460,783
Granted	147,157	137,958
Units, in lieu of dividends	4,010	3,570
Settled	(83,466)	(217,179)
Forfeited	(42,384)	(36,856)
Outstanding, December 31	373,593	348,276

In 2016, the expense for PSUs was $29 million (2015 – $55 million; 2014 – $50 million). At December 31, 2016, there was $15 million of total unrecognized compensation related to PSUs which is expected to be recognized over a weighted-average period of approximately 1.4 years.

Deferred share units plan

The Company established the DSU plan as a means to compensate and assist in attaining share ownership targets set for certain key employees and Directors. A DSU entitles the holder to receive, upon redemption, a cash payment equivalent to the Company's average share price using the 10 trading days prior to redemption. DSUs vest over various periods of up to 48 months and are only redeemable for a specified period after employment is terminated.

Senior managers may elect to receive DSUs in lieu of annual bonus cash payments in the bonus deferral program. In addition, senior managers will be granted a 25% company match of DSUs when deferring cash to DSUs to meet ownership targets. The election to receive eligible payments in DSUs is no longer available to a participant when the value of the participant’s DSUs is sufficient to meet the Company’s stock ownership guidelines. Senior managers have five years to meet their ownership targets.

An expense for DSUs is recognized over the vesting period for both the initial subscription price and the change in value between reporting periods.

The following table summarizes information related to the DSUs as at December 31:

	2016	2015
Outstanding, January 1	318,176	308,447
Granted	31,069	21,690
Units, in lieu of dividends	2,798	2,015
Settled	(87,996)	(11,784)
Forfeited	(30,011)	(2,192)
Outstanding, December 31	234,036	318,176

During 2016, the Company granted 31,069 DSUs with a grant date fair value of $5 million. In 2016, the expense was $2 million (2015 – $10 million recovery; 2014 – $28 million expense). At December 31, 2016, there was $1 million of total unrecognized compensation related to DSUs which is expected to be recognized over a weighted-average period of approximately 1.2 years.

Summary of share based liabilities paid

The following table summarizes the total share based liabilities paid for each of the years ended December 31:

(in millions of Canadian dollars)	2016	2015	2014
Plan			
DSUs	$ 17	$ 3	$ 17
PSUs	31	79	—
Other	—	8	12
Total	$ 48	$ 90	$ 29

C. Employee share purchase plan

The Company has an employee share purchase plan whereby both employee and the Company contributions are used to purchase shares on the open market for employees. The Company’s contributions are expensed over the one year vesting period. Under the plan, the Company matches $1 for every $3 contributed by employees up to a maximum employee contribution of 6% of annual salary.

The total number of shares purchased in 2016 on behalf of participants, including the Company's contributions, was 140,560 (2015 – 131,703; 2014 – 176,906). In 2016, the Company’s contributions totalled $5 million (2015 – $5 million; 2014 – $5 million) and the related expense was $5 million (2015 – $4 million; 2014 – $5 million).

22 Variable interest entities

The Company leases equipment from certain trusts, which have been determined to be variable interest entities financed by a combination of debt and equity provided by unrelated third parties. The lease agreements, which are classified as operating leases, have a fixed price purchase option which create the Company’s variable interest and result in the trusts being considered variable interest entities.

Maintaining and operating the leased assets according to specific contractual obligations outlined in the terms of the lease agreements and industry standards is the Company’s responsibility. The rigor of the contractual terms of the lease agreements and industry standards are such that the Company has limited discretion over the maintenance activities associated with these assets. As such, the Company concluded these terms do not provide the Company with the power to direct the activities of the variable interest entities in a way that has a significant impact on the entities' economic performance.

The financial exposure to the Company as a result of its involvement with the variable interest entities is equal to the fixed lease payments due to the trusts. In 2016, lease payments after tax were $12 million. Future minimum lease payments, before tax, of $207 million will be payable over the next 14 years (see Note 23).

The Company does not guarantee the residual value of the assets to the lessor; however, it must deliver to the lessor the assets in good operating condition, subject to normal wear and tear, at the end of the lease term.

As the Company's actions and decisions do not significantly affect the variable interest entities' performance, and the Company's fixed price purchase option is not considered to be potentially significant to the variable interest entities, the Company is not considered to be the primary beneficiary, and does not consolidate these variable interest entities.

23 Commitments and contingencies

In the normal course of its operations, the Company becomes involved in various legal actions, including claims relating to injuries and damage to property. The Company maintains provisions it considers to be adequate for such actions. While the final outcome with respect to actions outstanding or pending at December 31, 2016, cannot be predicted with certainty, it is the opinion of management that their resolution will not have a material adverse effect on the Company's financial position or results of operations.

Commitments

At December 31, 2016, the Company had committed to total future capital expenditures amounting to $186 million and operating expenditures relating to supplier purchase obligations, such as locomotive maintenance and overhaul agreements, as well as agreements to purchase other goods and services amounting to approximately $2.5 billion for the years 2017–2032, of which CP estimates approximately $1.9 billion will be incurred in the next five years.

As at December 31, 2016, the Company's commitments under operating leases were estimated at $450 million in aggregate, with minimum annual payments in each of the next five years and thereafter as follows:

(in millions of Canadian dollars)	Operating leases
2017	$ 97
2018	66
2019	52
2020	44
2021	40
Thereafter	151
Total minimum lease payments	$ 450

Expenses for operating leases for the year ended December 31, 2016, were $111 million (2015 – $127 million; 2014 – $121 million).

Legal proceedings related to Lac-Mégantic rail accident

On July 6, 2013, a train carrying crude oil operated by Montreal Maine and Atlantic Railway (“MMA”) or a subsidiary, Montreal Maine & Atlantic Canada Co. (“MMAC” and collectively the “MMA Group”) derailed and exploded in Lac-Mégantic, Québec. The accident occurred on a section of railway owned and operated by the MMA Group. The previous day CP had interchanged the train to the MMA Group, and after the interchange, the MMA Group exclusively controlled the train.

Following this incident, Québec's Minister of Sustainable Development, Environment, Wildlife and Parks (the "Minister") ordered the named parties to recover the contaminants and to clean up the derailment site. On August 14, 2013, the Minister added CP as a party (the “Amended Cleanup Order”). CP appealed the Amended Cleanup Order to the Administrative Tribunal of Québec. On July 5, 2016, the Minister served a Notice of Claim for nearly $95 million of compensation spent on cleanup, alleging that CP refused or neglected to undertake the work. On September 6, 2016, CP filed a contestation of the Notice of Claim with the Administrative Tribunal of Québec. In October 2016, CP and the Minister agreed to stay the tribunal proceedings pending the outcome of the Province of Québec's action, set out below. The Court's decision to stay the tribunal proceedings is pending, but de facto, the file has been suspended.

Directly related to that matter, on July 6, 2015, the Province of Québec sued CP in Québec Superior Court claiming $409 million in derailment damages, including cleanup costs. The Province alleges that CP exercised custody or control over the crude oil lading and that CP was otherwise negligent. Therefore, CP is said to be solidarily (joint and severally) liable with third parties responsible for the accident. The Province filed a motion for leave to amend its complaint in September 2016, but no date has been fixed for the hearing of this motion, as most of the Attorney General of Québec's lawyers have been on strike since October 2016 and current reports are that there is no imminent end in sight. As at the end of 2016, no timetable governing the conduct of this lawsuit has been ordered by the Québec Superior Court. This proceeding appears to be duplicative of the administrative proceedings.

A class action lawsuit has also been filed in the Québec Superior Court on behalf of persons and entities residing in, owning or leasing property in, operating a business in or physically present in Lac-Mégantic at the time of the derailment (the "Class Action"). That lawsuit seeks derailment damages, including for wrongful death, personal injury, and property harm. On August 16, 2013, CP was added as a defendant. On May 8, 2015, the Québec Superior Court authorized (certified) the Class Action against CP, the shipper – Western Petroleum, and the shipper's parent – World Fuel Services (collectively, the "World Fuel Entities"). The World Fuel Entities have since settled. The plaintiffs filed a motion for leave to amend their complaint, but subsequently withdrew it.

On October 24, 2016, the Québec Superior Court authorized class action proceedings against two additional defendants in the same matter discussed above, i.e., against MMAC and Mr. Thomas Harding. On December 9, 2016, the Superior Court granted CP's motion asking the latter to confirm the validity of the opt-outs from this class action by most of the estates of the deceased parties following the train derailment who had opted out to allow them to sue in the United States instead (i.e., the wrongful death cases, filed in the United States, which are further discussed hereinafter). As at the end of 2016, no timetable governing the conduct of this lawsuit has been ordered by the Québec Superior Court.

On July 4, 2016, eight subrogated insurers served CP with claims of approximately $16 million. On July 11, 2016, two additional subrogated insurers served CP with claims of approximately $3 million. The lawsuits do not identify the parties to which the insurers are subrogated, and therefore the extent of claim overlap and the extent that claims will be satisfied after proof of claim review and distribution from the Plans, referred to below, is difficult to determine. These lawsuits have been stayed until June 2, 2017.

In the wake of the derailment and ensuing litigation, MMAC filed for bankruptcy in Canada (the "Canadian Proceeding") and MMA filed for bankruptcy in the United States (the "U.S. Proceeding"). Plans of arrangement have been approved in both the Canadian Proceeding and the U.S. Proceeding (the "Plans"). These Plans provide for the distribution of a fund of approximately $440 million amongst those claiming derailment damages. The Plans also provide settling parties broadly worded third-party releases and injunctions preventing lawsuits against settlement contributors. CP has not settled and therefore will not benefit from those provisions. Both Plans do, however, contain judgment reduction provisions, affording CP a credit for the greater of (i) the settlement monies received by the plaintiff(s), or (ii) the amount, in contribution or indemnity, that CP would have been entitled to charge against third parties other than MMA and MMAC, but for the Plans' releases and injunctions. CP may also have judgment reduction rights, as part of the contribution/indemnification credit, for the fault of the MMA Group. Finally, the Plans provide for a potential re-allocation of the MMA Group's liability among plaintiffs and CP, the only non-settling party.

An Adversary Proceeding filed by the MMA U.S. bankruptcy trustee (now, estate representative) against CP, Irving Oil, and the World Fuel Entities accuses CP of failing to ensure that World Fuel Entities or Irving Oil properly classified the oil lading and of not refusing to ship the misclassified oil as packaged. By that action the estate representative seeks to recover MMA's going concern value supposedly destroyed by the derailment. The estate representative has since settled with the World Fuel Entities and Irving Oil and now bases CP misfeasance on the railroad's failure to abide in North Dakota by a Canadian regulation. That regulation supposedly would have caused the railroads to not move the crude oil train because an inaccurate classification was supposedly suspected. In a recently amended complaint, the estate representative named a CP affiliate, Soo Line Railroad Company ("Soo Line"), and asserts that CP and Soo Line breached terms or warranties allegedly contained in the bill of lading. CP's motion to dismiss this amended complaint was heard on December 20, 2016 and a decision is pending.

In response to one of CP's motions to withdraw the Adversary Proceedings bankruptcy reference, the estate representative maintained that Canadian law rather than U.S. law controlled. The Article III court that heard the motion found that if U.S. federal regulations governed, the case was not complex enough to warrant withdrawal. Before the bankruptcy court, CP moved to dismiss for want of personal jurisdiction, but the court denied the motion because CP had participated in the bankruptcy proceedings.
Lac-Mégantic residents and wrongful death representatives commenced a class action and a mass action in Texas and wrongful death and personal injury actions in Illinois and Maine. CP removed all of these lawsuits to federal court, and a federal court thereafter consolidated those cases in Maine. These actions generally charge CP with misclassification and mis-packaging (that is, using inappropriate DOT-111 tank cars) negligence. On CP's motion, the Maine court dismissed all wrongful death and personal injury actions on several grounds on September 28, 2016. The plaintiffs' subsequent motion for reconsideration was denied on January 9, 2017. The plaintiffs filed a notice of appeal on January 19, 2017. CP will file a motion to dismiss the appeal. If the ruling is upheld on appeal these cases will be litigated, if anywhere, in Canada. As previously mentioned, many of these plaintiffs had previously opted-out of the Québec Class Action in order to bring their claims in the United States. CP brought a motion on December 1, 2016 to seek a declaration from the Québec Superior Court that the plaintiffs who had opted were precluded from opting back into the Québec Class Action. CP's motion was successful. Accordingly, if these plaintiffs seek to sue CP, they would have to do so in Québec in individual actions (they could also join their individual claims in the same individual action).

CP has received two damage to cargo notices of claims from the shipper of the oil, Western Petroleum. Western Petroleum submitted U.S. and Canadian notices of claims for the same damages and under the Carmack Amendment (49 U.S.C. Section 11706) Western

Petroleum seeks to recover for all injuries associated with, and indemnification for, the derailment. Both jurisdictions permit a shipper to recover the value of damaged lading against any carrier in the delivery chain, subject to limitations in the carrier's tariffs. CP's tariffs significantly restrict shipper damage claim rights. Western Petroleum is part of the World Fuel Services Entities, and those companies settled with the trustee. In settlements with the estate representative the World Fuel Services Entities and the consignee (Irving Oil) assigned all claims against CP, if any, including Carmack Amendment claims. The estate representative has since designated a trust formed for the benefit of the wrongful death plaintiff to pursue those claims.

On April 12, 2016, the Trustee (the "WD Trustee") for a wrongful death trust (the "WD Trust"), as defined and established under the confirmed Plans, sued CP in North Dakota federal court, asserting Carmack Amendment claims. The WD Trustee maintains that the estate representative assigned Carmack Amendment claims to the WD Trustee. The Plan supposedly gave the estate representative Carmack Amendment assignment rights. The WD Trustee seeks to recover amounts for damaged railcars (approximately $6 million), and the settlement amounts the consignor (i.e., the shipper, the World Fuel Entities) and the consignee (Irving Oil) paid to the bankruptcy estates, alleged to be $110 million and $60 million, respectively. The WD Trustee maintains that Carmack Amendment liability extends beyond lading losses to cover all derailment related damages suffered by the World Fuel Entities or Irving Oil. CP disputes this interpretation of Carmack Amendment exposure and maintains that CP's tariffs preclude anything except a minimal recovery. Canadian Pacific Railway Limited and Soo Line Corporation, both non-carriers, have moved to dismiss the Carmack Amendment claims, which only apply to common carriers. CP has brought threshold motions to dismiss the Carmack Amendment claims. The determination of these motions is pending.
At this early stage of the proceedings, any potential responsibility and the quantum of potential losses cannot be determined. Nevertheless, CP denies liability and intends to vigorously defend against all derailment-related proceedings.
24 Guarantees

In the normal course of operating the railway, the Company enters into contractual arrangements that involve providing certain guarantees, which extend over the term of the contracts. These guarantees include, but are not limited to:

- residual value guarantees on operating lease commitments of $19 million at December 31, 2016;
- guarantees to pay other parties in the event of the occurrence of specified events, including damage to equipment, in relation to assets used in the operation of the railway through operating leases, rental agreements, easements, trackage, and interline agreements; and
- indemnifications of certain tax-related payments incurred by lessors and lenders.

The maximum amount that could be payable under these guarantees, excluding residual value guarantees, cannot be reasonably estimated due to the nature of certain of these guarantees. All or a portion of amounts paid under guarantees to other parties in the event of the occurrence of specified events could be recoverable from other parties or through insurance. The Company has accrued for all guarantees that it expects to pay. At December 31, 2016, these accruals amounted to $5 million (2015 – $4 million), recorded in "Accounts payable and accrued liabilities".

Indemnifications

Pursuant to a trust and custodial services agreement with the trustee of the Canadian Pacific Railway Company Pension Plan, the Company has undertaken to indemnify and save harmless the trustee, to the extent not paid by the fund, from any and all taxes, claims, liabilities, damages, costs, and expenses arising out of the performance of the trustee's obligations under the agreement, except as a result of misconduct by the trustee. The indemnity includes liabilities, costs, or expenses relating to any legal reporting or notification obligations of the trustee with respect to the defined contribution option of the pension plans or otherwise with respect to the assets of the pension plans that are not part of the fund. The indemnity survives the termination or expiry of the agreement with respect to claims and liabilities arising prior to the termination or expiry. At December 31, 2016, the Company had not recorded a liability associated with this indemnification, as it does not expect to make any payments pertaining to it.

25 Segmented and geographic information

Operating segment

The Company operates in only one operating segment: rail transportation. Operating results by geographic areas, railway corridors or other lower level components or units of operation are not reviewed by the Company's chief operating decision-maker to make decisions about the allocation of resources to, or the assessment of performance of, such geographic areas, corridors, components or units of operation.

In the years ended December 31, 2016, 2015, and 2014, no one customer comprised more than 10% of total revenues and accounts receivable.

Geographic information			
(in millions of Canadian dollars)	Canada	United States	Total
2016			
Revenues	$4,473	$ 1,759	$6,232
Long-term assets excluding financial instruments, mortgages receivable and deferred tax assets	$11,000	$ 6,121	$17,121
2015			
Revenues	$4,662	$ 2,050	$6,712
Long-term assets excluding financial instruments, mortgages receivable and deferred tax assets	$10,630	$ 6,068	$16,698
2014			
Revenues	$4,655	$ 1,965	$6,620
Long-term assets excluding financial instruments, mortgages receivable and deferred tax assets	$10,114	$ 4,733	$14,847

26 Selected quarterly data (unaudited)

For the quarter ended	2016				2015			
(in millions of Canadian dollars, except per share data)	Dec. 31	Sep. 30	Jun. 30	Mar. 31	Dec. 31	Sep. 30	Jun. 30	Mar. 31
Total revenues	$1,637	$1,554	$1,450	$1,591	$1,687	$1,709	$1,651	$1,665
Operating income	717	657	551	653	677	753	646	612
Net income	384	347	328	540	319	323	390	320
Basic earnings per share[1]	$2.63	$2.35	$2.16	$3.53	$2.09	$2.05	$2.38	$1.94
Diluted earnings per share[1]	2.61	2.34	2.15	3.51	2.08	2.04	2.36	1.92

[1] Per share net income for the four quarters combined may not equal the per share net income for the year due to rounding.

27 Subsequent event

On January 18, 2017, the Company announced the resignation of Mr. E. Hunter Harrison from all positions held by him at the Company, including as the Company’s Chief Executive Officer and a member of the Board of Directors of the Company, effective January 31, 2017. In connection with Mr. Harrison’s resignation, the Company entered into a separation agreement with Mr. Harrison. Under the terms of the separation agreement, the Company has agreed to a limited waiver of Mr. Harrison’s non-competition and non-solicitation obligations.

Effective January 31, 2017, pursuant to the separation agreement, Mr. Harrison forfeited certain pension and post-retirement benefits and agreed to the surrender for cancellation of 22,514 PSUs, 68,612 DSUs, and 752,145 Stock options.

As a result of this agreement, the Company has recognized a recovery of $51 million in "Compensation and benefits" in the first quarter of 2017.

28 Condensed consolidating financial information

Canadian Pacific Railway Company, a 100%-owned subsidiary of Canadian Pacific Railway Limited ("CPRL"), is the issuer of certain debt securities, which are fully and unconditionally guaranteed by CPRL. The following tables present condensed consolidating financial information ("CCFI") in accordance with Rule 3-10(c) of Regulation S-X.

Investments in subsidiaries are accounted for under the equity method when presenting the CCFI.

The tables include all adjustments necessary to reconcile the CCFI on a consolidated basis to CPRL's consolidated financial statements for the periods presented.

CONDENSED CONSOLIDATING STATEMENTS OF INCOME
YEAR ENDED DECEMBER 31, 2016

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Revenues					
Freight	$ —	$ 4,332	$ 1,728	$ —	$ 6,060
Non-freight	—	134	386	(348)	172
Total revenues	—	4,466	2,114	(348)	6,232
Operating expenses					
Compensation and benefits	—	749	434	6	1,189
Fuel	—	458	109	—	567
Materials	—	130	32	18	180
Equipment rents	—	204	(31)	—	173
Depreciation and amortization	—	422	218	—	640
Purchased services and other	—	673	604	(372)	905
Total operating expenses	—	2,636	1,366	(348)	3,654
Operating income	—	1,830	748	—	2,578
Less:					
Other income and charges	(40)	(34)	29	—	(45)
Net interest expense (income)	1	493	(23)	—	471
Income before income tax expense and equity in net earnings of subsidiaries	39	1,371	742	—	2,152
Less: Income tax expense	6	337	210	—	553
Add: Equity in net earnings of subsidiaries	1,566	532	—	(2,098)	—
Net income	$ 1,599	$ 1,566	$ 532	$ (2,098)	$ 1,599

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CONDENSED CONSOLIDATING STATEMENTS OF INCOME
YEAR ENDED DECEMBER 31, 2015

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Revenues					
Freight	$ —	$ 4,532	$ 2,020	$ —	$ 6,552
Non-freight	—	128	363	(331)	160
Total revenues	—	4,660	2,383	(331)	6,712
Operating expenses					
Compensation and benefits	—	943	428	—	1,371
Fuel	—	549	159	—	708
Materials	—	148	36	—	184
Equipment rents	—	181	(7)	—	174
Depreciation and amortization	—	411	184	—	595
Purchased services and other	—	711	680	(331)	1,060
Gain on sale of Delaware & Hudson South	—	—	(68)	—	(68)
Total operating expenses	—	2,943	1,412	(331)	4,024
Operating income	—	1,717	971	—	2,688
Less:					
Other income and charges	84	322	(71)	—	335
Net interest (income) expense	(5)	447	(48)	—	394
(Loss) income before income tax expense and equity in net earnings of subsidiaries	(79)	948	1,090	—	1,959
Less: Income tax (recovery) expense	(21)	303	325	—	607
Add: Equity in net earnings of subsidiaries	1,410	765	—	(2,175)	—
Net income	$ 1,352	$ 1,410	$ 765	$ (2,175)	$ 1,352

CONDENSED CONSOLIDATING STATEMENTS OF INCOME
YEAR ENDED DECEMBER 31, 2014

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Revenues					
Freight	$ —	$ 4,524	$ 1,940	$ —	$ 6,464
Non-freight	—	130	357	(331)	156
Total revenues	—	4,654	2,297	(331)	6,620
Operating expenses					
Compensation and benefits	—	945	403	—	1,348
Fuel	—	779	269	—	1,048
Materials	—	156	37	—	193
Equipment rents	—	137	18	—	155
Depreciation and amortization	—	396	156	—	552
Purchased services and other	—	706	610	(331)	985
Total operating expenses	—	3,119	1,493	(331)	4,281
Operating income	—	1,535	804	—	2,339
Less:					
Other income and charges	3	46	(30)	—	19
Net interest expense	—	250	32	—	282
(Loss) income before income tax expense and equity in net earnings of subsidiaries	(3)	1,239	802	—	2,038
Less: Income tax (recovery) expense	(1)	320	243	—	562
Add: Equity in net earnings of subsidiaries	$ 1,478	$ 559	$ —	$ (2,037)	$ —
Net income	$ 1,476	$ 1,478	$ 559	$ (2,037)	$ 1,476

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CONDENSED CONSOLIDATING STATEMENTS OF COMPREHENSIVE INCOME
YEAR ENDED DECEMBER 31, 2016

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Net income	$ 1,599	$ 1,566	$ 532	$ (2,098)	$ 1,599
Net gain (loss) in foreign currency translation adjustments, net of hedging activities	—	149	(131)	—	18
Change in derivatives designated as cash flow hedges	—	(2)	—	—	(2)
Change in pension and post-retirement defined benefit plans	—	(443)	9	—	(434)
Other comprehensive loss before income taxes	—	(296)	(122)	—	(418)
Income tax recovery (expense) on above items	—	99	(3)	—	96
Equity accounted investments	(322)	(125)	—	447	—
Other comprehensive loss	(322)	(322)	(125)	447	(322)
Comprehensive income	$ 1,277	$ 1,244	$ 407	$ (1,651)	$ 1,277

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CONDENSED CONSOLIDATING STATEMENTS OF COMPREHENSIVE INCOME
YEAR ENDED DECEMBER 31, 2015

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Net income	$ 1,352	$ 1,410	$ 765	$ (2,175)	$ 1,352
Net (loss) gain in foreign currency translation adjustments, net of hedging activities	—	(757)	671	—	(86)
Change in derivatives designated as cash flow hedges	—	(69)	—	—	(69)
Change in pension and post-retirement defined benefit plans	—	1,061	(2)	—	1,059
Other comprehensive income before income taxes	—	235	669	—	904
Income tax (expense) recovery on above items	—	(163)	1	—	(162)
Equity accounted investments	742	670	—	(1,412)	—
Other comprehensive income	742	742	670	(1,412)	742
Comprehensive income	$ 2,094	$ 2,152	$ 1,435	$ (3,587)	$ 2,094

CONDENSED CONSOLIDATING STATEMENTS OF COMPREHENSIVE INCOME
YEAR ENDED DECEMBER 31, 2014

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Net income	$ 1,476	$ 1,478	$ 559	$ (2,037)	$ 1,476
Net (loss) gain in foreign currency translation adjustments, net of hedging activities	—	(316)	284	—	(32)
Change in derivatives designated as cash flow hedges	—	(49)	—	—	(49)
Change in pension and post-retirement defined benefit plans	—	(908)	(33)	—	(941)
Other comprehensive (loss) income before income taxes	—	(1,273)	251	—	(1,022)
Income tax recovery on above items	—	293	13	—	306
Equity accounted investments	(716)	264	—	452	—
Other comprehensive (loss) income	(716)	(716)	264	452	(716)
Comprehensive income	$ 760	$ 762	$ 823	$ (1,585)	$ 760

CONDENSED CONSOLIDATING BALANCE SHEETS
AS AT DECEMBER 31, 2016

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Assets					
Current assets					
Cash and cash equivalents	$ —	$ 100	$ 64	$ —	$ 164
Accounts receivable, net	—	435	156	—	591
Accounts receivable, intercompany	90	113	206	(409)	—
Short-term advances to affiliates	500	692	4,035	(5,227)	—
Materials and supplies	—	150	34	—	184
Other current assets	—	38	32	—	70
	590	1,528	4,527	(5,636)	1,009
Long-term advances to affiliates	1	—	91	(92)	—
Investments	—	47	147	—	194
Investments in subsidiaries	8,513	10,249	—	(18,762)	—
Properties	—	8,756	7,933	—	16,689
Goodwill and intangible assets	—	—	202	—	202
Pension asset	—	1,070	—	—	1,070
Other assets	1	48	8	—	57
Deferred income taxes	11	—	—	(11)	—
Total assets	$ 9,116	$ 21,698	$ 12,908	$ (24,501)	$ 19,221
Liabilities and shareholders’ equity					
Current liabilities					
Accounts payable and accrued liabilities	$ 73	$ 945	$ 304	$ —	$ 1,322
Accounts payable, intercompany	14	292	103	(409)	—
Short-term advances from affiliates	4,403	816	8	(5,227)	—
Long-term debt maturing within one year	—	25	—	—	25
	4,490	2,078	415	(5,636)	1,347
Pension and other benefit liabilities	—	658	76	—	734
Long-term advances from affiliates	—	92	—	(92)	—
Other long-term liabilities	—	152	132	—	284
Long-term debt	—	8,605	54	—	8,659
Deferred income taxes	—	1,600	1,982	(11)	3,571
Total liabilities	4,490	13,185	2,659	(5,739)	14,595
Shareholders’ equity					
Share capital	2,002	1,037	5,823	(6,860)	2,002
Additional paid-in capital	52	1,638	298	(1,936)	52
Accumulated other comprehensive (loss) income	(1,799)	(1,799)	712	1,087	(1,799)
Retained earnings	4,371	7,637	3,416	(11,053)	4,371
	4,626	8,513	10,249	(18,762)	4,626
Total liabilities and shareholders’ equity	$ 9,116	$ 21,698	$ 12,908	$ (24,501)	$ 19,221

CONDENSED CONSOLIDATING BALANCE SHEETS
AS AT DECEMBER 31, 2015

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Assets					
Current assets					
Cash and cash equivalents	$ —	$ 502	$ 148	$ —	$ 650
Accounts receivable, net	—	452	193	—	645
Accounts receivable, intercompany	59	105	265	(429)	—
Short-term advances to affiliates	—	75	3,483	(3,558)	—
Materials and supplies	—	154	34	—	188
Other current assets	—	37	17	—	54
	59	1,325	4,140	(3,987)	1,537
Long-term advances to affiliates	501	207	376	(1,084)	—
Investments	—	22	130	—	152
Investments in subsidiaries	7,518	9,832	—	(17,350)	—
Properties	—	8,481	7,792	—	16,273
Goodwill and intangible assets	—	3	208	—	211
Pension asset	—	1,401	—	—	1,401
Other assets	—	55	8	—	63
Deferred income taxes	25	—	—	(25)	—
Total assets	$ 8,103	$ 21,326	$ 12,654	$ (22,446)	$ 19,637
Liabilities and shareholders’ equity					
Current liabilities					
Accounts payable and accrued liabilities	$ 54	$ 1,122	$ 241	$ —	$ 1,417
Accounts payable, intercompany	—	325	104	(429)	—
Short-term advances from affiliates	3,253	230	75	(3,558)	—
Long-term debt maturing within one year	—	24	6	—	30
	3,307	1,701	426	(3,987)	1,447
Pension and other benefit liabilities	—	676	82	—	758
Long-term advances from affiliates	—	877	207	(1,084)	—
Other long-term liabilities	—	186	132	—	318
Long-term debt	—	8,863	64	—	8,927
Deferred income taxes	—	1,505	1,911	(25)	3,391
Total liabilities	3,307	13,808	2,822	(5,096)	14,841
Shareholders’ equity					
Share capital	2,058	1,037	5,465	(6,502)	2,058
Additional paid-in capital	43	1,568	613	(2,181)	43
Accumulated other comprehensive (loss) income	(1,477)	(1,477)	840	637	(1,477)
Retained earnings	4,172	6,390	2,914	(9,304)	4,172
	4,796	7,518	9,832	(17,350)	4,796
Total liabilities and shareholders’ equity	$ 8,103	$ 21,326	$ 12,654	$ (22,446)	$ 19,637

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CONDENSED CONSOLIDATING STATEMENTS OF CASH FLOWS
YEAR ENDED DECEMBER 31, 2016

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Cash provided by operating activities	$ 255	$ 1,424	$ 879	$ (469)	$ 2,089
Investing activities					
Additions to properties	—	(728)	(454)	—	(1,182)
Proceeds from sale of properties and other assets	—	102	14	—	116
Advances to affiliates	—	(664)	(539)	1,203	—
Repayment of advances to affiliates	—	222	—	(222)	—
Capital contributions to affiliates	—	(472)	—	472	—
Repurchase of share capital from affiliates	—	8	—	(8)	—
Other	—	—	(3)	—	(3)
Cash used in investing activities	—	(1,532)	(982)	1,445	(1,069)
Financing activities					
Dividends paid	(255)	(255)	(214)	469	(255)
Issuance of share capital	—	—	472	(472)	—
Return of share capital to affiliates	—	—	(8)	8	—
Issuance of CP Common Shares	21	—	—	—	21
Purchase of CP Common Shares	(1,210)	—	—	—	(1,210)
Repayment of long-term debt, excluding commercial paper	—	(24)	(14)	—	(38)
Net repayment of commercial paper	—	(8)	—	—	(8)
Advances from affiliates	1,189	—	14	(1,203)	—
Repayment of advances from affiliates	—	—	(222)	222	—
Other	—	(3)	—	—	(3)
Cash (used in) provided by financing activities	(255)	(290)	28	(976)	(1,493)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	—	(4)	(9)	—	(13)
Cash position					
Decrease in cash and cash equivalents	—	(402)	(84)	—	(486)
Cash and cash equivalents at beginning of year	—	502	148	—	650
Cash and cash equivalents at end of year	$ —	$ 100	$ 64	$ —	$ 164

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CONDENSED CONSOLIDATING STATEMENTS OF CASH FLOWS
YEAR ENDED DECEMBER 31, 2015

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Cash provided by operating activities	$ 2,283	$ 1,650	$ 1,074	$ (2,548)	$ 2,459
Investing activities					
Additions to properties	—	(766)	(756)	—	(1,522)
Proceeds from the sale of Delaware & Hudson South	—	—	281	—	281
Proceeds from sale of properties and other assets	—	103	11	—	114
Advances to affiliates	(1,133)	(311)	(1,820)	3,264	—
Repayment of advances to affiliates	—	804	1,000	(1,804)	—
Capital contributions to affiliates	—	(1,655)	—	1,655	—
Repurchase of share capital from affiliates	—	1,210	—	(1,210)	—
Other	—	6	(2)	—	4
Cash used in investing activities	(1,133)	(609)	(1,286)	1,905	(1,123)
Financing activities					
Dividends paid	(226)	(2,272)	(276)	2,548	(226)
Issuance of share capital	—	—	1,655	(1,655)	—
Return of share capital to affiliates	—	—	(1,210)	1,210	—
Issuance of CP Common Shares	43	—	—	—	43
Purchase of CP Common Shares	(2,787)	—	—	—	(2,787)
Issuance of long-term debt, excluding commercial paper	—	3,411	—	—	3,411
Repayment of long-term debt, excluding commercial paper	—	(461)	(44)	—	(505)
Net repayment of commercial paper	—	(893)	—	—	(893)
Advances from affiliates	1,820	500	944	(3,264)	—
Repayment of advances from affiliates	—	(1,000)	(804)	1,804	—
Cash (used in) provided by financing activities	(1,150)	(715)	265	643	(957)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	—	24	21	—	45
Cash position					
Increase in cash and cash equivalents	—	350	74	—	424
Cash and cash equivalents at beginning of year	—	152	74	—	226
Cash and cash equivalents at end of year	$ —	$ 502	$ 148	$ —	$ 650

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CONDENSED CONSOLIDATING STATEMENTS OF CASH FLOWS
YEAR ENDED DECEMBER 31, 2014

(in millions of Canadian dollars)	CPRL (Parent Guarantor)	CPRC (Subsidiary Issuer)	Non-Guarantor Subsidiaries	Consolidating Adjustments and Eliminations	CPRL Consolidated
Cash provided by operating activities	$ 183	$ 1,684	$ 604	$ (348)	$ 2,123
Investing activities					
Additions to properties	—	(816)	(702)	69	(1,449)
Proceeds from the sale of west end of Dakota, Minnesota and Eastern Railroad	—	—	236	—	236
Proceeds from sale of properties and other assets	—	116	5	(69)	52
Advances to affiliates	—	(611)	(2,636)	3,247	—
Repayment of advances to affiliates	—	2,167	1,592	(3,759)	—
Capital contributions to affiliates	—	(2,927)	—	2,927	—
Other	—	2	(2)	—	—
Cash used in investing activities[1]	—	(2,069)	(1,507)	2,415	(1,161)
Financing activities					
Dividends paid	(244)	(182)	(166)	348	(244)
Issuance of share capital	—	—	2,927	(2,927)	—
Issuance of CP Common Shares	62	—	—	—	62
Purchase of CP Common Shares	(2,050)	—	—	—	(2,050)
Repayment of long-term debt, excluding commercial paper	—	(174)	(9)	—	(183)
Net issuance of commercial paper	—	771	—	—	771
Settlement of foreign exchange forward on long-term debt	—	17	—	—	17
Advances from affiliates	2,049	1,198	—	(3,247)	—
Repayment of advances from affiliates	—	(1,592)	(2,167)	3,759	—
Other	—	—	(3)	—	(3)
Cash (used in) provided by financing activities	(183)	38	582	(2,067)	(1,630)
Effect of foreign currency fluctuations on U.S. dollar-denominated cash and cash equivalents	—	(3)	10	—	7
Cash position					
Decrease in cash, cash equivalents, and restricted cash[1]	—	(350)	(311)	—	(661)
Cash, cash equivalents, and restricted cash at beginning of year[1]	—	502	385	—	887
Cash, cash equivalents, and restricted cash at end of year[1]	$ —	$ 152	$ 74	$ —	$ 226

[1]Certain figures have been reclassified due to a retrospective change in accounting policy (Note 2).

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2016, an evaluation was carried out under the supervision of and with the participation of CP's management, including CEO and CFO, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on that evaluation, the CEO and CFO concluded that these disclosure controls and procedures were effective as of December 31, 2016, to ensure that information required to be disclosed by the Company in reports that they file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified by the SEC rules and forms and (ii) accumulated and communicated to the Company’s management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Management is responsible for the financial statements and for establishing and maintaining adequate internal control over financial reporting for the Company as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. The Corporation’s internal control system was designed to provide reasonable assurance to the Corporation’s management and Board of Directors regarding the preparation and fair presentation of published financial statements. Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has assessed the effectiveness of the Company’s internal control over financial reporting in accordance with the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in “Internal Control – Integrated Framework (2013)”. Based on this assessment, management concluded that the Company maintained effective internal control over financial reporting as of December 31, 2016. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to the reliability of financial reporting and preparation of financial statements in accordance with generally accepted accounting principles.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2016 has been audited by Deloitte LLP, the Company's independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control over Financial Reporting

During the three months ended December 31, 2016, the Company has not identified any changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and the Shareholders of Canadian Pacific Railway Limited:

We have audited the internal control over financial reporting of Canadian Pacific Railway Limited and subsidiaries (the "Company") as of December 31, 2016, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2016 of the Company and our report dated February 16, 2017 expressed an unqualified opinion on those financial statements and financial statement schedule.

/s/ Deloitte LLP

Chartered Professional Accountants
February 16, 2017
Calgary, Canada

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ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

In accordance with Instruction G(3) of Form 10-K, the information required by this item is incorporated herein by reference to the Company's definitive Proxy Statement which will be filed with the SEC not later than April 30, 2017 (the "Proxy Statement").

Directors of Registrant
The information regarding directors is included in the Nominees for Election to the Board section of the Proxy Statement and is incorporated herein by reference.

The information regarding the Audit Committee is included in the Statement of Corporate Governance section of the Proxy Statement and is incorporated herein by reference.

Executive Officers of Registrant
The information regarding executive officers is included in Part I of this report under Executive Officers of the Registrant, following Item 4. Mine Safety Disclosures.

Compliance with Section 16(a) of the Exchange Act
The information regarding the compliance with Section 16(a) of the Securities Exchange Act of 1934 is included in Section 16(a) Beneficial Ownership Reporting Compliance section of the Proxy Statement and is incorporated herein by reference.

Code of Ethics for Chief Executive Officer and Senior Financial Officers
The Board of Directors of CP has adopted the Code of Ethics for the Chief Executive Officer and Senior Financial Officers, which is accessible through CP's website at http://www.cpr.ca/en/about-cp/corporate-governance. All amendments to the code, and all waivers of the code with respect to any of the officers covered by it, will be posted on CP's website and provided in print to any person who requests them.

ITEM 11. EXECUTIVE COMPENSATION

In accordance with Instruction G(3) of Form 10-K, the information required by this item regarding executive compensation is included in the Statement of Executive Compensation section of the Proxy Statement and is incorporated herein by reference (see Item 10 above).

The information regarding the Compensation Committee is included in the Report of the Management Resources and Compensation Committee section of the Proxy Statement and is incorporated herein by reference (see Item 10 above).

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

In accordance with Instruction G(3) of Form 10-K, the information required by this item is included in the Management Stock Option Incentive Plan section and the Security Ownership of Certain Beneficial Owners and Management section of the Proxy Statement and is incorporated herein by reference (see Item 10 above).

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

In accordance with Instruction G(3) of Form 10-K, the information required by this item regarding director independence and transactions with related persons is included in the Statement of Corporate Governance section and the Nominees for Election to the Board section of the Proxy Statement, which is incorporated herein by reference (see Item 10 above).

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

In accordance with Instruction G(3) of Form 10-K, the information required by this item regarding the fees billed by the independent registered public accounting firm and the nature of services comprising the fees is included in the Statement of Corporate Governance section of the Proxy Statement (see Item 10 above).

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULE

The following documents are filed as part of this report:

(a) Financial Statements

The financial statements filed as part of this filing are listed on the Index to Consolidated Financial Statements in Item 8. Financial Statements and Supplementary Data.

(b) Financial Statement Schedule

Schedule II – Valuation and Qualifying Accounts

(in millions of Canadian dollars)	Beginning balance at January 1	Additions charged to expenses	Payments and other reductions	Impact of FX	Ending balance at December 31
Accruals for legal, personal injury and casualty-related claims[1]					
2014	$ 153	$ 32	$ (38)	$ 3	$ 150
2015	$ 150	$ 79	$ (102)	$ 6	$ 133
2016	$ 133	$ 67	$ (71)	$ 1	$ 130
Environmental liabilities					
2014	$ 90	$ 4	$ (9)	$ 6	$ 91
2015	$ 91	$ 7	$ (17)	$ 12	$ 93
2016	$ 93	$ 6	$ (12)	$ (2)	$ 85

[1] Includes WCB, FELA, occupational, foreign car damage and property & lading damage claims.

(c) Exhibits

Exhibits are listed in the exhibit index below. The exhibits include management contracts, compensatory plans and arrangements required to be filed as exhibits to the Form 10-K by Item 601 (10) (iii) of Regulation S-K.

Exhibit	Description
3	Articles of incorporation and Bylaws:
3.1	Restated Certificate and Articles of Incorporation of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 99.2 to Canadian Pacific Railway Limited’s Form 6-K filed with the Securities and Exchange Commission on October 22, 2015, File No. 001-01342).
3.2	By-law No. 1, as amended, of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 1 to Canadian Pacific Railway Limited’s Form 6-K filed with the Securities and Exchange Commission on May 22, 2009, File No. 001-01342).
3.3	By-law No. 2 of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 99.1 to Canadian Pacific Railway Limited’s Form 6-K filed with the Securities and Exchange Commission on March 13, 2015, File No. 001-01342).
3.4	General By-law, as amended, of Canadian Pacific Railway Company, a wholly owned subsidiary of Canadian Pacific Railway Limited (incorporated by reference to Exhibit 2 to Canadian Pacific Railway Limited’s Form 6-K filed with the Securities and Exchange Commission on May 22, 2009, File No. 001-01342).
4	Instruments Defining the Rights of Security Holders, Including Indentures:

4.1	Indenture dated as of May 8, 2007 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.1 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.2	First Supplemental Indenture dated as of May 8, 2007 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.3	Second Supplemental Indenture dated as of May 20, 2008 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.3 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

4.4	Third Supplemental Indenture dated as of May 15, 2009 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.4 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.5	Fourth Supplemental Indenture dated as of September 23, 2010 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.5 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.6	Fifth Supplemental Indenture dated as of December 1, 2011 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.6 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.7	Sixth Supplemental Indenture dated as of February 2, 2015 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.7 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.8	Seventh Supplemental Indenture dated as of August 3, 2015 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.8 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.9	Eighth Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.9 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.10	Indenture dated as of October 30, 2001 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.10 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.11	First Supplemental Indenture dated as of April 23, 2004 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.11 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.12	Second Supplemental Indenture dated as of October 12, 2011 between Canadian Pacific Railway Limited and The Bank of New York Mellon (incorporated by reference to Exhibit 4.12 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.13	Third Supplemental Indenture dated as of October 13, 2011 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.13 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.14	Fourth Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.14 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.15	Indenture dated as of July 15, 1991 between Canadian Pacific Railway Company and Harris Trust and Savings Bank (incorporated by reference to Exhibit 4.15 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.16	First Supplemental Indenture dated as of July 1, 1996 between Canadian Pacific Railway Company and Harris Trust and Savings Bank (incorporated by reference to Exhibit 4.16 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.17	Second Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (as successor in interest to Harris Trust and Savings Bank) (incorporated by reference to Exhibit 4.17 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.18	Indenture dated as of May 23, 2008 between Canadian Pacific Railway Company and Computershare Trust Company of Canada (incorporated by reference to Exhibit 4.18 to Canadian Pacific Railway Limited's Form 10-K

	filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.19	First Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and Computershare Trust Company of Canada (incorporated by reference to Exhibit 4.19 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.20	Indenture dated as of September 11, 2015, from Canadian Pacific Railway Company to Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 99.1 to Canadian Pacific Railway Limited's Registration Statement on Form 6-K filed with the Securities and Exchange Commission on September 14, 2015, File No. 001-01342).

4.21	First Supplemental Indenture dated as of September 11, 2015 between Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.21 to Canadian Pacific Railway Limited’s Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.22	Second Supplemental Indenture dated as of November 24, 2015 among Canadian Pacific Railway Limited, Canadian Pacific Railway Company and The Bank of New York Mellon (incorporated by reference to Exhibit 4.22 to Canadian Pacific Railway Limited’s Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
4.23	Guarantee of Canadian Pacific Railway Company’s Perpetual 4% Consolidated Debenture Stock dated as of December 18, 2015, between Canadian Pacific Railway Limited and Canadian Pacific Railway Company (incorporated by reference to Exhibit 4.23 to Canadian Pacific Railway Limited’s Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10	Material Contracts:
10.1*,**	Amendment dated as of January 31, 2017 to the Executive Employment Agreement dated July 23, 2016 and effective as of July 1, 2017 between Keith Creel and Canadian Pacific Railway Company.
10.2*,**	Offer of Employment Letter to Robert Johnson dated April 19, 2016.
10.3*	Separation Agreement between Canadian Pacific Railway and E. Hunter Harrison dated January 18, 2017 (incorporated by reference to Exhibit 10.1 Canadian Pacific Railway Limited’s Registration Statement on Form 8-K filed with the Securities and Exchange Commission on January 23, 2017, File No. 001-01342).
10.4*	Offer of Employment Letter to Nadeem Velani dated October 18, 2016 (incorporated by reference to Exhibit 10.3 Canadian Pacific Railway Limited’s Registration Statement on Form 8-K filed with the Securities and Exchange Commission on October 24, 2016, File No. 001-01342).
10.5*	Post-Retirement Consulting Agreement between the Canadian Pacific Railway Limited and E. Hunter Harrison dated July 25, 2016 (incorporated by reference to Exhibit 10.1 to Canadian Pacific Railway Limited’s Registration Statement on Form 8-K filed with the Securities and Exchange Commission on July 26, 2016, File No. 001-01342).
10.6*	Employment Agreement, between the Canadian Pacific Railway Limited and Keith Creel effective July 1, 2017 (incorporated by reference to Exhibit 10.2 to Canadian Pacific Railway Limited’s Registration Statement on Form 8-K filed with the Securities and Exchange Commission on July 26, 2016, File No. 001-01342).
10.7	Third Amending Agreement, dated as of June 28, 2016, amending the Credit Agreement, dated September 26, 2014, between Canadian Pacific Railway Company, as Borrower, Canadian Pacific Railway Limited, as Covenantor, Royal Bank of Canada, as Administrative Agent, and the various Lenders party thereto (incorporated by reference to Exhibit 10.1 to Canadian Pacific Railway Limited’s Registration Statement on Form 8-K filed with the Securities and Exchange Commission on June 29, 2016, File No. 001-01342).
10.8*	CP 401(k) Savings Plan, as amended and restated effective October 27, 2014 (incorporated by reference to Exhibit 4.5 to Canadian Pacific Railway Limited's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on December 21, 2015, File No. 333-208647).
10.9*	Stand-Alone Option Agreement dated February 4, 2013 between the Registrant and Keith Creel (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited’s Registration Statement on Form S-8 filed with the Securities and Exchange Commission on May 24, 2013, File No. 333-188827).
10.10*	

	Performance Share Unit Plan for Eligible Employees of Canadian Pacific Railway Limited, adopted with effect from February 17, 2009, as amended February 22, 2013, April 30, 2014 and February 18, 2015 (incorporated by reference to Exhibit 10.3 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.11*	Canadian Pacific Railway Limited Amended and Restated Management Stock Option Incentive Plan, as amended and restated effective November 19, 2015 (incorporated by reference to Exhibit 10.4 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.12*	Canadian Pacific Railway Limited Employee Share Purchase Plan (U.S.) dated July 1, 2006 ("ESPP (U.S.)"), and Amendment to the ESPP (U.S.) effective January 1, 2015, and Amendment to the ESPP (U.S.) January 1, 2016 (incorporated by reference to Exhibit 10.5 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.13*	Stand-Alone Option Agreement dated June 26, 2012 between the Registrant and E. Hunter Harrison (incorporated by reference to Exhibit 4.2 to Canadian Pacific Railway Limited's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on September 14, 2012, File No. 333-183891).
10.14*	Directors' Stock Option Plan, effective October 1, 2001 (incorporated by reference to Exhibit 10.7 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.15*	Directors' Deferred Share Unit Plan, as amended effective July 1, 2013 (incorporated by reference to Exhibit 10.8 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

10.16*	Senior Executives' Deferred Share Unit Plan, effective as of January 1, 2001, as amended September 6, 2012 (incorporated by reference to Exhibit 10.9 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.17*	Canadian Pacific Railway Limited Employee Share Purchase Plan (Canada) dated July 1, 2006 ("ESPP (Canada)"), and Amendment to the ESPP (Canada) effective January 1, 2013, and Amendment to the ESPP (Canada) effective November 5, 2013, and Amendment to the ESPP (Canada) effective July 17, 2014 (incorporated by reference to Exhibit 10.10 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.18*	Canadian Pacific U.S. Salaried Retirement Income Plan, as restated effective January 1, 2015 (incorporated by reference to Exhibit 10.11 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.19*	Canadian Pacific U.S. Supplemental Executive Retirement Plan, effective January 1, 2013 ("CPUSERP"), and First Amendment to the CPUSERP effective November 14, 2013, and Second Amendment to the CPUSERP effective January 1, 2014 (incorporated by reference to Exhibit 10.12 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.20*	Restricted Share Unit Plan for Eligible Employees of Canadian Pacific Railway Limited, effective August 2, 2011, as amended February 21, 2013 (incorporated by reference to Exhibit 10.13 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.21*	Short Term Incentive Plan for Non-Unionized Employees (Canada) and US Salaried Employees, effective January 1, 2014 (incorporated by reference to Exhibit 10.14 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.22*	Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.15 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.23*	Amendment Number 1, effective July 1, 2010, to the Defined Contribution Provisions (Appendix B) of the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.16 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.24*	Amendment Number 2, effective April 1, 2011, to the Defined Contribution Provisions (Appendix B) of the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.17 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.25*	Amendment Number 3, effective January 1, 2013, to the Defined Contribution Provisions (Appendix B) of the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.18 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.26*	Amendment Number 1 to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009, approved by the Board of Directors on December 16, 2009 (incorporated by reference to Exhibit 10.19 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.27*	Amendment Number 2, effective January 1, 2010, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.20 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.28*	Amendment Number 3, effective January 1, 2010, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.21 to

	Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.29*	Amendment Number 4, effective January 1, 2011, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.22 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.30*	Amendment Number 5, effective January 1, 2011, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.23 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.31*	Amendment Number 6, effective October 1, 2012, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.24 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.32*	Amendment Number 7, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.25 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

10.33*	Amendment Number 8, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.26 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.34*	Amendment Number 9, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.27 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.35*	Amendment Number 10, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.28 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.36*	Amendment Number 11, effective January 1, 2013, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.29 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.37*	Amendment Number 12, effective January 1, 2015, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.30 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.38*	Amendment Number 13, effective January 1, 2015, to the Canadian Pacific Railway Company Pension Plan (Pension Plan Rules), consolidated as at January 1, 2009 (incorporated by reference to Exhibit 10.31 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.39*	Canadian Pacific Railway Company Secondary Pension Plan (Pension Plan Rules), effective June 1, 2013 (incorporated by reference to Exhibit 10.32 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.40*	Amendment Number 1, effective June 1, 2013, to the Canadian Pacific Railway Company Secondary Pension Plan (Pension Plan Rules), effective June 1, 2013 (incorporated by reference to Exhibit 10.33 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.41*	Amendment Number 2, effective January 1, 2015, to the Canadian Pacific Railway Company Secondary Pension Plan (Pension Plan Rules) effective January 1, 2015 (incorporated by reference to Exhibit 10.34 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.42*	Canadian Pacific Supplemental Executive Retirement Plan, effective January 1, 2011 (incorporated by reference to Exhibit 10.35 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.43*	Executive Employment Agreement between Canadian Pacific Railway Company and Hunter Harrison, effective as of June 28, 2012 (incorporated by reference to Exhibit 10.36 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.44*	Amendment dated as of May 5, 2014, to the Executive Employment Agreement between Canadian Pacific Railway Company and Hunter Harrison, effective as of June 28, 2012 (incorporated by reference to Exhibit 10.37 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.45*	Executive Employment Agreement between Canadian Pacific Railway Company, Soo Line Railroad Company and Keith Creel, effective as of February 5, 2013 (incorporated by reference to Exhibit 10.38 to Canadian

	Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.46*	Amendment dated August 10, 2015, to the Executive Employment Agreement between Canadian Pacific Railway Company, Soo Line Railroad Company and Keith Creel, effective as of February 5, 2013 (incorporated by reference to Exhibit 10.39 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.47*	Offer of Employment Letter to Mark Erceg dated April 30, 2015 (incorporated by reference to Exhibit 10.40 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.48*	Change in Control Agreement between Canadian Pacific Railway Company and Mark Erceg made as of May 18, 2015 (incorporated by reference to Exhibit 10.41 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.49*	Offer of Employment Letter to Mark Wallace dated July 16, 2012 (incorporated by reference to Exhibit 10.42 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.50*	Change in Control Agreement between Canadian Pacific Railway Company and Mark Wallace made as of May 1, 2014 (incorporated by reference to Exhibit 10.43 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).

10.51*	Offer of Employment Letter to Laird Pitz dated March 7, 2014 (incorporated by reference to Exhibit 10.44 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.52	Credit Agreement dated as of September 26, 2014 among Canadian Pacific Railway Company and CPR Securities Limited, as borrowers, Canadian Pacific Railway Limited, as covenantor, the Financial Institutions that are signatories to the Credit Agreement, as Lenders, the Royal Bank of Canada, as Administrative Agent, RBC Capital Markets, J.P. Morgan Securities LLC, TD Securities, Morgan Stanley MUFG Loan Partners, LLC and Citibank, N.A., Canadian Branch, as Co-Lead Arrangers, RBC Capital Markets and J.P. Morgan Securities LLC, as Joint Bookrunners, J.P. Morgan Chase Bank, N.A., as Syndication Agent, The Toronto-Dominion Bank, Morgan Stanley MUFG Loan Partners, LLC and Citibank, N.A., Canadian Branch, as Co-Documentation Agents (incorporated by reference to Exhibit 10.45 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.53	First Amending Agreement dated as of June 15, 2015, to the Credit Agreement dated September 26, 2014, among Canadian Pacific Railway Company and CPR Securities Limited, as borrowers, Canadian Pacific Railway Limited, as covenantor, the signatories to this First Amending Agreement to the Credit Agreement, as Lenders, the Royal Bank of Canada, as Administrative Agent (incorporated by reference to Exhibit 10.46 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
10.54	Second Amending Agreement dated as of September 17, 2015, to the Credit Agreement dated September 26, 2014, among Canadian Pacific Railway Company and CPR Securities Limited, as borrowers, Canadian Pacific Railway Limited, as covenantor, the signatories to the Second Amending Agreement to this Credit Agreement, as Lenders, the Royal Bank of Canada, as Administrative Agent (incorporated by reference to Exhibit 10.47 to Canadian Pacific Railway Limited's Form 10-K filed with the Securities and Exchange Commission on February 29, 2016, File No. 001-01342).
12.1**	Ratio of earnings to fixed charges
21.1**	Subsidiaries of the registrant
23.1**	Consent of Independent Registered Public Accounting Firm
24.1**	Power of attorney (included on the signature pages of this Form 10-K)
31.1**	CEO Rule 13a-14(a) Certifications
31.2**	CFO Rule 13a-14(a) Certifications
32.1**	CEO Section 1350 Certifications
32.2**	CFO Section 1350 Certifications
99.1**	Annual CEO Certification pursuant to NYSE Rule 303A.12(a)
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document
	The following financial information from Canadian Pacific Railway Limited's Annual Report on Form 10-K for the year ended December 31, 2016, formatted in Extensible Business Reporting Language (XBRL) includes: (i) the Consolidated Statements of Income of each of the years ended December 31, 2016, 2015, and 2014; (ii) the Consolidated Statements of Comprehensive Income for each of the years ended December 31, 2016, 2015, and 2014; (iii) the Consolidated Balance Sheets at December 31, 2016 and 2015; (iv) the Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015, and 2014; (v) the Consolidated Statements of Changes in Shareholders' Equity for each of the three years

ended December 31, 2016, 2015, and 2014; and (vi) the Notes to Consolidated Financial Statements.

* Management contract or compensatory arrangement
**Filed with this Statement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CANADIAN PACIFIC
RAILWAY LIMITED
(Registrant)
By: /s/ KEITH CREEL
Keith Creel
Chief Executive Officer
Dated: February 16, 2017

POWER OF ATTORNEY

Each of the undersigned do hereby appoint each of Nadeem Velani and Jeffrey J. Ellis, his or her true and lawful attorney-in-fact and agent, to sign on his or her behalf the Company's Annual Report on Form 10-K, for the year ended December 31, 2016, and any and all amendments thereto, and to file the same, with all exhibits thereto, with the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities indicated on February 16, 2017.

Signature	Title
/s/ KEITH CREEL Keith Creel	Chief Executive Officer and Director (Principal Executive Officer)
/s/ NADEEM VELANI Nadeem Velani	Vice-President and Chief Financial Officer (Principal Financial Officer)
/s/ ANDREW F. REARDON Andrew F. Reardon	Chairman of the Board of Directors
/s/ JOHN R. BAIRD John R. Baird	Director
/s/ ISABELLE COURVILLE Isabelle Courville	Director
/s/ GILLIAN H. DENHAM Gillian H. Denham	Director
/s/ WILLIAM R. FATT William R. Fatt	Director
/s/ REBECCA MACDONALD Rebecca MacDonald	Director

/s/ MATTHEW H. PAULL Matthew H. Paull	Director
/s/ JANE L. PEVERETT Jane L. Peverett	Director
/s/ GORDON T. TRAFTON II Gordon T. Trafton II	Director

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