



Leading
The Charge



LEADING THE CHARGE

For 115 years, Dana has led the charge. We have proven time and again that we not only evolve in tandem with the industry, but also remain a step ahead. We continually build upon our foundation of success to support new applications as they emerge, and partner with customers as they develop tomorrow's vehicles.

Established in **1904**

36,000 Employees

Presence in **34** Countries

150 Major Facilities

Invested **\$271** Million in
Engineering

Ship to **136** Countries

10,000+ Patents

50 Years of
Electrification Expertise



Dana at a Glance

Business Units

MISSION

Our talented people power a customer-centric organization that is continuously improving the performance and efficiency of vehicles and machines around the globe. We will consistently deliver superior products and services to our customers and will generate exceptional value for our shareholders. This mission is embodied in our company theme:

People Finding A Better Way®

VISION

To be the global technology leader in efficient power conveyance and energy-management solutions that enable our customers to achieve their sustainability objectives.

VALUES

- Honesty and Integrity
- Good Corporate Citizenship
- Open Communication
- Continuous Improvement

Light Vehicle Drive Systems



Dana is a leading supplier of fully integrated drivetrain and electrified propulsion systems for all passenger vehicles. Working collaboratively with original-equipment manufacturers and the aftermarket, we focus on delivering best-in-class efficiency, maximum durability, and superior ride and handling across the globe.

Commercial Vehicle Drive and Motion Systems



Dana is an industry leader in the supply of traditional and electrified systems for medium- and heavy-duty commercial vehicles. We help original-equipment manufacturers and end-market customers achieve the best weight, performance, and efficiency, as well as the lowest cost of ownership, no matter the powertrain configuration.

Off-Highway Drive and Motion Systems



Dana delivers mobile drivetrain and motion solutions for construction, agriculture, material handling, and mining equipment, as well as motion systems for a wide variety of mobile and stationary industrial applications. These customized solutions support vehicles and machines with both conventional and electrified power sources and are designed to deliver innovative technologies that meet customer demands and goals worldwide.

Power Technologies



Dana provides advanced sealing and thermal-management solutions to all end markets in support of both conventional and electrified platforms. Leveraging the most cutting-edge technology and manufacturing processes, we deliver custom-engineered solutions designed to optimize vehicle efficiency and performance.

Financial Highlights

RECORD SALES

\$8.6 Billion ↑

6% increase from \$8.1 billion in 2018

RECORD ADJUSTED EBITDA¹

\$1.02 Billion ↑

6% increase from \$957 million in 2018

MARGIN

11.8%

Comparable to 2018

ADJUSTED FREE CASH FLOW¹

\$272 Million ↑

3% of sales, which is a 12% increase from \$243 million in 2018

RECORD DILUTED ADJUSTED EPS²

\$3.06 ↑

Up from \$3.02 in 2018

2019 CASH DIVIDENDS DECLARED

\$0.40 Per Share

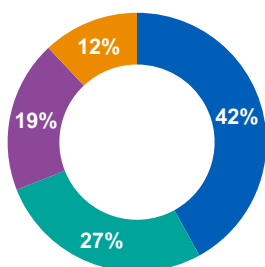
13% of diluted adjusted EPS returned to shareholders

All figures as of year-end December 31, 2019.

¹ See pages 34-35 of Dana's 2019 Form 10-K, included herein, for explanation and reconciliation of non-GAAP financial measures.

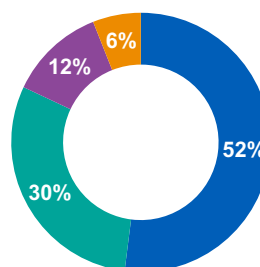
² Diluted adjusted EPS is a non-GAAP financial measure, which we have defined as adjusted net income divided by adjusted diluted shares. See the "Quarterly Financial Information and Reconciliations of Non-GAAP Information" on Dana's Investor Relations website at dana.com/investors for explanation and calculation of diluted adjusted EPS.

Sales



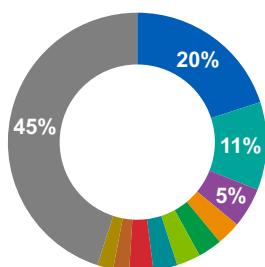
Sales by Business Unit

Light Vehicle	42%
Off-Highway	27%
Commercial Vehicle	19%
Power Technologies	12%



Sales by Region

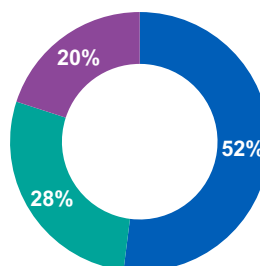
North America	52%
Europe	30%
Asia Pacific	12%
South America	6%



Sales by Customers

Ford	20%
FCA*	11%
PACCAR	5%
Toyota	3%
Volkswagen	3%
General Motors	3%
Renault/Nissan/Mitsubishi	3%
Deere	3%
Daimler	2%
Tata	2%
Others	45%

* Includes sales to system integrators for driveline products that support FCA vehicles.



Sales by End Market

Light Vehicle	52%
Off-Highway	28%
Commercial Vehicle	20%

Dear Fellow Shareholders,

The Dana of today is much different than what some long-term shareholders may remember. While our customer-centric culture and expertise in bringing innovative technologies to market remain the same, we have taken strategic steps to transform the company and position Dana as a leader in vehicle electrification across all mobility markets and geographies.



JAMES K. KAMSICKAS
Chairman and CEO



The investments we made over the last year are already delivering positive results for our business. In 2019, we continued our **track record of growth, achieving record sales, profit, and diluted adjusted earnings per share, while increasing our adjusted free cash flow by 12 percent over 2018.**

- **Record sales, profit, and diluted adjusted EPS**
- **\$25 million in acquisition cost synergies**
- **5 strategic electrodynamic acquisitions**
- **35+ customer and industry honors**
- **6 additional facilities in Asia**
- **PACE Award winner**
- **First full electric powertrain program with complete Dana content**
- **\$700 million new business backlog through 2022**

Last year, we updated our corporate strategy, as we exceeded the original targets we set for the company. The updated strategy, titled “Powering into e-Drive,” sets Dana’s focus on maintaining a profitable growth trajectory, delivering an additional \$2 billion of sales growth, expanding profit margin by 100 basis points, and adding approximately \$200 million of adjusted free cash flow through 2023. To achieve these goals, Dana will continue to leverage the core, drive customer centricity, expand global markets, deliver innovative solutions, and lead electric propulsion.

While the principles of the strategy are likely familiar, one area where shareholders may notice the most change is our focus on leading the charge in electric propulsion. And leaders we have already become. Today, electrification yields more than \$100 million of sales, and we expect that number to grow significantly, to nearly \$500 million annually by 2023.

Over the past year, Dana has accelerated our capabilities in vehicle electrification, securing our position as the only supplier capable of delivering all elements of a complete, fully integrated electrified system across all mobility markets in any region of the world. While our customers are at varying phases in their electrification journeys, our strategy remains focused on supporting them with industry-leading technologies and expertise for all vehicle architectures. In addition to our targeted investment in mechatronics research and development, a number of acquisitions have positioned us for success amidst this shift toward electrification.

In early 2019, Dana completed the purchase of the Oerlikon Group's drive systems segment, including the high-performance transmission capabilities of Graziano, torque-hub drive technology of Fairfield, software solutions from VOCIS, and electric motors from Ashwoods. As a result, we have added a wide range of electric propulsion technologies, transmission systems, custom gears, drives, and more into our product portfolio. We also finalized the acquisition of the SME Group, which augmented our electrodynamic offering with low-voltage electric motors, inverters, and controls. Together, these acquisitions have significantly increased our opportunities for added content per vehicle.

Additionally, Dana acquired Nordresa, a recognized leader in the development and integration of electric commercial vehicles. This strategic transaction provided Dana with the in-house capabilities to deliver complete, fully integrated e-Powertrains in partnership with our customers. From the battery packs that store the energy, to the e-Propulsion systems that propel the vehicle forward, to the hardware and software that control the various functions, Dana can now offer and integrate it all. In fact, we are already collaborating with customers such as Kenworth and Peterbilt to transform traditional medium-duty chassis into complete e-Powertrains. These programs alone are expected to generate approximately \$200 million in incremental sales to Dana.

Furthering our strategy in electrification and advancing our goal to expand global markets, Dana also announced a collaboration with Valeo to develop and supply 48-volt electric-vehicle systems for new mobility applications. This provides Dana with new opportunities for our light vehicle business to support low-speed electric vehicles and hybrid e-AWD passenger vehicles.

These investments in electrification further amplify our commitment to sustainability and social responsibility, which remain central to the vision of the company.

Nevertheless, we remain energy-source agnostic and continue to develop products to meet our customers' needs – whether they're working with a traditional engine or an electric, hybrid, or fuel cell

powertrain. Last year, for example, our Spicer® AdvanTEK Ultra™ axle went into production with Ford. An *Automotive News* PACE Award winner, this revolutionary axle system delivers up to a 45 percent reduction in energy loss, compared with a typical axle. This ongoing innovation, in combination with our exceptional delivery and quality performance, has resulted in more than 35 customer and industry honors. I am proud to report that we have secured multiple new programs, including the Jeep®, Gladiator, Sandvik TH663i underground mining truck, and the all-electric Lion8 bus — just to name a few.

In 2019, we also focused on expanding our global presence in Europe, India, and China to capitalize on the growth of our customers in these critical markets.

Despite facing softer demand in 2019, we have confidence in our ability to manage the company through the cyclical nature of the business to continue delivering shareholder value through 2020 and beyond.

We have positioned the company for significant growth as electrification adoption accelerates, and we have made the acquisitions that will be key to exceeding our long-term financial targets. Our new business backlog of \$700 million through 2022 positions us for strong future growth.

As we look to the year ahead, there's not a doubt in my mind that Dana will lead the charge across all mobility markets, worldwide — and we couldn't do it without our dedicated people, esteemed customers, and valued investors. Together with the Board of Directors and the global Dana team, I thank you for your support as we focus on "Powering into e-Drive" and delivering maximum value to everyone with whom we work.

My personal best,



James K. Kamsickas

Chairman and Chief Executive Officer

Dana is leading the charge as the only supplier capable of delivering all elements of a complete, fully integrated electrified system, across all mobility markets around the world.



Powering into e-Drive

After exceeding the targets from our previous enterprise strategy, Dana updated its corporate strategy in 2019. Today, the company is focused on “Powering into e-Drive,” a plan that will drive sales to approximately \$10 billion and enable Dana to achieve cumulative adjusted free cash flow of roughly \$2 billion by 2023. Powered by our people, who are always finding a better way, this strategy positions Dana as a leader in both traditional drivetrain and emerging e-Propulsion systems worldwide. The strategy is driven by five pillars.

01 Leveraging the Core

Dana utilizes our capabilities in power conveyance, thermal management, and mechatronics across all mobility markets to deliver a sustainable competitive advantage through cost efficiencies, shared research and development, and knowledge transfer.

Dana acquires drive systems segment of Oerlikon Group

In February, Dana completed the acquisition of the drive systems segment of the Oerlikon Group. This included the high-performance transmission capabilities of Graziano and the torque-hub drive technology of Fairfield. The acquisition expanded the company’s capabilities in electrification and further optimized Dana’s manufacturing presence in key growth markets with the addition of four research and development facilities and 12 manufacturing plants throughout China, India, Europe, and the United States.

The acquisition extends Dana’s current technology portfolio and creates opportunities for increased revenue and profitable growth, especially in the area of high-precision helical gears for the light- and commercial-vehicle markets, as well as planetary hub drives for wheeled and tracked vehicles in the off-highway market.

It also further increases Dana’s electronic controls capability for transmissions and drivelines through the acquisition of VOCIS and expands the company’s motor technologies with the integration of Ashwoods Electric Motors.

Graziano® bevel gear sets

02 Driving Customer Centricity

Dana is positioned to win significant new business across all three mobility markets as original-equipment manufacturers deploy capital toward the megatrends.

Dana to supply drive systems for redesigned Oshkosh® S-Series™ front discharge mixer

Dana will provide its Spicer® D172 series heavy-duty tandem axles and its SPL® 170 and 250 driveshafts as standard equipment for the newly redesigned Oshkosh S-Series front discharge mixer.

The company's new tandem axle is lightweight without compromising strength, key to the heavy-hauling requirement of the S-Series mixer. Rated for up to 50,000-pound capacity applications and supported by a broad range of gear ratios, this axle expertly handles the construction environment.

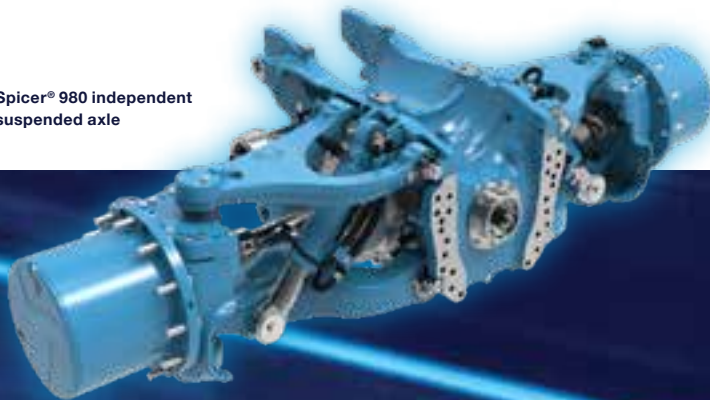
Dana advanced drive technologies contribute to all four winners of "Tractor of The Year 2020" awards

Dana is proud to supply advanced drive technologies for the winners in all four categories of the "Tractor of the Year 2020" awards competition.

The Spicer® 980 independent suspended axle is featured on the Fendt 942 Vario tractor, winner in the premier "Tractor of the Year" category. Dana also supplies the front axle for the Fendt 314 Vario Profi+, which topped the "Best Utility" classification.

Additionally, high-precision gears and shifting solutions from Dana are used in the transmissions of the New Holland T 4.110 N, which was named "Best Specialized" tractor, and the New Holland Methane Power Tractor, which was honored as the "Sustainable Tractor of the Year."

Spicer® 980 independent suspended axle



Dana earns supplier of the year honors from General Motors, FCA

Dana was named a Supplier of the Year by General Motors for its driveline technologies. Winners were selected based on performance criteria in purchasing, manufacturing services, customer care, aftersales, and logistics.



Dana has been a supplier to GM for 114 years and currently manufactures drive technologies for GM vehicles in North and South America, including front and rear axles and propshafts.

Separately, Dana was named a Supplier of the Year by FCA for value optimization. Dana was one of 19 supplier partners to receive the prestigious award, given to those with exemplary supplier scorecard performance.



Dana supplies drive, sealing, and thermal-management products to FCA.

03 Expanding Global Markets

Dana is investing in capabilities to drive growth in the Asia-Pacific market, where the growth rate is highest and electrification adoption is earliest.

Dana expands capabilities for Indian construction market

Dana continues to grow its support for the Indian construction industry, recently introducing new technologies, enhanced local engineering capabilities, and additional manufacturing and distribution facilities.

The company has been a leading Tier I supplier to vehicle manufacturers in India for more than half a century, with more than 5,000 employees working at Dana's 17 operations in the country.

Dana offers drive and motion technologies for compact construction equipment that demonstrate the company's support for a wide range of applications and vehicle energy strategies. Solutions include complete drive systems for compactors such as Spicer® axles, Spicer® Torque-Hub® wheel drives, and Brevini® hydraulic motors. Additionally, Dana offers a complete range of products for diesel-, hybrid-, and electric-powered aerial work platforms, wheel loaders, and self-loading mixers.

The company can seamlessly package drive technologies with motor and generator solutions for hybrid configurations, along with Spicer Electrified™ innovations for electric-powered equipment. The company also supplies a wide selection of Brevini Electrified™ motion products, optimized for the unique power distribution requirements of hybrid and electric off-highway vehicles.



Spicer® Torque-Hub®
wheel drives

New facilities in China fuel growth in the Asia-Pacific region

Through a combination of multiple acquisitions and organic growth, Dana has significantly increased its presence and capabilities in the Asia-Pacific region.

These new operations expand Dana's engineering, manufacturing, testing, and aftermarket services, as well as strengthen the company's capabilities for electrification and hybridization across the light-vehicle, commercial-vehicle, and off-highway markets throughout the region.

The new facilities are located in Shanghai, where Dana engineers and manufactures AC electric motors, inverters, controllers, and accessories; Changshu, where planetary gear reducers for e-Drives are produced; Baoding, where e-Axles for new energy buses are manufactured; and in Suzhou, where two facilities produce city bus axles and other drive products for off-highway mobile equipment and industrial machinery.

Dana also opened a new all-wheel-drive systems plant in Chongqing and expanded its planetary drive and thermal products manufacturing facility in Yancheng.

In China alone, Dana's footprint now encompasses more than 6,500 employees at 23 operations, including operations in which Dana holds equity interest.

04 Delivering Innovative Solutions

Award-winning Spicer® AdvanTEK Ultra™ axle system commences production

Dana began production of the Spicer® AdvanTEK Ultra™ axle with its SmartConnect™ disconnecting all-wheel-drive system for the Ford Edge and other related vehicle platforms throughout North America, Europe, and Asia-Pacific.

A 2019 *Automotive News* PACE Award winner, the Spicer AdvanTEK Ultra axle delivers best-in-class fuel efficiency across all torques, speeds, and temperatures without tradeoffs for durability or comfort. It leverages ultra-low viscosity lubricants while maintaining gear durability to achieve up to a 45-percent reduction in energy loss, compared with a typical axle.

Spicer® AdvanTEK Ultra™ axle

Dana will capitalize on growth trends that expand its addressable market and provide opportunities for increasing its content per vehicle.

Fuel cell bipolar plate and tire analytics solutions named finalists for *Automotive News* PACE Awards

Dana was named a 2020 *Automotive News* PACE Awards finalist for its metallic bipolar plates for fuel cells, as well as its Rhombus™ TireAnalytics system.



This marks the ninth consecutive year that Dana technologies have been named as finalists for this prestigious industry awards program, which recognizes suppliers for game-changing solutions that deliver superior innovation, technological advancement, and business performance.

Dana's metallic bipolar plates are an integral component in the fuel cell stack and deliver improved cost, performance, and manufacturability, aiding original-equipment manufacturers in realizing commercialization of fuel-cell-powered mobility.

The second PACE Award nominee, Dana's Rhombus TireAnalytics technology, is a sophisticated, cloud-based software platform that enables commercial-truck owners and fleet-maintenance managers to ensure that best practices are implemented for tire maintenance and to optimize tire lifecycle management. Using Dana's proprietary software, customers can view and take immediate action using the information provided by the software, including tire history, pressure, tread data, tire consumption, top-performing brands, wear rates, cost-per-mile, and more.

Dana launches powershift transmission for large underground mining and construction vehicles

Dana announced the development of the Spicer® TE50 powershift transmission, which is designed for large load-haul dumpers, trucks used in underground mining, and wheel loaders. Engineered for vehicles from 400 to 600 kW (544 to 816 horsepower), the Spicer TE50 transmission offers superior performance through improved fuel efficiency, smoother shifting, more precise vehicle handling, and optimized braking. The transmission launched with vehicle manufacturers in the second half of 2019.

The Ultimate Dana 60® Bracketless Crate Axles designed to fit any application

For the aftermarket, Dana now offers The Ultimate Dana 60® Bracketless Crate Axles, allowing for smoother installation into virtually any application. End users will now be able to add the mounting brackets they choose, enabling them to be installed on more vehicle platforms. The axles include all the other features of The Ultimate Dana 60, including Spicer® performance ring and pinion gears, heavy-duty upgraded brakes, and massive SPL® 70 u-joints.

The Ultimate Dana 60® Bracketless Crate Axles



05 Leading Electric Propulsion

Dana is actively developing and delivering fully integrated e-Propulsion systems, capturing opportunities to double content per vehicle as core markets shift from internal-combustion engines to electric propulsion.

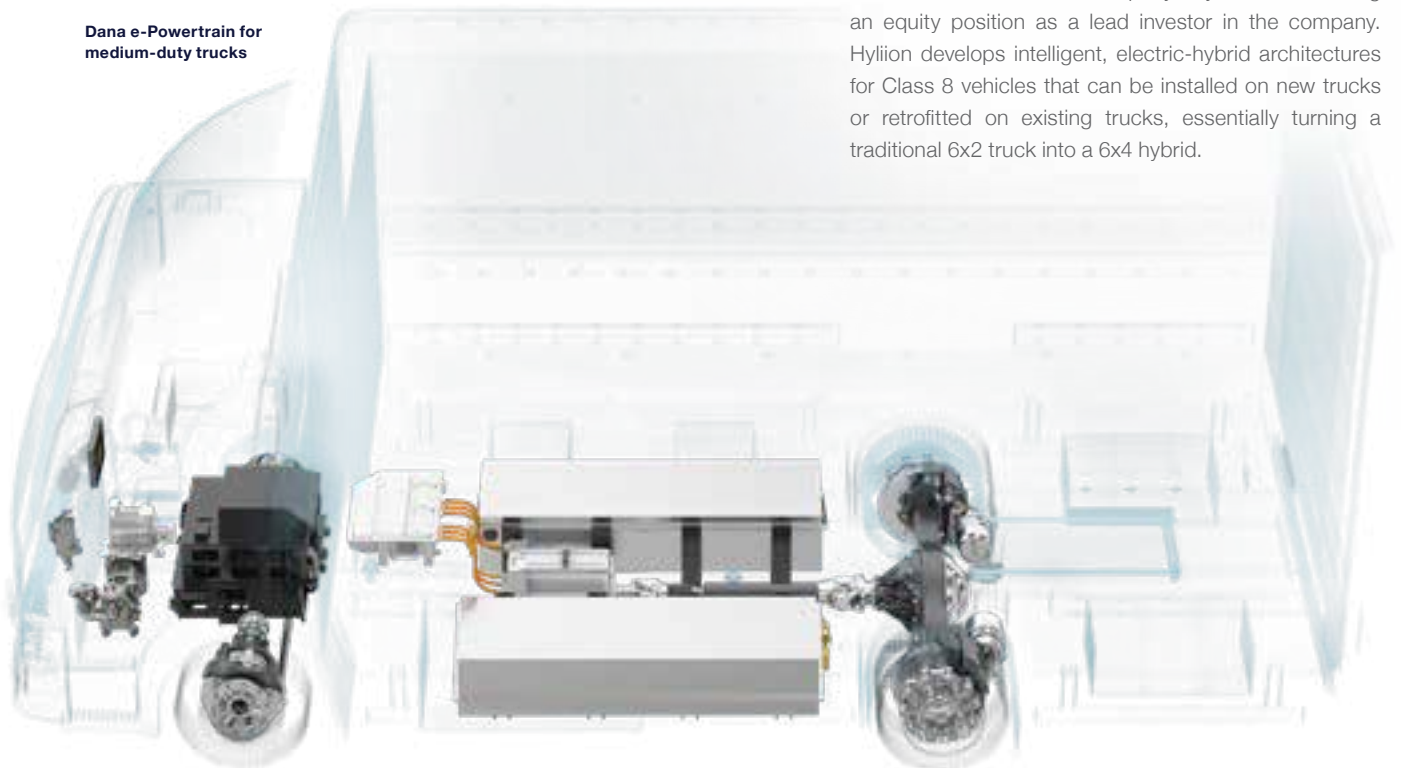
Peterbilt and Kenworth select Dana for e-Powertrain programs

Dana was selected by Peterbilt and Kenworth to supply complete e-Propulsion systems for their electric medium-duty battery-electric vehicles.

Peterbilt will integrate Dana's Spicer Electrified™ e-Propulsion system into its 220EV battery-electric chassis. The truck will also be equipped with two battery packs and an on-board charger supplied by Dana.

Dana is also working with Kenworth to integrate a complete Dana-designed e-Powertrain system into its zero-emissions K270E cabover chassis. Configured as a direct drive system, the vehicle will feature a Spicer Electrified e-Propulsion system, a standard Dana drive axle and driveshaft, an e-Power system, and software and controls from Dana.

Dana e-Powertrain for medium-duty trucks



Dana acquires Nordresa, invests in Hylion to boost e-Powertrain capabilities

In August, Dana completed the acquisition of Nordresa Motors, Inc., which is a prominent integration and application engineering expert for the development and commercialization of electric powertrains for commercial vehicles.

The investment further enhances Dana's electrification capabilities by combining its complete portfolio of motors, inverters, chargers, gearboxes, and thermal-management products with Nordresa's proprietary battery-management system, electric powertrain controls, and integration expertise to deliver complete electric powertrain systems.

Nordresa's ability to integrate multiple systems while customizing the battery storage and management systems enables Dana to offer the most efficient solutions to customers.

Dana also entered into a strategic partnership with Class 8 electrification company Hylion Inc., taking an equity position as a lead investor in the company. Hylion develops intelligent, electric-hybrid architectures for Class 8 vehicles that can be installed on new trucks or retrofitted on existing trucks, essentially turning a traditional 6x2 truck into a 6x4 hybrid.

Learn more about our sustainability initiatives at Dana.com/Sustainability



Dana TM4 low-voltage electric motor

Dana acquires SME Group, enhancing electromobility capabilities and global reach of Dana TM4

Dana completed the acquisition of the SME Group, headquartered in Arzignano, Italy. The global SME Group designs, engineers, and manufactures low-voltage AC induction and synchronous reluctance motors, inverters, and controls for a wide range of off-highway electric vehicle applications, including material handling, agriculture, construction, and automated-guided vehicles.

The addition of SME's low-voltage motors and inverters, which are primarily designed to meet the evolution of electrification in off-highway equipment, combined with Dana TM4's high voltage capabilities, gives Dana a complete range of electrodynamic technologies to support Dana's end markets.

Dana and Valeo collaborate to supply complete 48-volt electric-vehicle systems

Dana and Valeo announced a global collaboration to develop and supply 48-volt electric-vehicle systems for new-mobility applications, including low-speed electric and hybrid e-AWD vehicles. The first system is scheduled to launch in early 2020 with a major European automaker on series-produced cars.

The joint development will provide customers with complete electromechanical systems for three- and four-wheeled low-speed electric vehicles, as well as hybrid e-AWD applications for passenger cars and crossovers. The systems will be equipped with a Dana-designed Spicer Electrified™ e-Gearbox and a Valeo-developed electric motor and inverter.



The Dana-Valeo 48-volt systems are comprehensive, low-maintenance, and affordable solutions that easily can be tailored for all types of low-speed electric and hybrid AWD vehicles.

JLG and Dana develop e-Axle concept for next-generation aerial work platforms

Dana is collaborating with JLG to develop an advanced Spicer Electrified™ e-Axle as part of JLG's electrification initiative.

The Spicer Electrified e-Axle features an optimized combination of electrified drive components packaged in a unique configuration that reduces power losses by up to 20 percent when compared with traditional diesel-powered drivetrains.

Unveiled at the Bauma construction trade show in Munich, the Spicer Electrified e-Axle illustrates how Dana's investments in research and development, engineering capabilities, and recent acquisitions of adjacent technologies have strengthened the company's electrification offering.

For more than 20 years, Dana has supplied numerous drive and motion technologies for select JLG aerial work platforms and telehandler models, including axles, hydrostatic and hydrodynamic transmissions, hub drives, slew drives, and driveshafts. In 2019, Dana was honored as JLG's "Longest Standing Supplier" with a relationship spanning more than four decades.



Electrified aerial work platform technology demonstrator

Dana Leadership

Board of Directors

Aziz S. Aghili

Executive Vice President and President,
Off-Highway Drive and Motion Systems

Carl F. Beckwith

Senior Vice President, Global Operations

Shelley R. K. Bridaroli

Senior Vice President, Human Resources

Jonathan M. Collins

Executive Vice President and Chief
Financial Officer

Christophe J. Dominiak

Senior Vice President and Chief
Technology Officer

Matthew H. Fahnestock

Senior Vice President and
Chief Information Officer

James K. Kamsickas

Chairman and Chief Executive Officer

James D. Kellett

Vice President and Chief
Accounting Officer

Timothy R. Kraus

Senior Vice President and Treasurer

Douglas H. Liedberg

Senior Vice President, General Counsel,
and Secretary

Dwayne E. Matthews

President, Power Technologies

M. Craig Price

Senior Vice President, Purchasing and
Supplier Development

Robert D. Pyle

Executive Vice President and President,
Light Vehicle Drive Systems

Antonio Valencia

Senior Vice President, Global Electrification,
China, and India

Mark E. Wallace

Executive Vice President and President,
Commercial Vehicle Drive and Motion
Systems and Aftermarket

Rachel A. Gonzalez^{1,3}

Executive Vice President, General Counsel,
and Secretary of Starbucks Corporation
Director since 2017

James K. Kamsickas

Chairman and Chief Executive Officer of
Dana Incorporated
Director since 2015

Virginia A. Kamsky^{2,3}

Chairman and Chief Executive Officer
of Kamsky Associates, Inc.
Director since 2011

Bridget E. Karlin^{2,3}

Global Chief Technology Officer
and Vice President of IBM Global
Technology Services
Director since 2019

Raymond E. Mabus, Jr.^{2,3}

Founding Principal and Chief Executive
Officer of The Mabus Group
Former U.S. Secretary of the Navy
Director since 2017

Michael J. Mack^{1,2}

Retired Senior Executive of Deere & Co.
Director since 2018

R. Bruce McDonald^{1,2*}

Retired Chairman and Chief
Executive Officer of Adient plc
Director since 2014

Diarmuid B. O'Connell^{1,3}

Former Vice President of Tesla, Inc.
Director since 2018

Keith E. Wandell**

Retired Chairman, President, and Chief
Executive Officer of Harley-Davidson, Inc.
Director since 2008

¹ Member, Compensation Committee

² Member, Audit Committee

³ Member, Nominating and Corporate Governance Committee

* Committee Chair

** Lead Independent Director

For full biographies, please refer
to dana.com/investors or the proxy.

DAN

LISTED

NYSE

Form 10-K

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 10-K

**Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the Fiscal Year Ended: December 31, 2019**

OR

**Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the Transition Period From to**

Commission File Number: 1-1063

Dana Incorporated

(Exact name of registrant as specified in its charter)

Delaware

(State of incorporation)

3939 Technology Drive, Maumee, OH

(Address of principal executive offices)

26-1531856

(IRS Employer Identification Number)

43537

(Zip Code)

Registrant's telephone number, including area code: (419) 887-3000

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of exchange on which registered</u>
Common stock, par value \$0.01 per share	DAN	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the common stock held by non-affiliates of the registrant computed by reference to the closing price of the common stock on June 28, 2019 was \$2,851,347,359.

There were 143,942,539 shares of the registrant's common stock outstanding at January 31, 2020.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement to be delivered to stockholders in connection with the Annual Meeting of Shareholders to be held on April 22, 2020 are incorporated by reference into Part III.

DANA INCORPORATED
FORM 10-K
YEAR ENDED DECEMBER 31, 2019

Table of Contents

	<u>Pages</u>
PART I	
Item 1 Business	1
Item 1A Risk Factors	6
Item 1B Unresolved Staff Comments	12
Item 2 Properties	12
Item 3 Legal Proceedings	13
PART II	
Item 5 Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	14
Item 6 Selected Financial Data	15
Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations	16
Item 7A Quantitative and Qualitative Disclosures about Market Risk	42
Item 8 Financial Statements and Supplementary Data	44
Item 9 Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	101
Item 9A Controls and Procedures	101
Item 9B Other Information	101
PART III	
Item 10 Directors, Executive Officers and Corporate Governance	101
Item 11 Executive Compensation	101
Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	102
Item 13 Certain Relationships and Related Transactions, and Director Independence	102
Item 14 Principal Accountant Fees and Services	102
PART IV	
Item 15 Exhibits and Financial Statement Schedules	103
Signatures	106

Forward-Looking Information

Statements in this report (or otherwise made by us or on our behalf) that are not entirely historical constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements can often be identified by words such as “anticipates,” “expects,” “believes,” “intends,” “plans,” “predicts,” “seeks,” “estimates,” “projects,” “outlook,” “may,” “will,” “should,” “would,” “could,” “potential,” “continue,” “ongoing” and similar expressions, variations or negatives of these words. These statements represent the present expectations of Dana Incorporated and its consolidated subsidiaries based on our current information and assumptions. Forward-looking statements are inherently subject to risks and uncertainties. Our plans, actions and actual results could differ materially from our present expectations due to a number of factors, including those discussed below and elsewhere in this report and in our other filings with the Securities and Exchange Commission (SEC). All forward-looking statements speak only as of the date made and we undertake no obligation to publicly update or revise any forward-looking statement to reflect events or circumstances that may arise after the date of this report.

PART I

(Dollars in millions, except per share amounts)

Item 1. Business

General

Dana Incorporated (Dana) is headquartered in Maumee, Ohio and was incorporated in Delaware in 2007. We are a world leader in providing power-conveyance and energy-management solutions for vehicles and machinery. The company's portfolio improves the efficiency, performance, and sustainability of light vehicles, commercial vehicles, and off-highway equipment. From axles, driveshafts, and transmissions to electrodynamic, thermal, sealing and digital solutions, the company enables the propulsion of conventional, hybrid, and electric-powered vehicles by supplying nearly every major vehicle and engine manufacturer in the world. We also serve the stationary industrial market. As of December 31, 2019 we employed approximately 36,300 people, operated in 34 countries and had 149 major facilities around the world.

The terms “Dana,” “we,” “our” and “us” are references to Dana. These references include the subsidiaries of Dana unless otherwise indicated or the context requires otherwise.

Overview of our Business

We have aligned our organization around four operating segments: Light Vehicle Drive Systems (Light Vehicle), Commercial Vehicle Drive and Motion Systems (Commercial Vehicle), Off-Highway Drive and Motion Systems (Off-Highway) and Power Technologies. These operating segments have global responsibility and accountability for business commercial activities and financial performance.

External sales by operating segment for the years ended December 31, 2019, 2018 and 2017 are as follows:

	2019		2018		2017	
	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total
Light Vehicle	\$ 3,609	41.9%	\$ 3,575	43.9%	\$ 3,172	44.0%
Commercial Vehicle	1,611	18.7%	1,612	19.8%	1,412	19.6%
Off-Highway	2,360	27.4%	1,844	22.6%	1,521	21.1%
Power Technologies	1,040	12.0%	1,112	13.7%	1,104	15.3%
Total	<u>\$ 8,620</u>		<u>\$ 8,143</u>		<u>\$ 7,209</u>	

Refer to Segment Results of Operations in Item 7 and Note 22 to our consolidated financial statements in Item 8 for further financial information about our operating segments.

Our business is diversified across end-markets, products and customers. The following table summarizes the markets, products and largest customers of each of our operating segments as of December 31, 2019:

Segment	Markets	Products	Largest Customers
Light Vehicle	Light vehicle market: Light trucks (full frame) Sport utility vehicles Crossover utility vehicles Vans Passenger cars	Front drive steer rigid axles Rear drive rigid axles Front / rear drive units Driveshafts / propshafts AWD systems Power transfer units Electromechanical propulsion systems EV gearboxes Differentials	Ford Motor Company Fiat Chrysler Automobiles* Toyota Motor Company Renault-Nissan-Mitsubishi Alliance General Motors Company Tata Motors / Jaguar Land Rover
Commercial Vehicle	Medium/heavy vehicle market: Medium duty trucks Heavy duty trucks Buses Specialty vehicles	Steer axles Drive axles Driveshafts Tire inflation systems High voltage motors and inverters Low voltage motors and inverters Vehicle integration services Connected software solutions	PACCAR Inc AB Volvo Volkswagen AG** Navistar International Corp. Daimler AG Ford Motor Company
Off-Highway	Off-Highway market: Construction Earth moving Agricultural Mining Forestry Material handling Industrial stationary	Front axles Rear axles Driveshafts Transmissions Torque converters Wheel, track and winch planetary drives Industrial gear boxes Custom gears and shifting solutions Tire inflation systems Electronic controls Hydraulic valves, pumps and motors EV motors and inverters	Deere & Company CNH Industrial N.V. Oshkosh Corporation AGCO Corporation Manitou Group JCB Limited
Power Technologies	Light vehicle market Medium/heavy vehicle market Off-Highway market	Gaskets Cover modules Heat shields Engine sealing systems Cooling Heat transfer products	Ford Motor Company Cummins Inc. General Motors Company Volkswagen AG** Fiat Chrysler Automobiles Caterpillar Inc.

* Via a directed supply relationship

** Includes MAN AG, a majority-owned subsidiary of Volkswagen AG

Geographic Operations

We maintain administrative and operational organizations in North America, Europe, South America and Asia Pacific to support our operating segments, assist with the management of affiliate relations and facilitate financial and statutory reporting and tax compliance on a worldwide basis. Our operations are located in the following countries:

North America	Europe		South America	Asia Pacific
Canada	Belgium	Netherlands	Argentina	Australia
Mexico	Denmark	Norway	Brazil	China
United States	Finland	Russia	Colombia	India
	France	South Africa	Ecuador	Japan
	Germany	Spain		New Zealand
	Hungary	Sweden		Singapore
	Ireland	Switzerland		South Korea
	Italy	Turkey		Taiwan
	Lithuania	United Kingdom		Thailand

Our non-U.S. subsidiaries and affiliates manufacture and sell products similar to those we produce in the United States. Operations outside the U.S. may be subject to a greater risk of changing political, economic and social environments, changing governmental laws and regulations, currency revaluations and market fluctuations than our domestic operations. See the discussion of risk factors in Item 1A.

Sales reported by our non-U.S. subsidiaries comprised \$4,551, or 53%, of our 2019 consolidated sales of \$8,620. A summary of sales and long-lived assets by geographic region can be found in Note 22 to our consolidated financial statements in Item 8.

Customer Dependence

We are largely dependent on light vehicle, medium- and heavy-duty vehicle and off-highway original equipment manufacturer (OEM) customers. Ford Motor Company (Ford) and Fiat Chrysler Automobiles (FCA) were the only individual customers accounting for 10% or more of our consolidated sales in 2019. As a percentage of total sales from operations, our sales to Ford were approximately 20% in 2019, 20% in 2018 and 22% in 2017, and our sales to FCA (via a directed supply relationship), our second largest customer, were approximately 11% in 2019, 11% in 2018 and 9% in 2017. PACCAR Inc, Toyota Motor Company and Volkswagen AG were our third, fourth and fifth largest customers in 2019. Our 10 largest customers collectively accounted for approximately 55% of our sales in 2019.

Loss of all or a substantial portion of our sales to Ford, FCA or other large volume customers would have a significant adverse effect on our financial results until such lost sales volume could be replaced and there is no assurance that any such lost volume would be replaced.

Sources and Availability of Raw Materials

We use a variety of raw materials in the production of our products, including steel and products containing steel, stainless steel, forgings, castings and bearings. Other commodity purchases include aluminum, brass, copper and plastics. These materials are typically available from multiple qualified sources in quantities sufficient for our needs. However, some of our operations remain dependent on single sources for certain raw materials.

While our suppliers have generally been able to support our needs, our operations may experience shortages and delays in the supply of raw material from time to time due to strong demand, capacity limitations, short lead times, production schedule increases from our customers and other problems experienced by the suppliers. A significant or prolonged shortage of critical components from any of our suppliers could adversely impact our ability to meet our production schedules and to deliver our products to our customers in a timely manner.

Seasonality

Our businesses are generally not seasonal. However, in the light vehicle market, our sales are closely related to the production schedules of our OEM customers and those schedules have historically been weakest in the third quarter of the year due to a large number of model year change-overs that occur during this period. Additionally, third-quarter production

schedules in Europe are typically impacted by the summer vacation schedules and fourth-quarter production is affected globally by year-end holidays.

Backlog

A substantial amount of the new business we are awarded by OEMs is granted well in advance of a program launch. These awards typically extend through the life of the given program. This backlog of new business does not represent firm orders. We estimate future sales from new business using the projected volume under these programs.

Competition

Within each of our markets, we compete with a variety of independent suppliers and distributors, as well as with the in-house operations of certain OEMs. With a focus on product innovation, we differentiate ourselves through efficiency and performance, reliability, materials and processes, sustainability and product extension.

The following table summarizes our principal competitors by operating segment as of December 31, 2019:

Segment	Principal Competitors	
Light Vehicle	ZF Friedrichshafen AG GKN plc American Axle & Manufacturing Holdings, Inc. Magna International Inc. Nidec Corporation	Wanxiang Group Corporation IFA ROTORION Holding GmbH TREMEC Corporation Vertically integrated OEM operations
Commercial Vehicle	Meritor, Inc. American Axle & Manufacturing Holdings, Inc. Hendrickson (a Boler Company) BorgWarner Inc. Bosch Cummins Inc. Jing-Jin Electric Klein Products Inc.	Nidec Corporation Tirsan Kardan Siemens Allison Transmission WEG Danfoss ZF Friedrichshafen AG Vertically integrated OEM operations
Off-Highway	Carraro Group ZF Friedrichshafen AG Kessler + Co. Comer Industries Bonfiglioli Reggiana Riduttori Nidec Corporation	Sew-Eurodrive Siemens Walterscheid GmbH Bosch Rexroth AG Danfoss Vertically integrated OEM operations
Power Technologies	ElringKlinger AG Tenneco Inc. Freudenberg NOK Group MAHLE GmbH	Modine Manufacturing Company Valeo Group YinLun Co., LTD Denso Corporation

Intellectual Property

Our proprietary driveline and power technologies product lines have strong identities in the markets we serve. Throughout these product lines, we manufacture and sell our products under a number of patents that have been obtained over a period of years and expire at various times. We consider each of these patents to be of value and aggressively protect our rights throughout the world against infringement. We are involved with many product lines and the loss or expiration of any particular patent would not materially affect our sales and profits.

We own or have licensed numerous trademarks that are registered in many countries, enabling us to market our products worldwide. For example, our Spicer®, Victor Reinz®, Long® and TM4® trademarks are widely recognized in their market segments.

Engineering and Research and Development

Since our introduction of the automotive universal joint in 1904, we have been focused on technological innovation. Our objective is to be an essential partner to our customers and we remain highly focused on offering superior product quality, technologically advanced products, world-class service and competitive prices. To enhance quality and reduce costs, we use statistical process control, cellular manufacturing, flexible regional production and assembly, global sourcing and extensive employee training.

We engage in ongoing engineering and research and development activities to improve the reliability, performance and cost-effectiveness of our existing products and to design and develop innovative products that meet customer requirements for new applications. We are integrating related operations to create a more innovative environment, speed product development, maximize efficiency and improve communication and information sharing among our research and development operations. At December 31, 2019, we had seven stand-alone technical and engineering centers and nineteen additional sites at which we conduct research and development activities. Our research and development costs were \$112 in 2019, \$103 in 2018 and \$102 in 2017. Total engineering expenses including research and development were \$271 in 2019, \$252 in 2018 and \$220 in 2017.

Our research and development activities continue to improve customer value. For all of our markets, this means drivelines with higher torque capacity, reduced weight and improved efficiency. End-use customers benefit by having vehicles with better fuel economy and reduced cost of ownership. We are also developing a number of power technologies products for vehicular and other applications that will assist fuel cell, battery and hybrid vehicle manufacturers in making their technologies commercially viable in mass production.

Employees

The following table summarizes our employees by operating segment as of December 31, 2019:

Segment	Employees
Light Vehicle	12,300
Commercial Vehicle	6,200
Off-Highway	10,800
Power Technologies	5,400
Technical and administrative	1,600
Total	36,300

Environmental Compliance

We make capital expenditures in the normal course of business as necessary to ensure that our facilities are in compliance with applicable environmental laws and regulations. The cost of environmental compliance has not been a material part of capital expenditures and did not have a material adverse effect on our earnings or competitive position in 2019.

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 as amended (Exchange Act) are available, free of charge, on or through our Internet website at <http://www.dana.com/investors> as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC. Copies of any materials we file with the SEC can also be obtained free of charge through the SEC's website at <http://www.sec.gov>. We also post our *Corporate Governance Guidelines*, *Standards of Business Conduct for Members of the Board of Directors*, Board Committee membership lists and charters, *Standards of Business Conduct* and other corporate governance materials on our Internet website. Copies of these posted materials are also available in print, free of charge, to any stockholder upon request from: Dana Incorporated, Investor Relations, P.O. Box 1000, Maumee, Ohio 43537, or via telephone in the U.S. at 800-537-8823 or e-mail at InvestorRelations@dana.com. The inclusion of our website address in this report is an inactive textual reference only and is not intended to include or incorporate by reference the information on our website into this report.

Item 1A. Risk Factors

We are impacted by events and conditions that affect the light vehicle, medium/heavy vehicle and off-highway markets that we serve, as well as by factors specific to Dana. Among the risks that could materially adversely affect our business, financial condition or results of operations are the following, many of which are interrelated.

Risk Factors Related to the Markets We Serve

A downturn in the global economy could have a substantial adverse effect on our business.

Our business is tied to general economic and industry conditions as demand for vehicles depends largely on the strength of the economy, employment levels, consumer confidence levels, the availability and cost of credit and the cost of fuel. These factors have had and could continue to have a substantial impact on our business.

We expect global market conditions in 2020 to result in overall sales that are slightly lower than 2019. We expect the North America economic climate to deteriorate as compared to 2019. The medium/heavy truck market in North America is expected to be down considerably in 2020, with Class 8 demand down over 30% and Classes 5-7 lower by approximately 10% compared to 2019. In the light vehicle market, light truck demand is expected to be comparable to slightly weaker than 2019. The economy in Europe is expected to be mixed, with off-highway market demand being down and on-highway market demand being relatively stable compared to this past year. Continued economic improvement in Brazil is expected to provide stable to improving production levels in our key South America market segments in 2020. We expect all markets in Asia Pacific to contract in 2020, as the Chinese and Indian economies continue to soften. Adverse developments in the economic conditions of any of these markets could reduce demand for new vehicles, causing our customers to reduce their vehicle production and, as a result, demand for our products would be adversely affected.

Certain political developments occurring the past several years have provided increased economic uncertainty. The United Kingdom's decision in 2016 to exit the European Union has not had significant economic ramifications to date; however, transition details continue to develop and could have potential economic implications in the United Kingdom and elsewhere. Political climate changes in the U.S., including tax reform legislation, easing of regulatory requirements and potential trade policy actions, are likely to impact economic conditions in the U.S. and various countries, the cost of importing into the U.S. and the competitive landscape of our customers, suppliers and competitors.

Adverse global economic conditions could also cause our customers and suppliers to experience severe economic constraints in the future, including bankruptcy, which could have a material adverse impact on our financial position and results of operations.

Our results of operations could be adversely affected by climate change, natural catastrophes or public health crises, in the locations in which we, our customers or our suppliers operate.

A natural disaster could disrupt our operations, or our customers' or suppliers' operations and could adversely affect our results of operations and financial condition. Although we have continuity plans designed to mitigate the impact of natural disasters on our operations, those plans may be insufficient, and any catastrophe may disrupt our ability to manufacture and deliver products to our customers, resulting in an adverse impact on our business and results of operations. Also, climate change poses both regulatory and physical risks that could harm our results of operations or affect the way we conduct our businesses. For example, new or modified regulations could require us to spend substantial funds to enhance our environmental compliance efforts. In addition, our global operations expose us to risks associated with public health crises, such as pandemics and epidemics, which could harm our business and cause our operating results to suffer. For example, December 2019 and January 2020, an outbreak of a new strain of coronavirus in Wuhan, China has resulted in travel disruption and has effected certain companies' operations in China. At this point, the extent to which the coronavirus may impact our results is uncertain.

Rising interest rates could have a substantial adverse effect on our business

Rising interest rates could have a dampening effect on overall economic activity, the financial condition of our customers and the financial condition of the end customers who ultimately create demand for the products we supply, all of which could negatively affect demand for our products. An increase in interest rates could make it difficult for us to obtain financing at attractive rates, impacting our ability to execute on our growth strategies or future acquisitions.

The proposed phase out of the London Interbank Offer Rate (LIBOR) could have an adverse effect on our business

Our revolving credit facility and term facilities utilize LIBOR to set the interest rate on any outstanding borrowings. In July 2017, the head of the United Kingdom Financial Conduct Authority announced the desire to phase out the use of LIBOR by the end of 2021. There is currently no definitive information regarding the future utilization of LIBOR or of any particular replacement rate. As such, the potential effect of any such event on our cost of capital cannot yet be determined. In addition, any further changes or reforms to the determination or supervision of LIBOR may result in a sudden or prolonged increase or decrease in reported LIBOR, which could have an adverse impact on extensions of credit held by us and could have a material adverse effect on our business, financial condition and results of operations.

We could be adversely impacted by the loss of any of our significant customers, changes in their requirements for our products or changes in their financial condition.

We are reliant upon sales to several significant customers. Sales to our ten largest customers accounted for 55% of our overall sales in 2019. Changes in our business relationships with any of our large customers or in the timing, size and continuation of their various programs could have a material adverse impact on us.

The loss of any of these customers, the loss of business with respect to one or more of their vehicle models on which we have high component content, or a significant decline in the production levels of such vehicles would negatively impact our business, results of operations and financial condition. Pricing pressure from our customers also poses certain risks. Inability on our part to offset pricing concessions with cost reductions would adversely affect our profitability. We are continually bidding on new business with these customers, as well as seeking to diversify our customer base, but there is no assurance that our efforts will be successful. Further, to the extent that the financial condition of our largest customers deteriorates, including possible bankruptcies, mergers or liquidations, or their sales otherwise decline, our financial position and results of operations could be adversely affected.

We may be adversely impacted by changes in international legislative and political conditions.

We operate in 34 countries around the world and we depend on significant foreign suppliers and customers. Further, we have several growth initiatives that are targeting emerging markets like China and India. Legislative and political activities within the countries where we conduct business, particularly in emerging markets and less developed countries, could adversely impact our ability to operate in those countries. The political situation in a number of countries in which we operate could create instability in our contractual relationships with no effective legal safeguards for resolution of these issues, or potentially result in the seizure of our assets. We operate in Argentina, where trade-related initiatives and other government restrictions limit our ability to optimize operating effectiveness. At December 31, 2019, our net asset exposure related to Argentina was approximately \$13, including \$6 of net fixed assets.

We may be adversely impacted by changes in trade policies and proposed or imposed tariffs, including but not limited to, the imposition of new tariffs by the U.S. government on imports to the U.S. and/or the imposition of retaliatory tariffs by foreign countries.

Section 232 of the Trade Expansion Act of 1962, as amended (the Trade Act), gives the executive branch of the U.S. government broad authority to restrict imports in the interest of national security by imposing tariffs. During 2018, the U.S. government concluded that imported steel and aluminum threaten to impair the national security and imposed tariffs on steel and aluminum imported from certain countries. Certain foreign countries have responded with retaliatory tariffs. In 2019, the U.S. government also determined pursuant to Section 232 that U.S. imports of automobiles and certain automotive parts threaten to impair U.S. national security. The government has not imposed tariffs but has sought to negotiate bilateral agreements with the European Union and Japan. These negotiations are ongoing. Section 301 of the Trade Act gives the executive branch broad authority to impose tariffs against countries that make unjustified, unreasonable, or discriminatory trade actions. During 2018, the U.S. government concluded that China's trade policies harm U.S. business and workers and threaten the long-term competitiveness of the U.S. and has imposed tariffs on numerous Chinese imports. China has responded with retaliatory tariffs. In January 2020, the U.S. and China signed an Economic and Trade Agreement (also known as the Phase One Agreement), while this marked a positive development, most of the key issues remain unresolved and need to be addressed in subsequent negotiations. In November 2018, the U.S., Mexico and Canada executed the U.S.-Mexico-Canada Agreement (USMCA), the successor agreement to the North American Free Trade Agreement (NAFTA). The agreement includes the imposition of tariffs on vehicles that do not meet regional raw material (steel and aluminum), part and labor content requirements. The agreement was ratified by the U.S. in January 2020.

Tariffs imposed on imported steel and aluminum could raise the costs associated with manufacturing our products. We continue to work with our customers to recover a portion of our increased costs, and with our suppliers to defray costs, associated with these tariffs. While we have been successful in the past recovering a significant portion of costs increases, there is no assurance that cost increases resulting from trade policies and tariffs will not adversely impact our profitability. Our sales may also be adversely impacted if tariffs are assessed directly on the products we produce or on our customers' products containing content sourced from us.

We may be adversely impacted by the strength of the U.S. dollar relative to the currencies in the other countries in which we do business.

Approximately 53% of our sales in 2019 were from operations located in countries other than the U.S. Currency variations can have an impact on our results (expressed in U.S. dollars). Currency variations can also adversely affect margins on sales of our products in countries outside of the U.S. and margins on sales of products that include components obtained from affiliates or other suppliers located outside of the U.S. Strengthening of the U.S. dollar against the euro and currencies of other countries in which we have operations has had and could continue to have an adverse effect on our results reported in U.S. dollars. We use a combination of natural hedging techniques and financial derivatives to mitigate foreign currency exchange rate risks. Such hedging activities may be ineffective or may not offset more than a portion of the adverse financial impact resulting from currency variations.

We may be adversely impacted by new laws, regulations or policies of governmental organizations related to increased fuel economy standards and reduced greenhouse gas emissions, or changes in existing ones.

The markets and customers we serve are subject to substantial government regulation, which often differs by state, region and country. These regulations, and proposals for additional regulation, are advanced primarily out of concern for the environment (including concerns about global climate change and its impact) and energy independence. We anticipate that the number and extent of these regulations, and the costs to comply with them, will increase significantly in the future.

In the U.S., vehicle fuel economy and greenhouse gas emissions are regulated under a harmonized national program administered by the National Highway Traffic Safety Administration and the Environmental Protection Agency (EPA). Other governments in the markets we serve are also creating new policies to address these same issues, including the European Union, Brazil, China and India. These government regulatory requirements could significantly affect our customers by altering their global product development plans and substantially increasing their costs, which could result in limitations on the types of vehicles they sell and the geographical markets they serve. Any of these outcomes could adversely affect our financial position and results of operations.

Company-Specific Risk Factors

We have taken, and continue to take, cost-reduction actions. Although our process includes planning for potential negative consequences, the cost-reduction actions may expose us to additional production risk and could adversely affect our sales, profitability and ability to retain and attract employees.

We have been reducing costs in all of our businesses and have discontinued product lines, exited businesses, consolidated manufacturing operations and positioned operations in lower cost locations. The impact of these cost-reduction actions on our sales and profitability may be influenced by many factors including our ability to successfully complete these ongoing efforts, our ability to generate the level of cost savings we expect or that are necessary to enable us to effectively compete, delays in implementation of anticipated workforce reductions, decline in employee morale and the potential inability to meet operational targets due to our inability to retain or recruit key employees.

We depend on our subsidiaries for cash to satisfy the obligations of the company.

Our subsidiaries conduct all of our operations and own substantially all of our assets. Our cash flow and our ability to meet our obligations depend on the cash flow of our subsidiaries. In addition, the payment of funds in the form of dividends, intercompany payments, tax sharing payments and otherwise may be subject to restrictions under the laws of the countries of incorporation of our subsidiaries or the by-laws of the subsidiary.

Labor stoppages or work slowdowns at Dana, key suppliers or our customers could result in a disruption in our operations and have a material adverse effect on our businesses.

We and our customers rely on our respective suppliers to provide parts needed to maintain production levels. We all rely on workforces represented by labor unions. Workforce disputes that result in work stoppages or slowdowns could disrupt operations of all of these businesses, which in turn could have a material adverse effect on the supply of, or demand for, the products we supply our customers.

We could be adversely affected if we are unable to recover portions of commodity costs (including costs of steel, other raw materials and energy) from our customers.

We continue to work with our customers to recover a portion of our material cost increases. While we have been successful in the past recovering a significant portion of such cost increases, there is no assurance that increases in commodity costs, which can be impacted by a variety of factors, including changes in trade laws and tariffs, will not adversely impact our profitability in the future.

We could be adversely affected if we experience shortages of components from our suppliers or if disruptions in the supply chain lead to parts shortages for our customers.

A substantial portion of our annual cost of sales is driven by the purchase of goods and services. To manage and minimize these costs, we have been consolidating our supplier base. As a result, we are dependent on single sources of supply for some components of our products. We select our suppliers based on total value (including price, delivery and quality), taking into consideration their production capacities and financial condition, and we expect that they will be able to support our needs. However, there is no assurance that adverse financial conditions, including bankruptcies of our suppliers, reduced levels of production, natural disasters or other problems experienced by our suppliers will not result in shortages or delays in their supply of components to us or even in the financial collapse of one or more such suppliers. If we were to experience a significant or prolonged shortage of critical components from any of our suppliers, particularly those who are sole sources, and were unable to procure the components from other sources, we would be unable to meet our production schedules for some of our key products and to ship such products to our customers in a timely fashion, which would adversely affect our sales, profitability and customer relations.

Adverse economic conditions, natural disasters and other factors can similarly lead to financial distress or production problems for other suppliers to our customers which can create disruptions to our production levels. Any such supply-chain induced disruptions to our production are likely to create operating inefficiencies that will adversely affect our sales, profitability and customer relations.

Our profitability and results of operations may be adversely affected by program launch difficulties.

The launch of new business is a complex process, the success of which depends on a wide range of factors, including the production readiness of our manufacturing facilities and manufacturing processes and those of our suppliers, as well as factors related to tooling, equipment, employees, initial product quality and other factors. Our failure to successfully launch material new or takeover business could have an adverse effect on our profitability and results of operations.

We use important intellectual property in our business. If we are unable to protect our intellectual property or if a third party makes assertions against us or our customers relating to intellectual property rights, our business could be adversely affected.

We own important intellectual property, including patents, trademarks, copyrights and trade secrets, and are involved in numerous licensing arrangements. Our intellectual property plays an important role in maintaining our competitive position in a number of the markets that we serve. Our competitors may develop technologies that are similar or superior to our proprietary technologies or design around the patents we own or license. Further, as we expand our operations in jurisdictions where the protection of intellectual property rights is less robust, the risk of others duplicating our proprietary technologies increases, despite efforts we undertake to protect them. Developments or assertions by or against us relating to intellectual property rights, and any inability to protect these rights, could have a material adverse impact on our business and our competitive position.

We could encounter unexpected difficulties integrating acquisitions and joint ventures.

We acquired businesses in recent years, and we expect to complete additional acquisitions and investments in the future that complement or expand our businesses. The success of this strategy will depend on our ability to successfully complete these transactions or arrangements, to integrate the businesses acquired in these transactions and to develop satisfactory working arrangements with our strategic partners in the joint ventures. We could encounter unexpected difficulties in completing these transactions and integrating the acquisitions with our existing operations. We also may not realize the degree or timing of benefits anticipated when we entered into a transaction.

Several of our joint ventures operate pursuant to established agreements and, as such, we do not unilaterally control the joint venture. There is a risk that the partners' objectives for the joint venture may not be aligned with ours, leading to potential differences over management of the joint venture that could adversely impact its financial performance and consequent contribution to our earnings. Additionally, inability on the part of our partners to satisfy their contractual obligations under the agreements could adversely impact our results of operations and financial position.

We could be adversely impacted by the costs of environmental, health, safety and product liability compliance.

Our operations are subject to environmental laws and regulations in the U.S. and other countries that govern emissions to the air; discharges to water; the generation, handling, storage, transportation, treatment and disposal of waste materials; and the cleanup of contaminated properties. Historically, environmental costs related to our former and existing operations have not been material. However, there is no assurance that the costs of complying with current environmental laws and regulations, or those that may be adopted in the future, will not increase and adversely impact us.

There is also no assurance that the costs of complying with current laws and regulations, or those that may be adopted in the future, that relate to health, safety and product liability matters will not adversely impact us. There is also a risk of warranty and product liability claims, as well as product recalls, if our products fail to perform to specifications or cause property damage, injury or death. (See Notes 17 and 18 to our consolidated financial statements in Item 8 for additional information on product liabilities and warranties.)

A failure of our information technology infrastructure could adversely impact our business and operations.

We recognize the increasing volume of cyber attacks and employ commercially practical efforts to provide reasonable assurance that the risks of such attacks are appropriately mitigated. Each year, we evaluate the threat profile of our industry to stay abreast of trends and to provide reasonable assurance our existing countermeasures will address any new threats identified. Despite our implementation of security measures, our IT systems and those of our service providers are vulnerable to circumstances beyond our reasonable control including acts of terror, acts of government, natural disasters, civil unrest and denial of service attacks which may lead to the theft of our intellectual property, trade secrets or business disruption. To the extent that any disruption or security breach results in a loss or damage to our data or an inappropriate disclosure of confidential information, it could cause significant damage to our reputation, affect our relationships with our customers, suppliers and employees, lead to claims against the company and ultimately harm our business. Additionally, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

We participate in certain multi-employer pension plans which are not fully funded.

We contribute to certain multi-employer defined benefit pension plans for certain of our union-represented employees in the U.S. in accordance with our collective bargaining agreements. Contributions are based on hours worked except in cases of layoff or leave where we generally contribute based on 40 hours per week for a maximum of one year. The plans are not fully funded as of December 31, 2019. We could be held liable to the plans for our obligation, as well as those of other employers, due to our participation in the plans. Contribution rates could increase if the plans are required to adopt a funding improvement plan, if the performance of plan assets does not meet expectations or as a result of future collectively bargained wage and benefit agreements. (See Note 13 to our consolidated financial statements in Item 8 for additional information on multi-employer pension plans.)

Changes in interest rates and asset returns could increase our pension funding obligations and reduce our profitability.

We have unfunded obligations under certain of our defined benefit pension and other postretirement benefit plans. The valuation of our future payment obligations under the plans and the related plan assets are subject to significant adverse changes if the credit and capital markets cause interest rates and projected rates of return to decline. Such declines could also require us to make significant additional contributions to our pension plans in the future. A material increase in the unfunded obligations of these plans could also result in a significant increase in our pension expense in the future.

We may incur additional tax expense or become subject to additional tax exposure.

Our provision for income taxes and the cash outlays required to satisfy our income tax obligations in the future could be adversely affected by numerous factors. These factors include changes in the level of earnings in the tax jurisdictions in which we operate, changes in the valuation of deferred tax assets and liabilities, changes in our plans to repatriate the earnings of our non-U.S. operations to the U.S. and changes in tax laws and regulations.

In December 2017, the U.S. introduced broad ranging tax reform with the passage of the Tax Cuts and Jobs Act ("Act") legislation. Among the tax reforms was a reduction of the corporate tax rate from 35% to 21%. Although the tax reform in the U.S. reduced the statutory tax rate to 21% for 2018, the effects of the lower rate were offset in part by the effects of increased nondeductible expenses and the global intangible low taxed income ("GILTI") provisions which result in a certain amount of foreign earnings being subjected to U.S. tax. Considering the exclusion of foreign subsidiary dividends from taxation in the U.S., we believe the Act will provide some greater flexibility to repatriate future earnings of our foreign operations.

Our income tax returns are subject to examination by federal, state and local tax authorities in the U.S. and tax authorities outside the U.S. The results of these examinations and the ongoing assessments of our tax exposures could also have an adverse effect on our provision for income taxes and the cash outlays required to satisfy our income tax obligations.

Our ability to utilize our net operating loss carryforwards may be limited.

Net operating loss carryforwards (NOLs) approximating \$281 were available at December 31, 2019 to reduce future U.S. income tax liabilities. Our ability to utilize these NOLs may be limited as a result of certain change of control provisions of the U.S. Internal Revenue Code of 1986, as amended (Code). The NOLs are treated as losses incurred before the change of control in January 2008 and are limited to annual utilization of \$84. There can be no assurance that trading in our shares will not effect another change in control under the Code, which could further limit our ability to utilize our available NOLs. Such limitations may cause us to pay income taxes earlier and in greater amounts than would be the case if the NOLs were not subject to limitation.

An inability to provide products with the technology required to satisfy customer requirements would adversely impact our ability to successfully compete in our markets.

The vehicular markets in which we operate are undergoing significant technological change, with increasing focus on electrified and autonomous vehicles. These and other technological advances could render certain of our products obsolete. Maintaining our competitive position is dependent on our ability to develop commercially-viable products and services that support the future technologies embraced by our customers.

Failure to appropriately anticipate and react to the cyclical and volatile nature of production rates and customer demands in our business can adversely impact our results of operations.

Our financial performance is directly related to production levels of our customers. In several of our markets, customer production levels are prone to significant cyclicity, influenced by general economic conditions, changing consumer preferences, regulatory changes, and other factors. Oftentimes the rapidity of the downcycles and upcycles can be severe. Successfully executing operationally during periods of extreme downward and upward demand pressures can be challenging. Our inability to recognize and react appropriately to the production cycles inherent in our markets can adversely impact our operating results.

Our continued success is dependent on being able to retain and attract requisite talent.

Sustaining and growing our business requires that we continue to retain, develop and attract people with the requisite skills. With the vehicles of the future expected to undergo significant technological change, having qualified people savvy in the right technologies will be a key factor in our ability to develop the products necessary to successfully compete in the future. As a global organization, we are also dependent on our ability to attract and maintain a diverse work force that is fully engaged supporting our company's objectives and initiatives.

Failure to maintain effective internal controls could adversely impact our business, financial condition and results of operations.

Regulatory provisions governing the financial reporting of U.S. public companies require that we maintain effective disclosure controls and internal controls over financial reporting across our operations in 34 countries. Effective internal controls are designed to provide reasonable assurance of compliance, and, as such, they can be susceptible to human error, circumvention or override, and fraud. Failure to maintain adequate, effective internal controls could result in potential financial misstatements or other forms of noncompliance that have an adverse impact on our results of operations, financial condition or organizational reputation. Our 2019 acquisitions were exempt from certain regulatory internal control compliance requirements this past year, but are required to be compliant in 2020.

Developments in the financial markets or downgrades to Dana's credit rating could restrict our access to capital and increase financing costs.

At December 31, 2019, Dana had consolidated debt obligations of \$2,398, with cash and marketable securities of \$527 and unused revolving credit capacity of \$979. Our ability to grow the business and satisfy debt service obligations is dependent, in part, on our ability to gain access to capital at competitive costs. External factors beyond our control can adversely affect capital markets – either tightening availability of capital or increasing the cost of available capital. Failure on our part to maintain adequate financial performance and appropriate credit metrics can also affect our ability to access capital at competitive prices.

Risk Factors Related to our Securities

Provisions in our Restated Certificate of Incorporation and Bylaws may discourage a takeover attempt.

Certain provisions of our Restated Certificate of Incorporation and Bylaws, as well as the General Corporation Law of the State of Delaware, may have the effect of delaying, deferring or preventing a change in control of Dana. Such provisions, including those governing the nomination of directors, limiting who may call special stockholders' meetings and eliminating stockholder action by written consent, may make it more difficult for other persons, without the approval of our board of directors, to make a tender offer or otherwise acquire substantial amounts of common stock or to launch other takeover attempts that a stockholder might consider to be in such stockholder's best interest.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Type of Facility	North America	Europe	South America	Asia Pacific	Total
Light Vehicle					
Manufacturing/Distribution	13	4	4	11	32
Service/Assembly	2			1	3
Technical and Engineering Centers				1	1
Commercial Vehicle					
Manufacturing/Distribution	6	5	3	8	22
Service/Assembly	1			1	2
Technical and Engineering Centers	1				1
Off-Highway					
Manufacturing/Distribution	3	20		6	29
Service/Assembly	3	16	1	7	27
Administrative Offices		3		2	5
Technical and Engineering Centers		1			1
Power Technologies					
Manufacturing/Distribution	9	4		2	15
Administrative Offices	1				1
Technical and Engineering Centers	2				2
Corporate and other					
Administrative Offices	3	1	1	1	6
Technical and Engineering Centers - Multiple Segments				2	2
	<u>44</u>	<u>54</u>	<u>9</u>	<u>42</u>	<u>149</u>

As of December 31, 2019, we operated in 34 countries and had 149 major facilities housing manufacturing and distribution operations, service and assembly operations, technical and engineering centers and administrative offices. In addition to the seven stand-alone technical and engineering centers in the table above, we have nineteen technical and engineering centers housed within manufacturing sites. We lease 72 of these facilities and own the remainder. We believe that all of our property and equipment is properly maintained.

Our world headquarters is located in Maumee, Ohio. This facility and other facilities in the greater Detroit, Michigan and Maumee, Ohio areas house functions that have global or North American regional responsibility for finance and accounting, tax, treasury, risk management, legal, human resources, procurement and supply chain management, communications and information technology.

Item 3. Legal Proceedings

We are a party to various pending judicial and administrative proceedings that arose in the ordinary course of business. After reviewing the currently pending lawsuits and proceedings (including the probable outcomes, reasonably anticipated costs and expenses and our established reserves for uninsured liabilities), we do not believe that any liabilities that may result from these proceedings are reasonably likely to have a material adverse effect on our liquidity, financial condition or results of operations. Legal proceedings are also discussed in Note 17 to our consolidated financial statements in Item 8.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

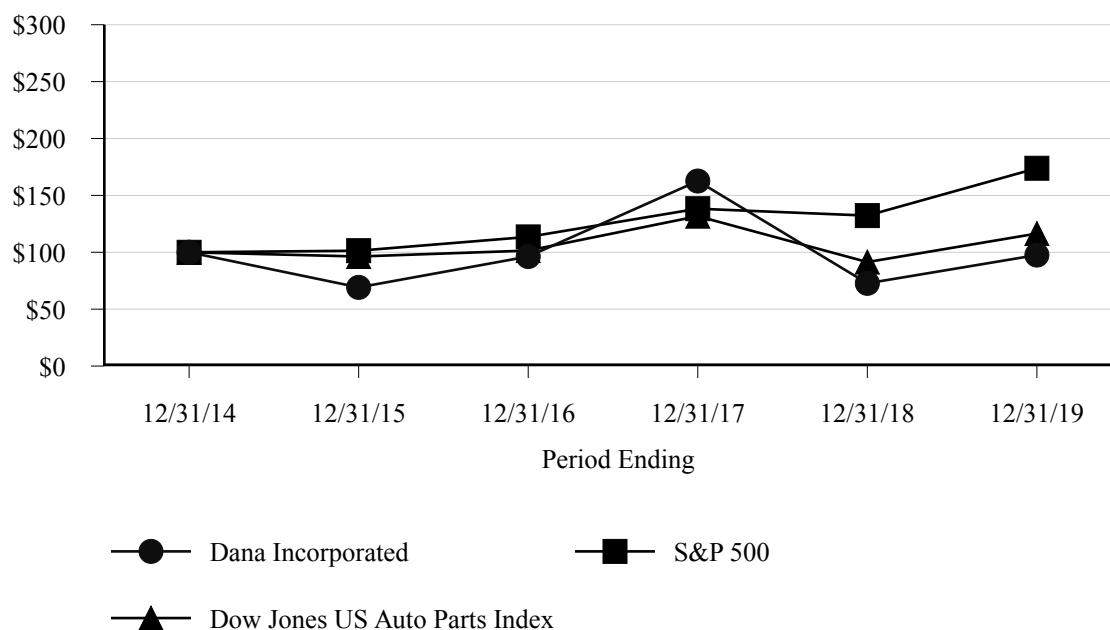
Market information — Our common stock trades on the New York Stock Exchange (NYSE) under the symbol "DAN."

Holder of common stock — Based on reports by our transfer agent, there were approximately 2,757 registered holders of our common stock on January 31, 2020.

Reference is made to the Equity Compensation Plan Information section of Item 12 for certain information regarding our equity compensation plans.

Stockholder return — The following graph shows the cumulative total shareholder return for our common stock since December 31, 2014. The graph compares our performance to that of the Standard & Poor's 500 Stock Index (S&P 500) and the Dow Jones US Auto Parts Index. The comparison assumes \$100 was invested at the closing price on December 31, 2014. Each of the returns shown assumes that all dividends paid were reinvested.

Performance chart



Index

	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Dana Incorporated	\$ 100.00	\$ 69.16	\$ 96.26	\$ 162.61	\$ 72.71	\$ 97.56
S&P 500	100.00	101.38	113.51	138.29	132.23	173.86
Dow Jones US Auto Parts Index	100.00	96.29	101.50	131.74	91.39	116.46

Issuer's purchases of equity securities — On December 11, 2019, our Board of Directors approved an extension of our existing common stock share repurchase program through December 31, 2021. Approximately \$150 remained available under the program for future share repurchases as of December 31, 2019. We repurchase shares utilizing available excess cash either in the open market or through privately negotiated transactions. Stock repurchases are subject to prevailing market conditions and other considerations. No shares of our common stock were repurchased under the program during the fourth quarter of 2019.

Annual meeting — We will hold an annual meeting of shareholders on April 22, 2020.

Item 6. Selected Financial Data

	Year Ended December 31,				
	2019 ⁽¹⁾	2018 ⁽²⁾	2017 ⁽³⁾	2016 ⁽⁴⁾	2015 ⁽⁵⁾
Operating Results					
Net sales	\$ 8,620	\$ 8,143	\$ 7,209	\$ 5,826	\$ 6,060
Earnings from continuing operations before income taxes	171	494	380	215	292
Income from continuing operations	233	440	116	653	176
Income from discontinued operations	—	—	—	—	4
Net income	233	440	116	653	180
Net income attributable to the parent company	\$ 226	\$ 427	\$ 111	\$ 640	\$ 159
Redeemable noncontrolling interests adjustment to redemption value	—	—	6	—	—
Net income available to common stockholders	<u>\$ 226</u>	<u>\$ 427</u>	<u>\$ 105</u>	<u>\$ 640</u>	<u>\$ 159</u>
Net income per share available to common stockholders					
Basic					
Income from continuing operations	\$ 1.57	\$ 2.94	\$ 0.72	\$ 4.38	\$ 0.98
Income from discontinued operations	—	—	—	—	0.02
Net income	1.57	2.94	0.72	4.38	1.00
Diluted					
Income from continuing operations	\$ 1.56	\$ 2.91	\$ 0.71	\$ 4.36	\$ 0.97
Income from discontinued operations	—	—	—	—	0.02
Net income	1.56	2.91	0.71	4.36	0.99
Depreciation and amortization	\$ 339	\$ 270	\$ 233	\$ 182	\$ 174
Net cash provided by operating activities	637	568	554	384	406
Purchases of property, plant and equipment	426	325	393	322	260
Financial Position					
Cash and cash equivalents and marketable securities	\$ 527	\$ 531	\$ 643	\$ 737	\$ 953
Total assets	7,220	5,918	5,644	4,860	4,301
Long-term debt, less debt issuance costs	2,336	1,755	1,759	1,595	1,553
Total debt, less debt issuance costs	2,370	1,783	1,799	1,664	1,575
Common stock and additional paid-in capital	2,388	2,370	2,356	2,329	2,313
Treasury stock	(150)	(119)	(87)	(83)	(1)
Total parent company stockholders' equity	1,873	1,345	1,013	1,157	728
Book value per share	\$ 13.01	\$ 9.27	\$ 6.98	\$ 7.92	\$ 4.58
Common Share Information					
Dividends declared per common share	\$ 0.40	\$ 0.40	\$ 0.24	\$ 0.24	\$ 0.23
Weighted-average common shares outstanding					
Basic	144.0	145.0	145.1	146.0	159.0
Diluted	145.1	146.5	146.9	146.8	160.0

- Net income in 2019 included pension settlement charges of \$259 attributable to the termination of certain U.S. and Canadian defined benefit pension plans and a \$135 benefit attributable to net discrete tax items. The increase in total assets in 2019 is primarily attributable to the acquisition of the Oerlikon Drive Systems (ODS) segment of the Oerlikon Group. The increase in total debt, less debt issuance costs is primarily attributable to taking out additional debt to finance the acquisition of ODS.
- Net income in 2018 included a \$20 charge attributable to the impairment of intangible assets used in research and development activities and a \$67 benefit attributable to net discrete tax items.
- Net income in 2017 included a \$27 charge attributable to the divestiture of our Brazil suspension components business and a \$159 charge attributable to net discrete tax items, including a charge of \$186 associated with a reduction of net deferred tax assets to reflect expected realization at the lower U.S. corporate tax rate of 21% rather than the previous rate of 35%.
- Net income in 2016 included a \$77 loss attributable to the divestiture of Dana Companies, LLC and a \$476 benefit attributable to net discrete tax items, including a benefit of \$501 associated with the release of valuation allowances against U.S. deferred taxes.
- Net income in 2015 includes a \$36 charge to impair long-lived assets attributable to an exclusive supply relationship with a South American supplier; a \$39 impairment charge attributable to an other-than-temporary decrease in the carrying value of our equity method investment in Dongfeng Dana Axle Co., Ltd.; and a \$28 benefit attributable to net discrete tax items.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations (Dollars in millions)

Management's discussion and analysis of financial condition and results of operations should be read in conjunction with the financial statements and accompanying notes in Item 8.

Management Overview

We are a global provider of high-technology products to virtually every major vehicle manufacturer in the world. We also serve the stationary industrial market. Our technologies include drive systems (axles, driveshafts, transmissions, and wheel and track drives); motion systems (winches, slew drives, and hub drives); electrodynamic technologies (motors, inverters, software and control systems, battery-management systems, and fuel cell plates); sealing solutions (gaskets, seals, cam covers, and oil pan modules); thermal-management technologies (transmission and engine oil cooling, battery and electronics cooling, charge air cooling, and thermal-acoustical protective shielding); and digital solutions (active and passive system controls and descriptive and predictive analytics). We serve our global light vehicle, medium/heavy vehicle and off-highway markets through four business units – Light Vehicle Drive Systems (Light Vehicle), Commercial Vehicle Drive and Motion Systems (Commercial Vehicle), Off-Highway Drive and Motion Systems (Off-Highway) and Power Technologies, which is the center of excellence for sealing and thermal-management technologies that span all customers in our on-highway and off-highway markets. We have a diverse customer base and geographic footprint which minimizes our exposure to individual market and segment declines. In 2019, 52% of our sales came from North American operations and 48% from operations throughout the rest of the world. Our sales by operating segment were Light Vehicle – 42%, Commercial Vehicle – 19%, Off-Highway – 27% and Power Technologies – 12%.

Operational and Strategic Initiatives

Our enterprise strategy builds on our strong technology foundation and leverages our resources across the organization while driving a customer centric focus, expanding our global markets, and delivering innovative solutions as we evolve into the era of vehicle electrification.

Central to our strategy is *leveraging our core operations*. This foundational element enables us to infuse strong operational disciplines throughout the strategy, making it practical, actionable, and effective. It enables us to capitalize on being a major drive systems supplier across all three end-mobility markets. We are achieving improved profitability by actively seeking synergies across our engineering, purchasing, and manufacturing base. We have strengthened the portfolio by acquiring critical assets; and □ we are utilizing our physical and intellectual capital to amplify innovation across the enterprise. Leveraging these core elements can further expand the cost efficiencies of our common technologies and deliver a sustainable competitive advantage for Dana.

Driving customer centricity continues to be at the heart of who we are. Putting our customers at the center of our value system is firmly embedded in our culture and is driving growth by focusing customer relationships and providing value to our customers. These relationships are strengthened as we are physically where we need to be in order to provide unparalleled service and we are prioritizing our customers' needs as we engineer solutions that differentiate their products, while making it easier to do business with Dana by digitizing their experience. Our customer centric focus has uniquely positioned us to win more than our fair share of new business and capitalize on future customer outsourcing initiatives.

We continue to enhance and expand our global footprint, optimizing it to capture growth across all of our end markets. *Expanding global markets* means utilizing our global capabilities and presence to further penetrate growth markets, focusing on Asia due to its position as the largest mobility market in the world with the highest market growth rate and its lead in the adoption of new energy vehicles. We are investing across various avenues to increase our presence in Asia Pacific by forging new partnerships, expanding inorganically, and growing organically. We continue to operate in this region through wholly owned and joint ventures with local market partners. We have recently made acquisitions that have augmented our footprint in the region, specifically in India and China. All the while, we have been making meaningful organic investments to grow with existing and new customers, primarily in Thailand, India, and China. These added capabilities have enabled us to target the domestic Asia Pacific markets and utilize the capacity for export to other global markets.

Delivering innovative solutions enables us to capitalize on market growth trends as we evolve our core technology capabilities. We are also focused on enhancing our physical products with digital content to provide smart systems and we see an opportunity to become a digital systems provider by delivering software as a service to our traditional end customers. This focus on delivering solutions based on our core technology is leading to new business wins and increasing our content per vehicle. We have made significant investments - both organically and inorganically - allowing us to move to the next phase, which is to *Lead electric propulsion*.

Over the past year we have achieved our goal to accelerate hybridization and electrification through both core Dana technologies and targeted strategic acquisitions and are positioned today to lead the market. □ The four recent acquisitions of electrodynamic expertise and technologies combined with Dana’s longstanding mechatronics capabilities has allowed us to develop and deliver fully integrated e-Propulsion systems that are power-dense and achieve optimal efficiency through the integration of the components that we offer due to our mechatronics capabilities. With recent electric vehicle program awards, we are well on our way to achieving our growth objectives in this emerging market.

The development and implementation of our enterprise strategy is positioning Dana to grow profitably due to increased customer focus as we leverage our core capabilities, expand into new markets, develop and commercialize new technologies including for hybrid and electric vehicles.

Capital Structure Initiatives

In addition to investing in our business, we plan to continue prioritizing the allocation of capital to reduce debt and maintain a strong financial position. In January 2018, we announced our intention to drive toward investment grade metrics as part of a balanced approach to our capital allocation priorities and our goal of further strengthening our balance sheet.

Shareholder return actions — When evaluating capital structure initiatives, we balance our growth opportunities and shareholder value initiatives with maintaining a strong balance sheet and access to capital. Our strong financial position has enabled us to simplify our capital structure while providing returns to our shareholders in the form of cash dividends and a reduction in the number of shares outstanding. Our Board of Directors authorized a \$200 share repurchase program effective in 2018 which expires at the end of 2021. Through December 31, 2019, we have used \$50 of cash to repurchase common shares under the program. We declared and paid quarterly common stock dividends in each of the past thirty-two quarters.

Financing actions — We have taken advantage of the lower interest rate environment to complete refinancing transactions that resulted in lower effective interest rates while extending maturities. In 2017, we completed a \$400 2025 note offering and entered into a \$275 floating rate term loan. The proceeds of these issuances were used to repay higher cost international debt and to repay \$450 of 2021 notes. During 2019, we expanded our credit and guaranty agreement. We entered into \$675 of additional floating rate term loans to fund the ODS acquisition (see Acquisitions section below) and increased our revolving credit facility to \$1,000 and extended its maturity by two years. We completed a \$300 2027 note offering and used the proceeds to repay \$300 of higher cost 2023 notes. During 2019, we terminated one of our U.S. defined benefit pension plans, settling approximately \$165 of previously unfunded pension obligations and eliminating future funding risk associated with interest rate and other market developments.

Other Initiatives

Aftermarket opportunities — We have a global group dedicated to identifying and developing aftermarket growth opportunities that leverage the capabilities within our existing businesses – targeting increased future aftermarket sales. Powered by recognized brands such as Dana®, Spicer®, Victor Reinz®, Glaser®, GWB®, Thompson®, Tru-Cool®, SVL®, and Transejes™, Dana delivers a broad range of aftermarket solutions – including genuine, all makes, and value lines – servicing passenger, commercial and off-highway vehicles across the globe.

Selective acquisitions — Although transformational opportunities like the GKN plc driveline business transaction that we pursued in 2018 will be considered when strategically and economically attractive, our acquisition focus is principally directed at “bolt-on” or adjacent acquisition opportunities that have a strategic fit with our existing core businesses, particularly opportunities that support our enterprise strategy and enhance the value proposition of our product offerings. Any potential acquisition will be evaluated in the same manner we currently consider customer program opportunities and other uses of capital – with a disciplined financial approach designed to ensure profitable growth and increased shareholder value.

Acquisitions

Nordresa — On August 26, 2019, we acquired a 100% ownership interest in Nordresa Motors, Inc. (Nordresa) for consideration of \$12, using cash on hand. Nordresa is a prominent integration and application engineering expert for the development and commercialization of electric powertrains for commercial vehicles. The investment further enhances Dana's electrification capabilities by combining its complete portfolio of motors, inverters, chargers, gearboxes, and thermal-management products with Nordresa's proprietary battery-management system, electric powertrain controls and integration expertise to deliver complete electric powertrain systems. The results of operations of Nordresa are reported within our Commercial Vehicle operating segment. Nordresa had an insignificant impact on our consolidated results of operations during 2019.

Prestolite E-Propulsion Systems (Beijing) Limited — On June 6, 2019, we acquired Prestolite Electric Beijing Limited's (PEBL) 50% ownership interest in Prestolite E-Propulsion Systems (Beijing) Limited (PEPS). PEPS manufactures and distributes electric mobility solutions, including electric motors, inverters, and generators for commercial vehicles and heavy machinery. PEPS has a state-of-the-art facility in China, enabling us to expand motor and inverter manufacturing capabilities in the world's largest electric-mobility market. The acquisition of PEBL's interest in PEPS, along with our existing ownership interest in PEPS through our TM4 subsidiary, provides us with a 100% ownership interest and a controlling financial interest in PEPS. We recognized a \$2 gain to other expense, net on the required remeasurement of our previously held equity method investment in PEPS to fair value. We paid \$50 at closing using cash on hand. Reference is made to Note 2 of the consolidated financial statements in Item 8 for the allocation of purchase consideration to assets acquired and liabilities assumed. The results of operations of PEPS will be reported in our Commercial Vehicle operating segment. The PEPS acquisition contributed \$8 of sales and de minimis adjusted EBITDA in 2019. See Hydro-Québec relationship discussion below for details of the subsequent change in our ownership interest in PEPS.

Oerlikon Drive Systems — On February 28, 2019, we acquired a 100% ownership interest in the Oerlikon Drive Systems (ODS) segment of the Oerlikon Group. ODS is a global manufacturer of high-precision gears, planetary hub drives for wheeled and tracked vehicles, and products, controls, and software that support vehicle electrification across the mobility industry. We paid \$626 at closing, which was primarily funded through debt proceeds. Reference is made to Note 2 of the consolidated financial statements in Item 8 for the allocation of purchase consideration to assets acquired and liabilities assumed. The results of operations of ODS will be reported primarily in our Off-Highway and Commercial Vehicle operating segments. The ODS acquisition added \$630 of sales and \$87 of adjusted EBITDA during 2019.

SME — On January 11, 2019, we acquired a 100% ownership interest in the S.M.E. S.p.A. (SME). SME designs, engineers, and manufactures low-voltage AC induction and synchronous reluctance motors, inverters, and controls for a wide range of off-highway electric vehicle applications, including material handling, agriculture, construction, and automated-guided vehicles. The addition of SME's low-voltage motors and inverters, which are primarily designed to meet the evolution of electrification in off-highway equipment, significantly expands Dana's electrified product portfolio. We paid \$88 at closing, consisting of \$62 in cash on hand and a note payable of \$26 which allows for net settlement of potential contingencies as defined in the purchase agreement. The note is payable in five years and bears annual interest of 5%. Reference is made to Note 2 of the consolidated financial statements in Item 8 for the allocation of purchase consideration to assets acquired and liabilities assumed. The results of operations of SME will be reported in our Off-Highway operating segment. The SME acquisition added \$21 of sales and de minimis adjusted EBITDA during 2019. See Hydro-Québec relationship discussion below for details of the subsequent change in our ownership interest in SME.

TM4 — On June 22, 2018, we acquired a 55% ownership interest in TM4 Inc. (TM4) from Hydro-Québec. TM4 designs and manufactures motors, power inverters and control systems for electric vehicles, offering a complementary portfolio to Dana's electric gearboxes and thermal-management technologies for batteries, motors and inverters. The transaction establishes Dana as the only supplier with full e-Drive design, engineering and manufacturing capabilities – offering electro mechanical propulsion solutions to each of our end markets. TM4's technology and advanced manufacturing facility in Boucherville, Quebec will add to our global technical centers, and their 50% interest in PEPS provides an opportunity to enhance our position in the fastest growing market for electric vehicles. Dana is consolidating TM4 as the governing documents provide Dana with a controlling financial interest. We paid \$125 at closing, using cash on hand. Reference is made to Note 2 of the consolidated financial statements in Item 8 for the allocation of purchase consideration to assets acquired and liabilities assumed. The results of operations of the TM4 business are reported in our Commercial Vehicle operating segment. The TM4 acquisition contributed \$11 of sales and de minimis adjusted EBITDA in 2018.

USM – Warren — On March 1, 2017, we completed the purchase of Warren Manufacturing LLC (USM – Warren), which holds certain assets and liabilities of the former Warren, Michigan production unit of U.S. Manufacturing Corporation (USM). With this transaction, we acquired proprietary tube-manufacturing processes and light-weighting intellectual property for axle tubes and shafts. Significant content was previously purchased from USM. Vertically integrating this content strengthens the supply chain for several of our most strategic customers. The new product and process technologies for light-weighting will assist our customers in achieving their sustainability and fuel efficiency goals. We paid \$104 for this business at closing, including \$25 to effectively settle trade payable obligations originating from product purchases Dana made from USM prior to the acquisition. No debt was assumed with this transaction which was funded using cash on hand. Post-closing purchase price adjustments for working capital and other items, which totaled less than \$1, were received in the third quarter of 2017. Reference is made to Note 2 of the consolidated financial statements in Item 8 for the allocation of purchase consideration to assets acquired and liabilities assumed. The results of operations of the USM – Warren business are reported within our Light Vehicle operating segment. The USM – Warren acquisition added \$96 of sales and \$12 of adjusted EBITDA in 2017.

BFP and BPT — On February 1, 2017, we acquired 80% ownership interests in Brevini Fluid Power S.p.A. (BFP) and Brevini Power Transmission S.p.A. (BPT) from Brevini Group S.p.A. (Brevini). The acquisition expands our Off-Highway operating segment product portfolio to include technologies for tracked vehicles, doubling our addressable market for off-highway driveline systems and establishing Dana as the only off-highway solutions provider that can manage the power to both move the equipment and perform its critical work functions. This acquisition also brings a platform of technologies that can be leveraged in our light and commercial vehicle end markets, helping to accelerate our hybridization and electrification initiatives. We paid \$181 at closing using cash on hand and assumed debt of \$181 as part of the transaction. In December 2017, a purchase price reduction of \$9 was agreed under the sale and purchase agreement provisions for determination of the net indebtedness and net working capital levels of BFP and BPT as of the closing date. In connection with the acquisition of BFP and BPT, Dana agreed to purchase certain real estate being leased by BPT from a Brevini affiliate for €25. Completion of the real estate purchase and receipt of the purchase price adjustment occurred in the second quarter of 2018 with a net cash payment of \$20. Reference is made to Note 2 of the consolidated financial statements in Item 8 for the allocation of purchase consideration to assets acquired and liabilities assumed. The results of operations of these businesses are reported within our Off-Highway operating segment. The BFP and BPT acquisitions added \$401 of sales and \$40 of adjusted EBITDA in 2017.

On August 8, 2018, we entered into an agreement to acquire Interfind S.p.A.'s, formerly Brevini Group S.p.A., remaining 20% ownership interests in BFP and BPT and to settle all claims between the parties. We paid \$43 to acquire Interfind S.p.A.'s remaining ownership interests and received \$10 in settlement of all pending and future claims.

Hydro-Québec Relationship

On June 22, 2018, we acquired a 55% ownership interest in TM4 from Hydro-Québec. On July 29, 2019, we broadened our relationship with Hydro-Québec, with Hydro-Québec acquiring an indirect 45% redeemable noncontrolling interest in SME and increasing its existing indirect 22.5% noncontrolling interest in PEPS to 45%. We received \$65 at closing, consisting of \$53 of cash and a note receivable of \$12. The note is payable in five years and bears annual interest of 5%. Dana will continue to consolidate SME and PEPS as the governing documents continue to provide Dana with a controlling financial interest in these subsidiaries. The terms of the agreements provide Hydro-Québec with the right to put all, and not less than all, of its ownership interests in TM4, SME and PEPS to Dana at fair value any time after June 22, 2021. See Acquisitions section above for a discussion of Dana's acquisitions of PEPS, SME and TM4.

Divestitures

Brazil Suspension Components Operations — In December 2017, we entered into an agreement to divest our Brazil suspension components business (the disposal group). This business was non-core to our enterprise strategy and under-performing financially. As such, we agreed to divest the business for no consideration and contribute \$10 of additional cash to the business prior to closing. We classified the disposal group as held for sale at December 31, 2017, recognizing a \$27 loss to adjust the carrying value of the net assets to fair value and to recognize the liability for the additional cash required to be contributed to the business prior to closing. During the first quarter of 2018, we made the required cash contribution to the disposal group. After being unable to complete the transaction with the counterparty to the December 2017 agreement, we entered into an agreement with another third party in June 2018. The transaction with the new counterparty closed in July 2018 and we received cash proceeds of \$2. We reversed \$3 of the previously recognized \$27 pre-tax loss, inclusive of the proceeds received in July 2018, during the second quarter of 2018. Reference is made to Note 3 of our consolidated financial statements in Item 8 for additional information. Sales of the divested business approximated \$23 in 2017 and \$12 in 2018 through the date of sale.

Segments

We manage our operations globally through four operating segments. Our Light Vehicle and Power Technologies segments primarily support light vehicle original equipment manufacturers (OEMs) with products for light trucks, SUVs, CUVs, vans and passenger cars. The Commercial Vehicle segment supports the OEMs of on-highway commercial vehicles (primarily trucks and buses), while our Off-Highway segment supports OEMs of off-highway vehicles (primarily wheeled vehicles used in construction, mining and agricultural applications).

Trends in Our Markets

Global Vehicle Production

(Units in thousands)	Dana 2020 Outlook	Actual		
		2019	2018	2017
North America				
Light Truck (Full Frame)	4,300 to 4,600	4,484	4,476	4,331
Light Vehicle Engines	15,400 to 15,700	14,547	15,332	14,828
Medium Truck (Classes 5-7)	245 to 255	277	270	246
Heavy Truck (Class 8)	210 to 230	338	320	255
Agricultural Equipment	45 to 55	54	56	54
Construction/Mining Equipment	150 to 160	168	176	157
Europe (including Eastern Europe)				
Light Truck	10,500 to 11,500	10,760	10,721	10,276
Light Vehicle Engines	21,800 to 22,300	22,387	23,098	24,096
Medium/Heavy Truck	485 to 500	492	506	486
Agricultural Equipment	185 to 200	201	204	202
Construction/Mining Equipment	310 to 330	340	351	309
South America				
Light Truck	1,300 to 1,500	1,278	1,313	1,235
Light Vehicle Engines	2,700 to 2,800	2,671	2,797	2,412
Medium/Heavy Truck	120 to 130	113	113	89
Agricultural Equipment	30 to 35	33	34	33
Construction/Mining Equipment	8 to 12	10	9	9
Asia-Pacific				
Light Truck	27,500 to 28,700	28,242	29,369	29,495
Light Vehicle Engines	47,000 to 48,000	48,366	52,293	52,543
Medium/Heavy Truck	1,800 to 2,000	1,926	2,004	2,039
Agricultural Equipment	580 to 620	631	653	653
Construction/Mining Equipment	450 to 470	472	495	441

North America

Light vehicle markets — Overall economic conditions in North America have been favorable for several years with strong employment and consumer confidence levels and comparatively low/stable fuel prices. Strong sales levels over this period have reduced the built-up demand to replace older vehicles. In addition, the shift in light vehicle sales mix, customers preferring light trucks over passenger cars, has continued to become more pronounced. The North America light vehicle market began to show signs of weakening in 2017, with total light vehicle sales declining about 1% from 2016, reflecting a 10% decline in passenger car sales being largely offset by a 4% increase in light truck sales. Light vehicle sales in 2018 were down slightly compared with 2017, with an 11% decline in passenger car sales largely offset by a 6% increase in light truck sales. Light vehicle sales declined an additional 2% in 2019, with a 10% decline in passenger car sales partially offset by a 2% increase in light truck sales. In the full frame light truck segment where many of our programs are focused, sales increased about 4% in both 2017 and 2018 and increased an additional 3% in 2019. Production levels have generally been reflective of light vehicle sales. Production of approximately 17.1 million light vehicles in 2017 declined about 1% to 17.0 million units in 2018. Light vehicle production of 16.3 million units in 2019 was down 4% compared with 2018. Overall light vehicle engine production was impacted more by the developments in the passenger car segment, with production in 2018 increasing about 3% versus 2017 after decreasing 7% year-over-year in 2017. Light vehicle engine production decreased about 5% in 2019 compared to 2018. In the key full frame light truck segment, year-over-year production levels in 2019 were flat after increasing 3% in both 2017 and 2018. Days' supply of total light vehicles in the U.S. at the end of December 2019 declined to 57 days after closing the prior two years at 61 days. In the full frame light truck segment, days supply in inventory at December 31, 2019 approximated 66 days, down from 72 days at December 31, 2018 and comparable with 64 days at the end of December 2017.

The North America light truck markets are expected to be relatively stable in 2020, with the effect of stable manufacturing and construction environments and lower interest rates being offset by the impact of rising new vehicle prices, less pent-up demand, continued strong demand for used vehicles and higher levels of consumer debt. We expect Dana sales to continue to benefit from our net new business backlog as additional key customer programs commence production in 2020. Our current

outlook for 2020 has full frame light truck production at 4.3 to 4.6 million vehicles, down 4% to up 3% compared with 2019 production of about 4.5 million vehicles. We expect light vehicle engine production in 2020 to be 15.4 to 15.7 million units, up 6 to 8% compared to 2019.

Medium/heavy vehicle markets — The commercial vehicle market is similarly impacted by many of the same macroeconomic developments impacting the light vehicle market. With the improving economic conditions in 2017 and scaled down build in 2016, there was increased freight-hauling demand and a strengthening order book for new trucks. Class 8 unit production in 2017 was up about 12% from 2016 while medium-duty production was about 7% higher. As expected, strong demand continued into 2018 and 2019, with Class 8 production up 25% in 2018 and up an additional 6% in 2019 while medium-duty truck production increased 9% in 2018 and increased an additional 2% in 2019.

During the fourth quarter of 2019 Class 8 order levels softened significantly as a result of a downturn in the freight market, continued trade and tariff uncertainty and rising pressure on carrier profits from the combined impact of lower haul rates and increasing costs. After three years of successive growth, we expect the market pressures experienced during the fourth quarter of 2019 to continue into 2020. Our outlook for 2020 Class 8 production in North America is 210,000 to 230,000 trucks, a level which is down 32 to 38% compared with the 2019 build level. Similarly, after three years of consecutive growth in the medium duty segment, we expect full year 2020 production to be in the range of 245,000 to 255,000 vehicles, down 8 to 12% from 2019.

Markets Outside of North America

Light vehicle markets — Signs of an improved overall European economy have been evident, albeit mixed at times, during the past few years. Reflective of a modestly improved economy, light vehicle production levels increased in 2017 with light vehicle engine production being up about 3% and light truck production being higher by 10%. Overall market stability continued in 2018 and 2019 with light truck production up 5% in 2018 and 1% in 2019 while light vehicle engine production was down 4% in 2018 and 3% in 2019. The United Kingdom's decision to withdraw from the European Union, along with political developments in other European countries, continues to cast an element of uncertainty around continued economic improvement in the region. At present, we expect overall economic conditions to largely be stable across the entire region in 2020. Our full year 2020 outlook reflects light truck production down 2% to up 7% and light vehicle engine production flat to down 3% from 2019. The economic climate in many South American markets has been weak, volatile and challenging for several years. After significant production declines in 2014 and 2015, there were signs that demand levels had bottomed out in 2016. Production levels in 2017 and 2018 were reflective of an improving market, with year-over-year light vehicle engine production up 14% and 16% and year-over-year light truck production up 27% and 5%, respectively. During 2019, the South American market experienced a modest retraction with light truck and light vehicle engine production down 3% and 5%, respectively. At present, we expect stable to improving economic conditions in the region in 2020. Our full year 2020 outlook has light truck production up 2 to 17% from 2019, with light vehicle engine production up 1 to 5% compared to this past year. The Asia Pacific markets were relatively strong through 2017, with light truck and light vehicle engine production up 7% and 4%, respectively over 2016. Production leveled off in 2018, with both light truck and light vehicle engine production being flat compared to 2017 levels. With China's economy showing signs of weakness, the Asia Pacific markets declined during 2019, with light truck production down 4% and light vehicle engine production down 7%. Our full year 2020 outlook for the Asia Pacific light vehicle markets reflects continuing softness in the region, with the light truck segment down 3% to up 2% from 2019 and light engine production being down 1 to 3%.

Medium/heavy vehicle markets — Some of the same factors referenced above that affected light vehicle markets outside of North America similarly affected the medium/heavy markets. A strengthening European market the past several years contributed to medium/heavy truck production increasing 6% in 2017 and another 3% in 2018 before pulling back 4% in 2019. Our 2020 full year outlook anticipates continued strong production at levels relatively comparable with 2019. A weakening South America economic climate beginning in 2014 led to a significant decline in medium/heavy truck production in 2015 and 2016. As with the light vehicle markets, improving economic conditions in the region led to medium/heavy truck production increasing 30% in 2017 and an additional 24% in 2018 before leveling off in 2019. We expect economic conditions to continue to improve in 2020, with medium/heavy truck production being up 6 to 15% compared to 2019. A stronger than expected China market and an improving India market contributed to increases in medium/heavy truck production in the Asia Pacific region of about 20% in 2017. Production levels in 2017 were driven partly by regulatory changes in China limiting axle load and weight. With some pre-buy in 2017 having likely occurred during the second half of 2017 as a result of the China regulatory actions and some weakening in the China market during 2018 and 2019, medium/heavy truck production declined 1% in 2018 and decreased an additional 4% in 2019. Our full year 2020 outlook reflects market volatility with medium/heavy truck production being down 7% to up 4% from 2019.

Off-Highway Markets — Our off-highway business has a large presence outside of North America, with 68% of its 2019 sales coming from Europe and 18% from South America and Asia Pacific combined. We serve several segments of the diverse off-highway market, including construction, agriculture, mining and material handling. Our largest markets are the construction/mining and agricultural equipment segments which had been relatively weak for several years until beginning to rebound in 2017. These markets began to rebound in 2017 along with general economic recovery in several global markets, and in particular the European markets where this segment has a significant presence. During 2017, global production levels in the construction/mining and agriculture segments increased by about 8% and 2%, respectively. The uplift in market demand continued in 2018 with global production levels in the construction/mining and agriculture segments increasing an additional 13% and 1%, respectively. During the second half of 2019, global markets began to weaken resulting in full year global construction/mining and agriculture segment production being down 4% and 3%, respectively. With generally weaker economic conditions in all regions, lower demand is expected in 2020. Our 2020 outlook has production in the global construction/mining segment down 2 to 7% and the agriculture segment down 1 to 9% from 2019.

Foreign Currency

With 53% of our sales coming from outside the U.S., international currency movements can have a significant effect on our sales and results of operations. The euro zone countries and Brazil accounted for 49% and 9% of our 2019 non-U.S. sales, respectively, while China and India each accounted for 7%. Although sales in Argentina and South Africa are each less than 5% of our non-U.S. sales, exchange rate movements of those countries have been volatile and significantly impacted sales from time to time. International currencies strengthened against the U.S. dollar in 2017, increasing 2017 sales by \$54. A stronger euro, Brazilian real, Thai baht and South African rand more than offset a weaker Argentine peso. Overall international currencies continued to strengthen against the U.S. dollar in 2018, with sales increasing by \$16 principally due to a stronger euro, Thai baht and Chinese renminbi, partially offset by a weaker Brazilian real, Argentine peso and Indian rupee. Weaker international currencies during 2019 decreased sales by \$177, with the euro, Brazilian real and South African rand accounting for \$103, \$30 and \$15 of the decrease, respectively. Based on our current sales and exchange rate outlook for 2020, we expect overall stability in international currencies with a modest reduction to sales. At sales levels in our current outlook for 2020, a 5% movement on the euro would impact our annual sales by approximately \$125. A 5% change on the Brazilian real, Thai baht, Mexican peso, Chinese renminbi, British pound and Indian rupee rates would impact our annual sales in each of those countries by approximately \$10 to \$20.

During the second quarter of 2018, we determined that Argentina's economy met the GAAP definition of a highly inflationary economy. In assessing Argentina's economy as highly inflationary we considered its three-year cumulative inflation rate along with other factors. As a result, effective July 1, 2018, the U.S. dollar is the functional currency for our Argentine operations, rather than the Argentine peso. Beginning July 1, 2018, peso-denominated monetary assets and liabilities are remeasured into U.S. dollars using current Argentine peso exchange rates with resulting translation gains or losses included in results of operations. Nonmonetary assets and liabilities are remeasured into U.S. dollar using historic Argentine peso exchange rates. Reference is made to Note 1 of our consolidated financial statements in Item 8 for additional information.

International Markets

Trade actions initiated by the U.S. imposing tariffs on imports have been met with retaliatory tariffs by other countries, adding a level of tension and uncertainty to the global economic environment. In November 2018, the U.S., Mexico and Canada executed the U.S.-Mexico-Canada Agreement (USMCA), the successor agreement to the North American Free Trade Agreement (NAFTA). The agreement includes the imposition of tariffs on vehicles that do not meet regional raw material (steel and aluminum), part and labor content requirements. The agreement was ratified by the U.S. in January 2020. These and other actions are likely to impact trade policies with other countries and the overall global economy. The United Kingdom's decision to exit the European Union ("Brexit") continues to provide some uncertainty and potential volatility around European currencies, along with uncertain effects of future trade and other cross-border activities of the United Kingdom with the European Union and other countries.

The Brazil market is an important market for our Commercial Vehicle segment, representing about 19% of this segment's 2019 sales. Our medium/heavy truck sales in Brazil account for approximately 79% of our total sales in the country. Reduced market demand resulting from the weak economic environment in Brazil during 2015 and 2016 lead to production levels declining approximately 30% in the light truck market and 55% in the medium/heavy duty truck market over the two-year period. As a consequence, sales by our operations in Brazil for 2016 approximated \$200, down from about \$500 in 2014. In response to the challenging economic conditions in this country, we implemented restructuring and other cost reduction actions and reduced costs to the extent practicable. The Brazilian economy rebounded in 2017 and 2018, leading to increased medium/heavy and light truck production of more than 40% in each of those segments over the two-year period. Sales by our operations

in Brazil were \$393 in 2019, up 1% from 2018, reflective of modestly higher medium/heavy and light truck production levels in 2019. Further economic improvement and increased production is expected in 2020.

As indicated above, Argentina has experienced significant inflationary pressures the past few years, contributing to significant devaluation of its currency among other economic challenges. Our Argentine operation supports our Light Vehicle operating segment. Our sales in Argentina for 2019 of approximately \$88 are 1% of our consolidated sales and our net asset exposure related to Argentina was approximately \$13, including \$6 of net fixed assets, at December 31, 2019.

Commodity Costs

The cost of our products may be significantly impacted by changes in raw material commodity prices, the most important to us being those of various grades of steel, aluminum, copper and brass. The effects of changes in commodity prices are reflected directly in our purchases of commodities and indirectly through our purchases of products such as castings, forgings, bearings and component parts that include commodities. Beginning in 2018, commodity prices have been impacted by imposed tariffs. Suppliers directly impacted by the tariffs are attempting to pass through the cost of the tariffs while suppliers not subject to the tariffs are advantaging themselves by raising prices. Most of our major customer agreements provide for the sharing of significant commodity price changes with those customers based on the movement in various published commodity indexes. Where such formal agreements are not present, we have historically been successful implementing price adjustments that largely compensate for the inflationary impact of material costs. Material cost changes will customarily have some impact on our financial results as customer pricing adjustments typically lag commodity price changes.

Prices for commodities such as steel and aluminum have risen over the past year, due to strong global demand. Higher commodity prices reduced year-over-year earnings in 2019 by approximately \$30, as compared to year-over-year earnings reductions of \$115 from higher commodity prices in 2018. Material recovery and other pricing actions decreased earnings \$10 compared to last year, whereas pricing and recovery actions increased year-over-year earnings in 2018 by \$80.

U.S. Tax Reform

In December 2017, the U.S. introduced broad ranging tax reform with the passage of the Tax Cuts and Jobs Act ("Act") legislation. Among the tax reforms was a reduction of the corporate tax rate from 35% to 21%. Historically, we've recognized a net deferred tax asset in the U.S. for items providing future net reductions of taxable income. These deferred tax assets are valued based on the corporate tax rate expected to be available when the deductions are taken. With enactment of the lower corporate tax rate in the U.S. in 2017, we recorded a charge to tax expense in the fourth quarter of 2017 to reduce the value of these net deferred tax assets. The effect of the rate reduction on net deferred tax assets in combination with other provisions of the Act resulted in a net non-cash increase in 2017 income tax expense of \$186. Among the tax reform provisions was a transitional U.S. tax assessed on undistributed earnings of foreign operations. Since we were able to utilize existing tax attributes to offset this transitional tax liability, adoption of the Act's provisions did not give rise to any cash taxes.

Although the tax reform in the U.S. reduced the statutory tax rate to 21% beginning in 2018, the effects of the lower rate are offset in part by the effects of increased nondeductible expenses and the global intangible low taxed income ("GILTI") provisions which result in a certain amount of foreign earnings being subjected to U.S. tax. Considering the exclusion of foreign subsidiary dividends from taxation in the U.S., we believe the Act will provide some greater flexibility to repatriate future earnings of our foreign operations.

Sales, Earnings and Cash Flow Outlook

	2020 Outlook	2019	2018	2017
Sales	\$8,250 - \$8,750	\$ 8,620	\$ 8,143	\$ 7,209
Adjusted EBITDA	\$950 - \$1,050	\$ 1,019	\$ 957	\$ 835
Net cash provided by operating activities	~9% of Sales	\$ 637	\$ 568	\$ 554
Discretionary pension contributions	\$—	\$ 61	\$ —	\$ —
Purchases of property, plant and equipment	~4.5% of Sales	\$ 426	\$ 325	\$ 393
Adjusted Free Cash Flow	4.0% - 4.5% of Sales	\$ 272	\$ 243	\$ 161

Adjusted EBITDA and adjusted free cash flow are non-GAAP financial measures. See the Non-GAAP Financial Measures discussion below for definitions of our non-GAAP financial measures and reconciliations to the most directly comparable U.S.

generally accepted accounting principles (GAAP) measures. We have not provided a reconciliation of our adjusted EBITDA outlook to the most comparable GAAP measure of net income. Providing net income guidance is potentially misleading and not practical given the difficulty of projecting event driven transactional and other non-core operating items that are included in net income, including restructuring actions, asset impairments and certain income tax adjustments. The accompanying reconciliations of these non-GAAP measures with the most comparable GAAP measures for the historical periods presented are indicative of the reconciliations that will be prepared upon completion of the periods covered by the non-GAAP guidance.

We experienced higher sales in 2017 driven primarily by acquisitions and stronger market demand. Acquisitions, net of divestitures, added \$500 of sales, while stronger market demand and contributions from new customer programs increased sales by \$829 - an organic increase of 14%. In 2017, international currencies were relatively stable, providing a \$54 benefit to sales. Sales increased \$934, or 13%, in 2018, reflecting continued strong market demand and the contribution of net new business backlog. Strong off-highway, commercial vehicle and light truck demand combined with net new business of about \$300, drove 2018 organic growth of \$861, or 12%. International currencies and acquisition and divestiture activities had a negligible impact on 2018 sales. Sales increased an additional \$477, or 6%, in 2019, primarily due to multiple acquisition transactions. Acquisitions, net of divestitures, added \$654 of sales, while net new business backlog realized during 2019 offset weaker market demand. Weaker international currencies lowered 2019 sales by \$177. Our 2020 sales outlook is \$8,250 to \$8,750, reflecting weaker global market demand partially offset by the realization of \$350 of net new business backlog and the full year sales impact of the businesses we acquired in 2019. We expect international currencies to be a modest headwind to sales in 2020.

We achieved adjusted EBITDA margin growth in 2017 as we benefited from the operating leverage attributable to increased sales volumes, while at the same time integrating several acquisitions. Increased commodity prices adversely impacted 2018 earnings and adjusted EBITDA margin. Although we recovered a substantial share of the increased cost, with the customary lag from incurrence of the higher cost to recovery, approximately \$35 was not recovered by the end of 2018. Much of the adverse earnings impact of higher commodity costs and supply chain pressures of operating at strong levels of market demand were offset with material cost savings, acquisition synergies and other cost reductions. As such, our adjusted EBITDA margin for 2018 was 11.8%, a 20 basis point improvement over 2017. Adjusted EBITDA margin of 11.8% in 2019 was flat with 2018, as the benefit from higher margin net new business and synergies related to our acquisition of ODS were offset by higher commodity and other costs and increased investment to support our electrification strategy. At our current sales outlook for 2020, we expect full year 2020 adjusted EBITDA to approximate \$950 to \$1,050. Adjusted EBITDA Margin is expected to remain at 11.8%, as the benefit from higher margin net new business and synergies related to our acquisition of ODS offsets the impact of lower sales and the increased investment we expect to make in 2020 to support our electrification strategy.

We have generated positive adjusted free cash flow in recent years while increasing capital spending to support organic business growth through launching new business with customers. As planned, an elevated level of capital spending at around 5.5% of sales continued into 2017 to support new customer programs. Despite an increase in capital spending of \$71 in 2017, adjusted free cash flow increased by \$99, primarily from a stronger earnings performance which contributed to increased operating cash flows of \$170. Adjusted free cash flow increased \$82 in 2018, with benefits from increased operating earnings and lower required capital investment being partially offset by higher working capital requirements associated with increased sales and production levels. Adjusted free cash flow increased an additional \$29 in 2019, with benefits from increased operating earnings being largely offset by higher capital investment to support new business and required investment in the ODS operations. We expect to generate adjusted free cash flow of approximately \$375, or 4.5% of sales for 2020. While we anticipate adjusted EBITDA to be relatively flat with 2019, we expect capital spending in 2020 to be around 4.5% of sales, down from peak 2019 spending. Capital spending to support new customer programs will begin to dissipate and the significant capital investments made in the ODS operations during 2019 will not repeat in 2020.

Among our operational and strategic initiatives are increased focus on and investment in product technology – delivering products and technology that are key to bringing solutions to issues of paramount importance to our customers. Our success on this front is measured, in part, by our sales backlog – net new business received that will be launching in the future and adding to our base annual sales. This backlog excludes replacement business and represents incremental sales associated with new programs for which we have received formal customer awards. At December 31, 2019, our sales backlog of net new business for the 2020 through 2022 period was \$700. We expect to realize \$350 of our sales backlog in 2020, with incremental sales backlog of \$350 being realized in 2021.

Consolidated Results of Operations

Summary Consolidated Results of Operations (2019 versus 2018)

	2019		2018		Increase/ (Decrease)
	Dollars	% of Net Sales	Dollars	% of Net Sales	
Net sales	\$ 8,620		\$ 8,143		\$ 477
Cost of sales	7,489	86.9%	6,986	85.8%	503
Gross margin	1,131	13.1%	1,157	14.2%	(26)
Selling, general and administrative expenses	508	5.9%	499	6.1%	9
Amortization of intangibles	12		8		4
Restructuring charges, net	29		25		4
Impairment of goodwill and indefinite-lived intangible asset	(6)		(20)		14
Gain on disposal group held for sale			3		(3)
Pension settlement charges	(259)				(259)
Other expense, net	(25)		(29)		4
Earnings before interest and income taxes	292		579		(287)
Loss on extinguishment of debt	(9)				(9)
Interest income	10		11		(1)
Interest expense	122		96		26
Earnings before income taxes	171		494		(323)
Income tax expense (benefit)	(32)		78		(110)
Equity in earnings of affiliates	30		24		6
Net income	233		440		(207)
Less: Noncontrolling interests net income	13		13		—
Less: Redeemable noncontrolling interests net loss	(6)				(6)
Net income attributable to the parent company	<u>\$ 226</u>		<u>\$ 427</u>		<u>\$ (201)</u>

Sales — The following table shows changes in our sales by geographic region.

	2019	2018	Increase/ (Decrease)	Amount of Change Due To		
				Currency Effects	Acquisitions (Divestitures)	Organic Change
North America	\$ 4,473	\$ 4,106	\$ 367	\$ (3)	\$ 196	\$ 174
Europe	2,606	2,484	122	(129)	322	(71)
South America	509	546	(37)	(31)	(13)	7
Asia Pacific	1,032	1,007	25	(14)	149	(110)
Total	<u>\$ 8,620</u>	<u>\$ 8,143</u>	<u>\$ 477</u>	<u>\$ (177)</u>	<u>\$ 654</u>	<u>\$ —</u>

Sales in 2019 were \$477 higher than in 2018. Weaker international currencies decreased sales by \$177, principally due to a weaker euro, Brazilian real, South African rand, Chinese renminbi and Indian rupee. The acquisitions of ODS and SME in this year's first quarter, PEPS in this year's second quarter, Nordresa in this year's third quarter and TM4 in last year's second quarter, net of the divestiture of the Brazil suspension components business in last year's third quarter, generated a year-over-year increase in sales of \$654. The organic sales increase in North America driven by stronger medium/heavy truck production and the conversion of sale backlog was offset by weaker global construction/mining and agricultural equipment markets and a softening in the Chinese economy. Pricing actions, including material commodity price and inflationary cost recovery, reduced sales by \$10.

The North America organic sales increase of 4% was driven principally by stronger medium/heavy truck production volumes and the conversion of sales backlog. Production of Class 8 trucks was up 6% and production of Classes 5-7 was up 2% while full frame light truck production was flat compared to 2018. In addition, realization of light truck sales backlog helped to offset the year-over-year sales volume-related decline attributable to one of our largest light vehicle customer programs for which production continued on the outgoing model, concurrent with production of the new model vehicle, during last year's first quarter.

A weaker euro and South African rand were the primary driver of the decreased sales in Europe due to currency effects. Excluding currency and acquisition effects, sales in Europe decreased 3% compared to 2018. Strong market demand in the first half of 2019 in our Off-Highway segment was more than offset by weak demand in the second half of 2019.

A weaker Brazilian real reduced South America sales in 2019. The region overall experienced relatively stable markets, with medium/heavy truck production being flat and light truck production down 3% compared to 2018.

A weaker Chinese renminbi and Indian rupee were the primary drivers of the decreased sales in Asia Pacific due to currency effects. Excluding currency and acquisition effects, sales decreased about 11% as China's economy showed signs of weakening. Light truck, light vehicle engine and medium/heavy truck production were down 4%, 7% and 4% respectively, from 2018.

Cost of sales and gross margin — Cost of sales for 2019 increased \$503, or 7% when compared to 2018. Similar to the factors affecting sales, the increase was primarily due to the inclusion of acquired businesses. Cost of sales as a percent of sales in 2019 was 110 basis points higher than in the previous year. Cost of sales attributed to net acquisitions, which included \$13 of incremental cost assigned to inventory as part of business combination accounting, was approximately \$620. Excluding the effects of acquisitions and divestitures, cost of sales as a percent of sales was 86.2%, 40 basis points higher than in the previous year. The increased cost of sales as a percent of sales was largely attributable to higher commodity prices which increased material costs by about \$30, an increase in engineering and development cost of \$4, higher depreciation expense of \$15 and operational inefficiencies and other cost increases. Partially offsetting these higher costs were continued material cost savings of \$86, a net benefit of \$17 from the monetization of a non-income tax claim, lower start-up and launch costs and lower premium freight.

Gross margin of \$1,131 for 2019 decreased \$26 from 2018. Gross margin as a percent of sales was 13.1% in 2019, 110 basis points lower than in 2018. The decline in margin as a percent of sales was driven principally by the cost of sales factors referenced above.

Selling, general and administrative expenses (SG&A) — SG&A expenses in 2019 were \$508 (5.9% of sales) as compared to \$499 (6.1% of sales) in 2018. SG&A attributed to net acquisitions was \$33. Excluding the increase associated with net acquisitions, SG&A expenses were 10 basis points lower than the same period of 2018. The year-over-year decrease of \$24 exclusive of net acquisitions was primarily due to lower salaries and benefits expenses resulting from the voluntary retirement program and other headcount reduction actions taken in the fourth quarter of 2018.

Amortization of intangibles — The \$4 increase in amortization expense in 2019 was attributable to intangible assets obtained through the TM4, ODS, SME, and PEPS acquisitions, partially offset by certain intangible assets becoming fully amortized. Reference is made to Note 2 of the consolidated financial statements in Item 8 for additional information on recent acquisitions.

Restructuring charges, net — Restructuring charges of \$29 in 2019 were comprised of severance and benefit costs related to integration of recent acquisitions, headcount reductions across our operations and exit costs related to previously announced actions. Restructuring charges of \$25 in 2018 were primarily comprised of severance and benefit costs related to a voluntary retirement program in North America, headcount reduction actions in our operations and corporate functions in Brazil and administrative cost reduction initiatives primarily in Europe and North America. In response to continued market recovery in our Off-Highway business in Europe, management re-evaluated the economic conditions of our global Off-Highway business and determined that \$7 of the previously approved restructuring actions are no longer economically prudent.

Impairment of goodwill and indefinite-lived intangible asset — During the fourth quarter of 2019, we wrote off the goodwill recognized as part of a 2016 acquisition. During the second quarter of 2018, we wrote off the in-process research and development intangible asset recognized as part of a 2012 acquisition. Refer to Note 4 of the consolidated financial statements in Item 8 for additional information.

Gain on disposal group held for sale — See Note 3 of the consolidated financial statements in Item 8 for a discussion of the divestiture of our Brazil suspension components business.

Pension settlement charges — During 2019, we recorded a \$256 settlement charge related to the termination of one of our U.S. defined benefit pension plans and a \$3 settlement charge related to the termination of one of our Canadian defined benefit pension plans. Refer to Note 13 of the consolidated financial statements in Item 8 for additional information.

Other expense, net — The following table shows the major components of other expense, net.

	2019	2018
Non-service cost components of pension and OPEB costs	\$ (23)	\$ (15)
Government grants and incentives	15	12
Foreign exchange loss	(11)	(12)
Strategic transaction expenses, net of transaction breakup fee income	(41)	(18)
Non-income tax legal judgment	6	
Gain on sale of marketable securities	1	
Gain on liquidation of foreign subsidiary	12	
Other, net	16	4
Other expense, net	<u>(25)</u>	<u>(29)</u>

Strategic transaction expenses in 2019 were primarily attributable to our acquisition of ODS. Strategic transaction expenses in 2018 were primarily attributable to our bid to acquire the driveline business of GKN plc., our acquisition of an ownership interest in TM4, our pending acquisition of ODS and integration costs associated with our acquisitions of BFP and BPT, and were partially offset by a \$40 transaction breakup fee associated with the GKN plc. transaction. During the first quarter of 2019, we won a legal judgment regarding the methodology used to calculate PIS/COFINS tax on imports into Brazil. During the fourth quarter of 2019, we liquidated a foreign subsidiary. The resulting non-cash gain is attributable to the recognition of accumulated currency translation adjustments.

Loss on extinguishment of debt — As discussed in Note 15 to our consolidated financial statements in Item 8, we redeemed \$300 of our September 2023 Notes during the fourth quarter of 2019. We incurred redemption premiums of \$7 in connection with these repayments and wrote off \$2 of previously deferred financing costs associated with the extinguished debt.

Interest income and interest expense — Interest income was \$10 in 2019 and \$11 in 2018. Interest expense increased from \$96 in 2018 to \$122 in 2019 primarily due to increased debt levels used to fund recent acquisition activities. Average effective interest rates, inclusive of amortization of debt issuance costs, approximated 5.0% and 5.2% in 2019 and 2018.

Income tax expense — Income taxes were a benefit of \$32 in 2019 and an expense of \$78 in 2018. During 2019, we recognized a benefit of \$22 for the release of valuation allowance in a subsidiary in Brazil based on recent history of profitability and increased income projections. A pre-tax pension settlement charge of \$259 was recorded, resulting in income tax expense of \$11 and a valuation allowance release of \$18. For the year, we also recognized benefits for the release of valuation allowance in the US of \$34 based on increased income projections and \$30 based on the development of a tax planning strategy related to federal tax credits. Partially offsetting this benefit in the US was \$6 of expense related to a US state law change. During the second quarter of 2019, we also recorded tax benefits of \$48 related to tax actions that adjusted federal tax credits. During 2018, we recognized a benefit of \$44 related to U.S. state law changes and the development and implementation of a tax planning strategy which adjusted federal tax credits, along with federal and state net operating losses and the associated valuation allowances. We also recognized benefits of \$11 relating to the reversal of a provision for an uncertain tax position, \$5 relating to the release of valuation allowances in the US based on improved income projections and \$7 due to permanent reinvestment assertions. Partially offsetting these benefits was \$5 of expense to settle outstanding tax matters in a foreign jurisdiction. See Note 19 to our consolidated financial statements in Item 8 of Part II for further disclosures around these items.

Excluding the effects of the items referenced in the preceding paragraph, our effective tax rates were 24% in 2019 and 28% in 2018. These rates vary from the applicable U.S. federal statutory rate of 21% primarily due to establishment, release and adjustment of valuation allowances in several countries, nondeductible expenses, deemed income, local tax incentives in several countries outside the U.S., different statutory tax rates outside the U.S. and withholding taxes related to repatriations of international earnings.

In countries where our history of operating losses does not allow us to satisfy the “more likely than not” criterion for recognition of deferred tax assets, we have generally recognized no income tax on the pre-tax income or losses as valuation allowance adjustments offset the associated tax effects. During the third quarter of 2019, we recognized a benefit of \$22 for the release of a valuation allowance in a subsidiary in Brazil.

Equity in earnings of affiliates — Net earnings from equity investments was \$30 in 2019 compared with \$24 in 2018. Equity in earnings from Bendix Spicer Foundation Break, LLC (BSFB) was \$12 in 2019 and \$7 in 2018. Equity in earnings from Dongfeng Dana Axle Co., Ltd. (DDAC) was \$18 in 2019 and \$15 in 2018.

Segment Results of Operations (2019 versus 2018)

Light Vehicle

	Sales	Segment EBITDA	Segment EBITDA Margin
2018	\$ 3,575	\$ 398	11.1%
Volume and mix	64	18	
Acquisition	1	(1)	
Performance	(10)	26	
Currency effects	(21)	(3)	
2019	<u>\$ 3,609</u>	<u>\$ 438</u>	12.1%

Light Vehicle sales in 2019, exclusive of acquisition and currency effects, were 2% higher than 2018. Conversion of sales backlog was partially offset by lower full frame truck production in Asia Pacific and the year-over-year sales volume-related decline attributable to one of our largest customer programs for which production continued on the outgoing model, concurrent with production of the new model vehicle, during last year's first quarter. Full frame truck production in North America and Europe was flat compared to 2018. Net customer pricing and cost recovery actions resulted in a year-over-year decrease of \$13.

Light Vehicle segment EBITDA increased by \$40 in 2019. Higher sales volumes provided a year-over-year benefit of \$18. The year-over-year performance related earnings improvement was driven by material cost savings of \$37 and lower new program start-up and launch-related costs of \$16. Lower net pricing and material cost recovery actions of \$13, increased engineering spend of \$9, higher warranty costs of \$2 and operational inefficiencies and other cost increases of \$3 reduced performance in 2019.

Commercial Vehicle

	Sales	Segment EBITDA	Segment EBITDA Margin
2018	\$ 1,612	\$ 146	9.1%
Volume and mix	10	3	
Acquisition / Divestiture	17	(2)	
Performance	16	(3)	
Currency effects	(44)	(6)	
2019	<u>\$ 1,611</u>	<u>\$ 138</u>	8.6%

Excluding currency effects and the net impact of acquisitions and divestitures, Commercial Vehicle sales increased 2% compared to last year. The volume-related increase was primarily attributable to higher production levels in North America during the first half of 2019 where Class 8 production was up 22% and Classes 5-7 production was up 7% compared to the first half of 2018. During the second half of 2019, North American production volumes declined, with Class 8 production down 9% and Classes 5-7 down 3% compared to the second half of 2018. Similarly the impact of higher 2019 first-half production volumes in Europe and Asia Pacific have been largely offset by declining production volumes in both regions during the second half of 2019. With the improving economy in Brazil, our sales volume in 2019 benefited from year-over-year higher production levels in that country of around 7%. Net customer pricing and cost recovery actions increased year-over-year sales by \$7.

Commercial Vehicle segment EBITDA was \$8 lower than 2018. Higher sales volumes increased year-over-year earnings by \$3. The year-over-year performance related earnings decline was driven by higher commodity costs of \$21, increased engineering spend of \$2 and operational inefficiencies and other cost increases of \$8. Material cost savings of \$19, higher net pricing and material cost recovery actions of \$7 and net foreign currency transaction gains of \$2 provided a partial offset.

Off-Highway

	Sales	Segment EBITDA	Segment EBITDA Margin
2018	\$ 1,844	\$ 285	15.5%
Volume and mix	(42)	(19)	
Acquisition	636	88	
Performance	3	(15)	
Currency effects	(81)	(9)	
2019	<u>\$ 2,360</u>	<u>\$ 330</u>	14.0%

Excluding currency effects, primarily due to a weaker euro, and the impact of the ODS and SME acquisitions, Off-Highway segment sales decreased 2% compared to last year. The construction/mining and agricultural equipment markets were relatively stable during the first half of 2019 but deteriorated rapidly during the second half of 2019. Customer pricing and material cost recovery actions increased year-over-year sales by \$5.

Off-Highway segment EBITDA increased by \$45 in 2019. Marginally higher market demand through the first half of 2019 was more than offset by rapid market deterioration in the second half of 2019. The \$15 performance-related deterioration in 2019 earnings was impacted by higher commodity costs of \$6 and operational inefficiencies and other cost increases of \$36, partially offset by material cost savings of \$22 and customer pricing and material cost recovery actions of \$5.

Power Technologies

	Sales	Segment EBITDA	Segment EBITDA Margin
2018	\$ 1,112	\$ 149	13.4%
Volume and mix	(36)	(13)	
Performance	(5)	(15)	
Currency effects	(31)	(4)	
2019	<u>\$ 1,040</u>	<u>\$ 117</u>	11.3%

Power Technologies primarily serves the light vehicle market but also sells product to the medium/heavy truck and off-highway markets. Net of currency effects, sales for 2019 were 4% lower than 2018, primarily due to program roll offs and lower market demand. Light vehicle engine production declined across all regions during 2019. Net customer pricing and material cost recovery actions decreased year-over-year sales by \$9.

Power Technologies segment EBITDA decreased \$32 compared to 2019. The \$15 performance deterioration resulted from higher commodity costs of \$2, operational inefficiencies and other cost increases of \$4 and lower net pricing and material cost recovery actions of \$9.

Summary Consolidated Results of Operations (2018 versus 2017)

	2018		2017		Increase/ (Decrease)
	Dollars	% of Net Sales	Dollars	% of Net Sales	
Net sales	\$ 8,143		\$ 7,209		\$ 934
Cost of sales	6,986	85.8%	6,143	85.2%	843
Gross margin	1,157	14.2%	1,066	14.8%	91
Selling, general and administrative expenses	499	6.1%	508	7.0%	(9)
Amortization of intangibles	8		11		(3)
Restructuring charges, net	25		14		11
Impairment of intangible assets	(20)				(20)
Gain (loss) on disposal group held for sale	3		(27)		30
Other expense, net	(29)		(16)		(13)
Earnings before interest and income taxes	579		490		89
Loss on extinguishment of debt			(19)		19
Interest income	11		11		—
Interest expense	96		102		(6)
Earnings before income taxes	494		380		114
Income tax expense	78		283		(205)
Equity in earnings of affiliates	24		19		5
Net income	440		116		324
Less: Noncontrolling interests net income	13		10		3
Less: Redeemable noncontrolling interests net loss			(5)		5
Net income attributable to the parent company	<u>\$ 427</u>		<u>\$ 111</u>		<u>\$ 316</u>

Sales — The following table shows changes in our sales by geographic region.

	2018	2017	Increase/ (Decrease)	Amount of Change Due To		
				Currency Effects	Acquisitions (Divestitures)	Organic Change
North America	\$ 4,106	\$ 3,688	\$ 418	\$ (1)	\$ 32	\$ 387
Europe	2,484	2,154	330	85	27	218
South America	546	500	46	(74)	(9)	129
Asia Pacific	1,007	867	140	6	7	127
Total	<u>\$ 8,143</u>	<u>\$ 7,209</u>	<u>\$ 934</u>	<u>\$ 16</u>	<u>\$ 57</u>	<u>\$ 861</u>

Sales in 2018 were \$934 higher than in 2017. Stronger international currencies increased sales by \$16, principally due to a stronger euro, Thai baht and Chinese renminbi, partially offset by a weaker Brazilian real, Argentine peso and Indian rupee. The acquisitions of the Brevini and USM operations which occurred in the first quarter of 2017 and TM4 which occurred in the second quarter of 2018, net of the divestiture of the Brazil suspension components business in the third quarter of 2018, generated a year-over-year increase in sales of \$57. The organic sales increase of \$861, or 12%, resulted from stronger light truck markets, strengthening global off-highway demand, stronger medium/heavy truck markets and contributions from new business. Pricing actions, including material commodity price and inflationary cost recovery added sales of \$80.

The North America organic sales increase of 10% was driven principally by stronger production levels on certain of our key light truck programs. Overall full-frame light truck production was up 4% compared with last year. In addition, certain of our key programs had higher production levels, with one of these programs producing outgoing model vehicles along with new model vehicles during this year's first quarter. Stronger medium/heavy truck production in 2018 of about 18%, with Class 8 trucks up more than 25% and Classes 5-7 up about 10%, also contributed to higher organic sales.

A stronger euro increased sales in Europe due to currency effects. Excluding currency and acquisition effects, sales in Europe were 10% higher than in 2017. With our significant Off-Highway presence in the region, increased market demand in this segment was a major contributor. Organic sales in this operating segment were up about 16% compared with 2017.

A weaker Brazilian real and Argentina peso reduced South America sales in 2018. However, more than offsetting this reduction was an organic increase in sales of 26%. Continued economic recovery in the Brazilian market was a major factor.

The region overall experienced stronger production levels, with light truck production up about 7% and medium/heavy truck production higher by about 27%.

Asia Pacific sales in 2018 were 16% higher than last year. Currency translation increased sales by \$6, driven by a stronger Thai baht and Chinese renminbi, partially offset by a weaker Indian rupee. Excluding currency and acquisition effects, sales increased 15% due primarily to stronger light truck production levels, off-highway market demand and contributions from new customer programs.

Cost of sales and gross margin — Cost of sales for 2018 increased \$843, or 14%, when compared to 2017. Similar to the factors affecting sales, the increase was primarily due to higher overall sales volumes and inclusion of a full twelve months of the businesses acquired in the first quarter of 2017. Cost of sales as a percent of 2018 sales was 60 basis points higher than in the previous year. The increased cost of sales as a percent of sales was largely attributable to higher commodity prices which increase material costs by about \$115, an increase in engineering and development expense of \$32, higher depreciation expense of \$39 attributable to increased capital spending over the past few years in support of significant new customer programs which launched this year and premium supply chain costs and other manufacturing inefficiencies associated with higher demand levels. Partially offsetting these higher costs were continued material cost savings of \$70, incremental costs of \$14 in 2017 resulting from recognizing acquired inventory at fair value as part of business combination accounting, cost attributable to acquisition cost synergies from acquisition integration, and overall better cost absorption on higher production volumes.

Gross margin of \$1,157 for 2018 increased \$91 from 2017. Gross margin as a percent of sales was 14.2% in 2018, 60 basis points lower than in 2017. The decline in margin as a percent of sales was driven principally by the cost of sales factors referenced above.

Selling, general and administrative expenses (SG&A) — SG&A expenses in 2018 were \$499 (6.1% of sales) as compared to \$508 (7.0% of sales) in 2017. Inclusion of a full twelve months of the businesses acquired in the first quarter of 2017 and six months of TM4 acquired in second quarter of 2018 contributed \$9 of expense. Salaries and benefits expense decreased by \$32, with of lower year-over-year incentive compensation partially offset by higher salary expense. Higher discretionary spending was \$14, in part due to increased software technology investments and customer support related costs. Contributing to lower SG&A as a percent of sales were acquisition synergies along with disciplined cost performance despite higher sales volumes.

Amortization of intangibles — The reduction of \$3 in amortization expense was primarily attributable to certain customer related intangibles becoming fully amortized.

Restructuring charges, net — During 2018, we initiated headcount and cost reduction initiatives across our operating segments and corporate functions. Restructuring charges of \$25 in 2018 include charges of \$14 related to a voluntary retirement program in North America, \$5 associated with headcount reduction actions in our operations and corporate functions in Brazil, \$9 of severance and benefits costs related to SG&A cost reduction initiatives primarily in Europe and North America and \$4 related to previously announced actions. In response to continued market recovery in our Off-Highway business in Europe, management re-evaluated the economic conditions of our global Off-Highway business and determined that \$7 of the previously approved restructuring actions were no longer economically prudent. During 2017, we approved plans to implement certain headcount reduction initiatives in our Off-Highway business as part of the BPT and BFP acquisition integration, resulting in the recognition of \$14, primarily for severance and benefits costs. Including costs associated with the actions approved during 2017 and costs associated with previously announced initiatives, net of the reversal described below, restructuring expense during 2017 was \$14. During the fourth quarter of 2017, in response to better-than-expected market recovery in our Off-Highway business in Europe, management re-evaluated the economic conditions of our global Off-Highway business and determined that a portion of the previously approved 2016 restructuring program was no longer economically prudent. This change in facts and circumstances led to the decision to reverse \$8 of previously accrued liabilities.

Impairment of indefinite-lived intangible asset — During the second quarter of 2018, we wrote off the in-process research and development intangible asset recognized as part of a 2012 acquisition. Refer to the Other Initiatives section in Item 7 and Note 4 of the consolidated financial statements in Item 8 for additional information.

Gain (loss) on disposal group held for sale — See Note 3 of the consolidated financial statements in Item 8 for a discussion of the divestiture of our Brazil suspension components business.

Other expense, net — The following table shows the major components of other expense, net.

	2018	2017
Non-service cost components of pension and OPEB costs	\$ (15)	\$ (7)
Government grants and incentives	12	7
Foreign exchange loss	(12)	(3)
Strategic transaction expenses	(18)	(25)
Amounts attributable to previously divested/closed operations		3
Other, net	4	9
Other expense, net	<u>(29)</u>	<u>(16)</u>

Strategic transaction expenses in 2018 were primarily attributable to our bid to acquire the driveline business of GKN plc., our acquisition of an ownership interest in TM4, our pending acquisition of Oerlikon Drive Systems and integration costs associated with our acquisitions of BFP and BPT, and were partially offset by a \$40 transaction breakup fee associated with the GKN plc. transaction. Strategic transaction expenses in 2017 are primarily attributable to our acquisitions of USM - Warren, BFP and BPT.

Loss on extinguishment of debt — As discussed in Note 15 to our consolidated financial statements in Item 8, we redeemed \$100 of our September 2021 Notes, repaid indebtedness of our BPT and BFP subsidiaries and repaid certain bank debt in Brazil during the second quarter of 2017, and we redeemed the remaining \$350 of our September 2021 Notes in the third quarter of 2017. We incurred redemption premiums of \$15 in connection with these repayments and wrote off \$4 of previously deferred financing costs associated with the debt that was extinguished.

Interest income and interest expense — Interest income was \$11 in 2018 and 2017. Interest expense decreased from \$102 in 2017 to \$96 in 2018 primarily due to a lower average interest rate on borrowings. During 2017, through debt refinancing and cross-currency swaps, we achieved lower overall interest rates. Average effective interest rates, inclusive of amortization of debt issuance costs, approximated 5.2% and 5.5% in 2018 and 2017.

Income tax expense — Income taxes were an expense of \$78 in 2018 and \$283 in 2017. During 2018, we recognized a benefit of \$44 related to U.S. state law changes and the development and implementation of a tax planning strategy which adjusted federal tax credits, along with federal and state net operating losses and the associated valuation allowances. We also recognized benefits of \$11 relating to the reversal of a provision for an uncertain tax position, \$5 relating to the release of valuation allowances in the US based on improved income projections and \$7 due to permanent reinvestment assertions. Partially offsetting these benefits was \$5 of expense to settle outstanding tax matters in a foreign jurisdiction. With the enactment of the Tax Cuts and Jobs Act occurring in December 2017 in the U.S., provisions of this tax reform legislation were required to be recognized in 2017. The most significant 2017 impact of this legislation was the reduction of net deferred tax assets to reflect expected realization at the lower U.S. corporate tax rate of 21% rather than the previous rate of 35%. The net impact of recognizing the required elements of the new tax reform legislation was an increase in tax expense of \$186 in 2017. During 2017, continued improvement in our profit outlook enabled us to release \$27 of valuation allowances on state deferred tax assets. See Note 19 to our consolidated financial statements in Item 8 of Part II for further disclosures around these items.

Excluding the effects of the items referenced in the preceding paragraph, our effective tax rates were 28% in 2018 and 33% in 2017. These rates vary from the applicable U.S. federal statutory rate of 21% and 35% in these periods primarily due to establishment, release and adjustment of valuation allowances in several countries, nondeductible expenses, deemed income, local tax incentives in several countries outside the U.S., different statutory tax rates outside the U.S. and withholding taxes related to repatriations of international earnings.

In countries where our history of operating losses does not allow us to satisfy the “more likely than not” criterion for recognition of deferred tax assets, we have generally recognized no income tax on the pre-tax income or losses as valuation allowance adjustments offset the associated tax effects. We believe that it is reasonably possible that a valuation allowance of up to \$24 related to a subsidiary in Brazil will be released in the next twelve months.

Equity in earnings of affiliates — Net earnings from equity investments was \$24 in 2018 compared with \$19 in 2017. Equity in earnings from Bendix Spicer Foundation Break, LLC (BSFB) was \$7 in 2018 and \$9 in 2017. Equity in earnings from Dongfeng Dana Axle Co., Ltd. (DDAC) was \$15 in 2018 and \$9 in 2017, inclusive of a \$4 charge for asset transfer and conversion of certain assets.

Segment Results of Operations (2018 versus 2017)

Light Vehicle

	Sales	Segment EBITDA	Segment EBITDA Margin
2017	\$ 3,172	\$ 359	11.3%
Volume and mix	376	83	
Performance	36	(43)	
Currency effects	(9)	(1)	
2018	<u>\$ 3,575</u>	<u>\$ 398</u>	11.1%

Light Vehicle sales in 2018, exclusive of currency effects and increased sales of \$18 from the acquisition of USM - Warren on March 1, 2017, were 12% higher than 2017. While North America full frame truck production was up 4% compared with 2017, we experienced a significant volume-related sales increase from one of our largest customer programs for which production continued on the outgoing model during the first quarter of 2018 concurrent with production of the new model vehicle. Stronger light truck production levels in Europe, South America and Asia Pacific also contributed to higher sales volumes. Customer pricing and cost recovery impacts provided year-over-year increase in sales of \$36.

Light Vehicle segment EBITDA increased by \$39 in 2018. Higher sales volumes provided a year-over-year benefit of \$83. The year-over-year performance-related earnings reduction resulted from increased commodity costs of \$40, higher engineering and development costs of \$15, with premium freight, cost performance, operating inefficiencies and other items reducing segment earnings by \$64. Net pricing and material recovery of \$36, material cost savings of \$31 and lower new program start-up and launch-related costs of \$9 provided a partial offset.

Commercial Vehicle

	Sales	Segment EBITDA	Segment EBITDA Margin
2017	\$ 1,412	\$ 116	8.2%
Volume and mix	219	35	
Performance	20	(1)	
Currency effects	(39)	(4)	
2018	<u>\$ 1,612</u>	<u>\$ 146</u>	9.1%

Excluding currency effects, Commercial Vehicle sales increased 17% compared to 2017. The volume-related increase was primarily attributable to higher production levels in North America where Class 8 production was up about 26% and Classes 5-7 production was up 10%. With the improving economy in Brazil, our sales volumes in 2018 benefited from higher year-over-year production levels in that country of around 27%. Also contributing to the higher sales volume was higher production in Europe during 2018. Customer pricing and cost recovery actions increased year-over-year sales by \$20.

Commercial Vehicle segment EBITDA increased by \$30 in 2018. Higher sales volumes increased 2018 earnings by \$35. Higher commodity costs decreased performance-related earnings by \$35, with net pricing and material recovery actions providing a partial offset of \$20. Higher year-over-year material cost savings of \$14 and cost performance and improved operating efficiency of \$11 were partially offset by increased engineering and development costs of \$11.

Off-Highway

	Sales	Segment EBITDA	Segment EBITDA Margin
2017	\$ 1,521	\$ 212	13.9%
Volume and mix	251	57	
Performance	26	11	
Currency effects	46	5	
2018	<u>\$ 1,844</u>	<u>\$ 285</u>	15.5%

Off-Highway sales in 2018, exclusive of currency effects and increased sales of \$38 from the acquisition of the Brevini BFP and BPT operations on February 1, 2017, were 16% higher than 2017, primarily from higher global end-market demand. Customer pricing and cost recovery actions increased year-over-year sales by \$26.

Off-Highway segment EBITDA increased by \$73 in 2017. Increased market demand was the primary driver of the volume and mix earnings improvement. The performance-related improvement was due primarily to net pricing and material recovery of \$26, material cost savings of \$17 and lower warranty costs of \$5, partially offset by higher commodity costs of \$25, increased engineering and development costs of \$6 and cost performance and operating inefficiencies of \$6.

Power Technologies

	Sales	Segment EBITDA	Segment EBITDA Margin
2017	\$ 1,104	\$ 168	15.2%
Volume and mix	(8)	(3)	
Performance	(2)	(18)	
Currency effects	18	2	
2018	<u>\$ 1,112</u>	<u>\$ 149</u>	13.4%

Power Technologies primarily serves the light vehicle market but also sells product to the medium/heavy truck and off-highway markets. Net of currency effects, 2018 sales were 1% lower than 2017, primarily due to programs that were scheduled to roll off in this year, along with weaker passenger car demand.

Segment EBITDA decreased by \$19 compared to 2017. The performance-related deterioration resulted from higher commodity costs of \$15, increased engineering spend of \$3 and cost performance and operating inefficiencies of \$8, partially offset by material cost savings of \$8.

Non-GAAP Financial Measures

Adjusted EBITDA

We have defined adjusted EBITDA as net income before interest, income taxes, depreciation, amortization, equity grant expense, restructuring expense, non-service cost components of pension and other postretirement benefits (OPEB) costs and other adjustments not related to our core operations (gain/loss on debt extinguishment, pension settlements, divestitures, impairment, etc.). Adjusted EBITDA is a measure of our ability to maintain and continue to invest in our operations and provide shareholder returns. We use adjusted EBITDA in assessing the effectiveness of our business strategies, evaluating and pricing potential acquisitions and as a factor in making incentive compensation decisions. In addition to its use by management, we also believe adjusted EBITDA is a measure widely used by securities analysts, investors and others to evaluate financial performance of our company relative to other Tier 1 automotive suppliers. Adjusted EBITDA should not be considered a substitute for earnings before income taxes, net income or other results reported in accordance with GAAP. Adjusted EBITDA may not be comparable to similarly titled measures reported by other companies.

The following table provides a reconciliation of net income to adjusted EBITDA.

	2019	2018	2017
Net income	\$ 233	\$ 440	\$ 116
Equity in earnings of affiliates	30	24	19
Income tax expense (benefit)	(32)	78	283
Earnings before income taxes	171	494	380
Depreciation and amortization	339	270	233
Restructuring charges, net	29	25	14
Interest expense, net	112	85	91
Loss on extinguishment of debt	9		19
Pension settlement charge	259		
Acquisition related inventory adjustments	13		14
Gain (loss) on disposal group held for sale		(3)	27
Impairment of goodwill and indefinite-lived intangible assets	6	20	
Other*	81	66	57
Adjusted EBITDA	<u>\$ 1,019</u>	<u>\$ 957</u>	<u>\$ 835</u>

* Other includes stock compensation expense, non-service cost components of pension and OPEB costs, strategic transaction expenses, net of transaction breakup fees and other items. See Note 22 to our consolidated financial statements in Item 8 for additional details. Non-service cost components of pension and OPEB costs were excluded from adjusted EBITDA beginning in 2018 concurrent with adoption of ASU 2017-07 which required such cost to be classified outside of operating income. While prior period amounts have been reclassified on our consolidated statement of operations for U.S. GAAP reporting purposes, we did not adjust prior period adjusted EBITDA on the basis of materiality. Had we conformed adjusted EBITDA for 2017, adjusted EBITDA would have been \$842.

Free Cash Flow and Adjusted Free Cash Flow

We have defined free cash flow as cash provided by operating activities less purchases of property, plant and equipment. We have defined adjusted free cash flow as cash provided by operating activities excluding discretionary pension contributions less purchases of property, plant and equipment. We believe these measures are useful to investors in evaluating the operational cash flow of the company inclusive of the spending required to maintain the operations. Free cash flow and adjusted free cash flow are not intended to represent nor be an alternative to the measure of net cash provided by operating activities reported in accordance with GAAP. Free cash flow and adjusted free cash flow may not be comparable to similarly titled measures reported by other companies.

The following table reconciles net cash flows provided by operating activities to adjusted free cash flow.

	2019	2018	2017
Net cash provided by operating activities	\$ 637	\$ 568	\$ 554
Purchases of property, plant and equipment	(426)	(325)	(393)
Free cash flow	211	243	161
Discretionary pension contribution	61	—	—
Adjusted free cash flow	<u>\$ 272</u>	<u>\$ 243</u>	<u>\$ 161</u>

Liquidity

The following table provides a reconciliation of cash and cash equivalents to liquidity, a non-GAAP measure, at December 31, 2019:

Cash and cash equivalents	\$ 508
Less: Deposits supporting obligations	(5)
Available cash	503
Additional cash availability from Revolving Facility	979
Marketable securities	19
Total liquidity	<u>\$ 1,501</u>

Cash deposits are maintained to provide credit enhancement for certain agreements and are reported as part of cash and cash equivalents. For most of these deposits, the cash may be withdrawn if a comparable security is provided in the form of

letters of credit. Accordingly, these deposits are not considered to be restricted. Marketable securities are included as a component of liquidity as these investments can be readily liquidated at our discretion.

The components of our December 31, 2019 consolidated cash balance were as follows:

	U.S.	Non-U.S.	Total
Cash and cash equivalents	\$ 132	\$ 278	\$ 410
Cash and cash equivalents held as deposits		5	5
Cash and cash equivalents held at less than wholly-owned subsidiaries	4	89	93
Consolidated cash balance	<u>\$ 136</u>	<u>\$ 372</u>	<u>\$ 508</u>

A portion of the non-U.S. cash and cash equivalents is utilized for working capital and other operating purposes. Several countries have local regulatory requirements that restrict the ability of our operations to repatriate this cash. Beyond these restrictions, there are practical limitations on repatriation of cash from certain subsidiaries because of the resulting tax withholdings and subsidiary by-law restrictions which could limit our ability to access cash and other assets.

The principal sources of liquidity available for our future cash requirements are expected to be (i) cash flows from operations, (ii) cash and cash equivalents on hand and (iii) borrowings from our Revolving Facility. We believe that our overall liquidity and operating cash flow will be sufficient to meet our anticipated cash requirements for capital expenditures, working capital, debt obligations, common stock repurchases and other commitments during the next twelve months. While uncertainty surrounding the current economic environment could adversely impact our business, based on our current financial position, we believe it is unlikely that any such effects would preclude us from maintaining sufficient liquidity.

During 2019, we expanded our Revolving Facility to \$1,000 and extended its maturity to August 17, 2024. At December 31, 2019, we had no outstanding borrowings under the Revolving Facility but we had utilized \$21 for letters of credit. We had availability at December 31, 2019 under the Revolving Facility of \$979 after deducting the outstanding letters of credit.

At December 31, 2019, we were in compliance with the covenants of our financing agreements. Under the Term Facilities, the Revolving Facility and our senior notes, we are required to comply with certain incurrence-based covenants customary for facilities of these types. The incurrence-based covenants in the Term Facilities and the Revolving Facility permit us to, among other things, (i) issue foreign subsidiary indebtedness, (ii) incur general secured indebtedness subject to a pro forma first lien net leverage ratio not to exceed 1.50:1.00 in the case of first lien debt and a pro forma secured net leverage ratio of 2.50:1.00 in the case of other secured debt and (iii) incur additional unsecured debt subject to a pro forma total net leverage ratio not to exceed 3.50:1.00, tested on the last day of each fiscal quarter. We may also make dividend payments in respect of our common stock as well as certain investments and acquisitions subject to a pro forma total net leverage ratio of 2.75:1.00. In addition, the Term A Facility and the Revolving Facility are subject to a financial covenant requiring us to maintain a first lien net leverage ratio not to exceed 2.00:1.00. The indentures governing the senior notes include other incurrence-based covenants that may subject us to additional specified limitations.

On December 11, 2019, our Board of Directors approved an extension of our existing common stock share repurchase program through December 31, 2021. Approximately \$150 remained available under the program for future share repurchases as of December 31, 2019.

From time to time, depending upon market, pricing and other conditions, as well as our cash balances and liquidity, we may seek to acquire our senior notes or other indebtedness or our common stock through open market purchases, privately negotiated transactions, tender offers, exchange offers or otherwise, upon such terms and at such prices as we may determine (or as may be provided for in the indentures governing the notes), for cash, securities or other consideration. There can be no assurance that we will pursue any such transactions in the future, as the pursuit of any alternative will depend upon numerous factors such as market conditions, our financial performance and the limitations applicable to such transactions under our financing and governance documents.

Cash Flow

	2019	2018	2017
Cash used for changes in working capital	\$ (17)	\$ (113)	\$ (8)
Other cash provided by operations	654	681	562
Net cash provided by operating activities	637	568	554
Net cash used in investing activities	(1,123)	(462)	(583)
Net cash provided by (used in) financing activities	479	(180)	(120)
Net decrease in cash, cash equivalents and restricted cash	\$ (7)	\$ (74)	\$ (149)

The table above summarizes our consolidated statement of cash flows.

Operating activities — Exclusive of working capital, other cash provided by operations was \$654 during 2019 compared to \$681 during 2018 and \$562 during 2017. The decrease in 2019 is principally due to \$61 of discretionary pension contributions associated with the termination of certain U.S. and Canadian defined benefit pension plans, higher year-over-year cash paid for interest of \$27, cash paid for strategic transaction expenses of \$30 and cash paid for restructuring of \$19, partially offset by higher operating earnings and lower year-over-year cash paid for income taxes of \$20. The increase in 2018 is principally due to an increased level of operating earnings, lower year-over-year cash paid for interest of \$14 and cash paid for strategic transaction expenses of \$15, partially offset by higher year-over-year cash paid for income taxes of \$58.

Working capital used cash of \$17 in 2019, \$113 in 2018 and \$8 in 2017. Lower levels of receivables generated cash of \$135 in 2019 while higher levels of receivables used cash of \$113 in 2018 and \$141 in 2017. The cash generated from receivables in 2019 is reflective of lower year-over-year fourth quarter sales resulting from lower market demand. The higher level of cash required for receivables in 2018 and 2017 was primarily due to higher year-over-year sales. Lower inventories generated cash of \$35 in 2019 while higher inventories consumed cash of \$110 in 2018 and \$146 in 2017. Inventory levels have begun to decline at the end of 2019 in response to lower market demand. The higher use of cash in 2018 is reflective of higher material costs and increased safety stock of certain materials to satisfy customer requirements. The higher level of cash used to finance increased inventory in 2017 was due primarily to the stronger year-over-year volume levels. Decreases in accounts payable and other net liabilities used cash of \$187 in 2019 while increases in accounts payable and other net liabilities provided cash of \$110 in 2018 and \$279 in 2017. Cash used by accounts payable and other net liabilities in 2019 is primarily attributable to lower levels of purchasing during the fourth quarter of 2019 resulting from lower market demand, lower year-over-year accruals for professional service fees and strategic transaction expenses and the payment of higher incentive compensation accrued in 2018. Cash provided by accounts payable and other liabilities in 2018 was reduced by the payment of higher incentive compensation accrued in 2017. In addition to higher volume levels, the cash generated in 2017 from increased levels of accounts payable and other liabilities was also reflective of changes in payment practices and lengthening of payment terms with suppliers.

Investing activities — Expenditures for property plant and equipment were \$426, \$325 and \$393 in 2019, 2018 and 2017. Higher levels of capital spending in 2016 and 2017 resulted from our increased new business sales backlog, including the launch of two of our largest customer programs which both required new investment. Although still at elevated levels, capital expenditures decreased in 2018, with lower requirements to support new business launches with customers. Capital spending increased in 2019 in support of new business sales backlog and for needed improvements at several ODS facilities. During 2019, we paid \$545, net of cash and restricted cash acquired, to purchase ODS, we paid \$61 to acquire SME, we paid \$48, net of cash acquired, to purchase PEPS and we paid \$10 to acquire Nordresa. During 2019, we paid \$21 to settle the undesignated Swiss franc notional deal contingent forward related to the ODS acquisition. In 2018, we paid \$125 to acquire a 55% ownership interest in TM4 and, pursuant to our purchase and sale agreement for the BFP and BPT acquisitions in 2017, we made a net payment of \$20 to complete a required purchase of real estate and settle purchase price adjustment amounts owed by the seller. During 2018, we completed the sale of our Brazil suspension components business resulting in a net cash outflow of \$6, as the cash transferred to the buyer in the transaction exceeded the proceeds received from the buyer. During 2017, we paid \$106, net of cash acquired, to purchase an 80% ownership interest in BFP and BPT, and we used cash of \$78 to acquire the USM – Warren business. During all three years, purchases of marketable securities were largely funded by proceeds from sales and maturities of marketable securities.

Financing activities — During 2019, we entered into an amended credit and guaranty agreement comprised of a \$500 Term A Facility, a \$450 Term B Facility and a \$1,000 Revolving Facility. The Term A Facility was an expansion of our existing \$275 term facility. We drew the \$225 available under the Term A Facility and the \$450 available under the Term B Facility. The proceeds from the Term Facilities were used to acquire ODS and pay for related integration activities. We paid financing costs of \$16 to amend the credit and guaranty agreement. During 2019, we made combined principle payments of \$117 on the Term

Facilities. Also during 2019, we completed the issuances of \$300 of our November 2027 Notes, paying financing cost of \$4. We used the proceeds of the November 2027 Notes issuance to redeem all \$300 of our September 2023 Notes, paying a redemption premium of \$7. During 2017, our European subsidiary, Dana Financing Luxembourg S.à r.l., completed the issuance of \$400 of its April 2025 Notes and paid financing costs of \$6 related to the notes. We paid financing costs of \$3 related to our Term Facility and Revolving Facility and drew the entire \$275 available under the Term Facility. We redeemed all \$450 of our September 2021 Notes at a \$14 premium, repaid indebtedness of a wholly-owned subsidiary in Brazil at a premium of \$1 and repaid indebtedness of our BPT and BFP subsidiaries. During 2019, we broadened our relationship with Hydro-Québec, with Hydro-Québec acquiring an indirect 45% redeemable noncontrolling interest in SME and increasing its existing indirect 22.5% noncontrolling interest in PEPS to an indirect 45% redeemable noncontrolling interest. We received \$53 of cash at closing. During 2018, we paid \$43 to acquire Brevini's remaining 20% ownership interests in BFP and BPT. Also during 2018, Yulon Motor Co., Ltd. (Yulon) paid \$22 to acquire a direct ownership interest in two of our consolidated operating subsidiaries. Yulon's ownership interest in the two consolidated operating subsidiaries did not change as a result of the transactions, as it previously owned the same percentages indirectly through a series of consolidated holding companies. The \$22, less withholding taxes, was returned to Yulon in the form of a dividend in 2018. We used cash of \$25 to repurchase common shares under our share repurchase program in both 2019 and 2018. We used \$58, \$58 and \$35 for dividend payments to common stockholders in 2019, 2018 and 2017. The increase in dividends paid to common stockholders in 2018 was due to our Board approving a four cent per share increase in our quarterly dividend. Distributions to noncontrolling interests totaled \$19, \$42 and \$12 in 2019, 2018 and 2017. Distributions to noncontrolling interest in 2018 includes the dividend to Yulon discussed above.

Off-Balance Sheet Arrangements

In connection with the divestiture of our Structural Products business in 2010, leases covering three U.S. facilities were assigned to a U.S. affiliate of the new owner, Metalsa S.A. de C.V. (Metalsa). Under the terms of the sale agreement, we guarantee the affiliate's performance under the leases, which run through June 2025, including approximately \$6 of annual payments. In the event of a required payment by Dana as guarantor, we are entitled to pursue full recovery from Metalsa of the amounts paid under the guarantee and to take possession of the leased property.

Contractual Obligations

We are obligated to make future cash payments in fixed amounts under various agreements. The following table summarizes our significant contractual obligations as of December 31, 2019.

Contractual Cash Obligations	Total	Payments Due by Period			
		2020	2021 - 2022	2023 - 2024	After 2024
Long-term debt ⁽¹⁾	\$ 2,352	\$ 15	\$ 61	\$ 851	\$ 1,425
Interest payments ⁽²⁾	682	116	231	222	113
Operating leases ⁽³⁾	213	50	74	43	46
Financing leases ⁽⁴⁾	34	5	10	6	13
Unconditional purchase obligations ⁽⁵⁾	128	123	5	—	—
Pension contribution ⁽⁶⁾	17	17	—	—	—
Retiree health care benefits ⁽⁷⁾	50	5	10	10	25
Uncertain income tax positions ⁽⁸⁾	—	—	—	—	—
Total contractual cash obligations	<u>\$ 3,476</u>	<u>\$ 331</u>	<u>\$ 391</u>	<u>\$ 1,132</u>	<u>\$ 1,622</u>

Notes:

- (1) Principal payments on long-term debt.
- (2) Interest payments are based on long-term debt in place at December 31, 2019 and the interest rates applicable to such obligations.
- (3) Operating lease obligations related to real estate, manufacturing and material handling equipment, vehicles and other assets.
- (4) Finance lease obligations related to real estate and manufacturing and material handling equipment.
- (5) Unconditional purchase obligations are comprised of commitments for the procurement of fixed assets, the purchase of raw materials and the fulfillment of other contractual obligations.
- (6) This amount represents estimated 2020 minimum required contributions to our global defined benefit pension plans. We have not estimated pension contributions beyond 2020 due to the significant impact that return on plan assets and changes in discount rates might have on such amounts.
- (7) This amount represents estimated payments under our retiree health care programs. Obligations under the retiree health care programs are not fixed commitments and will vary depending on various factors, including the level of participant utilization and inflation. Our estimates of the payments to be made in the future consider recent payment trends and certain of our actuarial assumptions.
- (8) We are not able to reasonably estimate the timing of payments related to uncertain tax positions because the timing of settlement is uncertain. The above table does not reflect unrecognized tax benefits at December 31, 2019 of \$119. See Note 19 to our consolidated financial statements in Item 8 for additional discussion.

At December 31, 2019, we maintained cash balances of \$5 on deposit with financial institutions primarily to support property insurance policy deductibles, certain employee retirement obligations and specific government approved environmental remediation efforts.

Contingencies

For a summary of litigation and other contingencies, see Note 17 to our consolidated financial statements in Item 8. Based on information available to us at the present time, we do not believe that any liabilities beyond the amounts already accrued that may result from these contingencies will have a material adverse effect on our liquidity, financial condition or results of operations.

Critical Accounting Estimates

The preparation of our consolidated financial statements in accordance with GAAP requires us to use estimates and make judgments and assumptions about future events that affect the reported amounts of assets, liabilities, revenue, expenses and the related disclosures. Considerable judgment is often involved in making these determinations. Critical estimates are those that require the most difficult, subjective or complex judgments in the preparation of the financial statements and the accompanying notes. We evaluate these estimates and judgments on a regular basis. We believe our assumptions and estimates are reasonable and appropriate. However, the use of different assumptions could result in significantly different results and actual results could differ from those estimates. The following discussion of accounting estimates is intended to supplement the Summary of Significant Accounting Policies presented as Note 1 to our consolidated financial statements in Item 8.

Income taxes — Accounting for income taxes is complex, in part because we conduct business globally and therefore file income tax returns in numerous tax jurisdictions. Significant judgment is required in determining the income tax provision, uncertain tax positions, deferred tax assets and liabilities and the valuation allowances recorded against our net deferred tax assets. A valuation allowance is provided when, in our judgment based upon available information, it is more likely than not that a portion of such deferred tax assets will not be realized. To make this assessment, we consider the historical and projected future taxable income or loss by tax jurisdiction. We consider all components of comprehensive income and weigh the positive and negative evidence, putting greater reliance on objectively verifiable historical evidence than on projections of future profitability that are dependent on actions that have not taken place as of the assessment date. We also consider changes to historical profitability of actions that occurred through the date of assessment and objectively verifiable effects of material forecasted events that would have a sustained effect on future profitability, as well as the effect on historical profits of nonrecurring events. We also incorporate the changes to historical and prospective income from tax planning strategies expected to be implemented.

Tax reform legislation in the U.S. was signed into law in December 2017 with enactment of the Tax Cuts and Jobs Act ("Act"). This legislation represents a fundamental and dramatic shift in U.S. taxation, with many provisions of the Act differing significantly from previous U.S. tax law. With enactment occurring late in 2017, companies with calendar reporting years did not have extensive time to analyze the impacts of the legislation. Applying the effects of a lower corporate tax rate to deferred tax assets and liabilities, evaluating the one-time transition tax on undistributed earnings of foreign operations, examining the implications of changes to net operating loss and other credit carryforwards and considering other provisions of the Act in a relatively compressed time frame necessitated significant estimation and judgment. Following the guidance of the U.S. Securities and Exchange Commission's Staff Accounting Bulletin No. 118, we made reasonable estimates of the Act's provisions and recorded a non-cash charge to the fourth quarter 2017 tax expense of \$186 to reflect these effects. Our analysis of this provisional amount continued throughout 2018 as guidance was issued, and we determined that no material adjustment was required to this provision estimate. Given the Act's broad and complex changes, further clarification, interpretation and regulatory guidance issued in the future could impact our original estimate.

In the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is less than certain. We are regularly under audit by the various applicable tax authorities. Although the outcome of tax audits is always uncertain, we believe that we have appropriate support for the positions taken on our tax returns and that our annual tax provisions include amounts sufficient to pay assessments, if any, upon final determination by the taxing authorities. Nonetheless, the amounts ultimately paid, if any, upon resolution of the issues raised by the taxing authorities may differ materially from the amounts accrued for each year. See additional discussion of our deferred tax assets and liabilities in Note 19 to our consolidated financial statements in Item 8.

Retiree benefits — Accounting for pension benefits and other postretirement benefits (OPEB) involves estimating the cost of benefits to be provided well into the future and attributing that cost to the time period each employee works. These plan expenses and obligations are dependent on assumptions developed by us in consultation with our outside advisers such as actuaries and other consultants and are generally calculated independently of funding requirements. The assumptions used, including inflation, discount rates, investment returns, life expectancies, turnover rates, retirement rates, future compensation levels and health care cost trend rates, have a significant impact on plan expenses and obligations. These assumptions are regularly reviewed and modified when appropriate based on historical experience, current trends and the future outlook. Changes in one or more of the underlying assumptions could result in a material impact to our consolidated financial statements in any given period. If actual experience differs from expectations, our financial position and results of operations in future periods could be affected.

Mortality rates are based in part on the company's plan experience and actuarial estimates. The inflation assumption is based on an evaluation of external market indicators, while retirement and turnover rates are based primarily on actual plan experience. Health care cost trend rates are developed based on our actual historical claims experience, the near-term outlook and an assessment of likely long-term trends. For our largest plans, discount rates are based upon the construction of a yield curve which is developed based on a subset of high-quality fixed-income investments (those with yields between the 40th and 90th percentiles). The projected cash flows are matched to this yield curve and a present value developed which is then calibrated to develop a single equivalent discount rate. Pension benefits are funded through deposits with trustees that satisfy, at a minimum, the applicable funding regulations. For our largest defined benefit pension plans, expected investment rates of return are based on input from the plans' investment advisers and actuary regarding our expected investment portfolio mix, historical rates of return on those assets, projected future asset class returns, the impact of active management and long-term market conditions and inflation expectations. We believe that the long-term asset allocation on average will approximate the targeted allocation and we regularly review the actual asset allocation to periodically re-balance the investments to the targeted allocation when appropriate. OPEB and the majority of our non-U.S. pension benefits are funded as they become due.

Actuarial gains or losses may result from changes in assumptions or when actual experience is different from that which was expected. Under the applicable standards, those gains and losses are not required to be immediately recognized in our results of operations as income or expense, but instead are deferred as part of AOCI and amortized into our results of operations over future periods.

U.S. retirement plans — Our U.S. defined benefit pension plans comprise 65% of our consolidated defined benefit pension obligations at December 31, 2019. These plans are frozen and no service-related costs are being incurred. Changes in our net obligations are principally attributable to changing discount rates and the performance of plan assets. In October 2017, upon authorization by the Dana Board of Directors, we commenced the process of terminating one of our U.S. defined benefit pension plans. During the second quarter of 2019, payments were made from plan assets to those plan participants that elected to take the lump-sum payout option. In June 2019, we entered into (a) a definitive commitment agreement by and among Dana, Athene Annuity and Life Company (Athene) and State Street Global Advisors, as independent fiduciary to the plan, and (b) a definitive commitment agreement by and among Dana, Companion Life Insurance Company (Companion) and State Street Global Advisors, as independent fiduciary to the plan. Pursuant to the definitive commitment agreements, the plan purchased group annuity contracts that irrevocably transferred to the insurance companies the remaining future pension benefit obligations of the plan. Plan participant's benefits are unchanged as a result of the termination. We contributed \$59 to the plan prior to the purchase of the group annuity contracts. The purchase of group annuity contracts was then funded directly by the assets of the plan in June 2019. By irrevocably transferring the obligations to Athene and Companion, we reduced our unfunded pension obligation by approximately \$165 and recognized a pre-tax pension settlement charge of \$256 in 2019.

For our other pension plans, benefit obligations are valued using discount rates established annually in consultation with our outside actuarial advisers using the same yield curve approach described above. Rising discount rates decrease the present value of future pension obligations — a 25 basis point increase in the discount rate would decrease our U.S. pension liability by about \$20. As indicated above, when establishing the expected long-term rate of return on our U.S. pension plan assets, we consider historical performance and forward looking return estimates reflective of our portfolio mix and investment strategy. Based on the most recent analysis of projected portfolio returns, we concluded that the use of a 5.0% expected return in 2020 is appropriate for our U.S. pension plans. See Note 13 to the consolidated financial statements in Item 8 for information about the investing and allocation objectives related to our U.S. pension plan assets.

We developed a custom mortality table during 2018 using historical mortality experience for our U.S. pension plans. These custom mortality tables are projected generationally from 2015 using the Society of Actuaries (SOA) projection scale, MP-2019, modified to use a 0.75% long-term improvement rate (LTIR) being achieved by 2027. Using the plan-specific mortality tables did not have a material effect on our pension obligations as we have been modifying the SOA tables for several years.

We use a full yield curve approach to estimate the service (where applicable) and interest components of the annual cost of our pension and other postretirement benefit plans. This method estimates interest and service expense using the specific spot rates, from the yield curve, that relate to projected cash flows. We believe this method is a more precise measurement of interest and service costs by improving the correlation between the projected cash flows and the corresponding interest rates. The determination of the projected benefit obligation at year end is unchanged.

At December 31, 2019, we have \$157 of unrecognized losses relating to our U.S. pension plans. Actuarial gains and losses, which are primarily the result of changes in the discount rate and other assumptions and differences between actual and expected asset returns, are deferred in AOCI and amortized to expense following the corridor approach. We use the average remaining service period of active participants unless almost all of the plan's participants are inactive, in which case we use the average remaining life expectancy of inactive participants.

Based on the current funded status of our U.S. plans, we expect to contribute approximately \$1 during 2020.

See Note 13 to our consolidated financial statements in Item 8 for additional discussion of our pension and OPEB obligations.

Acquisitions — From time to time, we make strategic acquisitions that have a material impact on our consolidated results of operations or financial position. We allocate the purchase price of acquired businesses to the identifiable tangible and intangible assets acquired and liabilities assumed in the transaction based upon their estimated fair values as of the acquisition date. We determine the estimated fair values using information available to us and engage independent third-party valuation specialists when necessary. Estimating fair values can be complex and subject to significant business judgment. We believe the assumptions and estimates we have made in the past have been reasonable and appropriate, they are based, in part, on historical experience and information obtained from management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain of the intangible assets we have acquired include, but are not limited to, future expected cash flows from product sales, customer contracts and acquired technologies, and discount rates. The discount rates used to discount expected future cash flows to present value are typically derived from a weighted-average cost of capital analysis and adjusted to reflect inherent risks. Unanticipated events and circumstances may occur that could affect either the accuracy or validity of such assumptions, estimates or actual results. Generally, we have, if necessary, up to one year from the acquisition date to finalize our estimates of acquisition date fair values.

Goodwill and other indefinite-lived intangible assets — Our goodwill and other indefinite-lived intangible assets are tested for impairment annually as of October 31 for all of our reporting units, and more frequently if events or circumstances warrant such a review. We make significant assumptions and estimates about the extent and timing of future cash flows, including revenue growth rates, projected gross margins, discount rates, terminal growth rates, and exit earnings multiples. The cash flows are estimated over a significant future period of time, which makes those estimates and assumptions subject to a high degree of uncertainty. Our utilization of market valuation models requires us to make certain assumptions and estimates regarding the applicability of those models to our assets and businesses. We use our internal forecasts, which we update quarterly, to make our cash flow projections. These forecasts are based on our knowledge of our customers' production forecasts, our assessment of market growth rates, net new business, material and labor cost estimates, cost recovery agreements with customers and our estimate of savings expected from our restructuring activities.

The most likely factors that would significantly impact our forecasts are changes in customer production levels and loss of significant portions of our business. We believe that the assumptions and estimates used in the assessment of the goodwill and other indefinite-lived intangible assets as of October 31, 2019 were reasonable.

Long-lived assets with definite lives — We perform impairment assessments on our property, plant and equipment and our definite-lived intangible assets whenever events and circumstances indicate that the carrying amounts of the assets may not be recoverable. When indications are present, we compare the estimated future undiscounted net cash flows of the operations to which the assets relate to the carrying amounts of such assets. We utilize the cash flow projections discussed above for property, plant and equipment and amortizable intangibles. We group the assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluate the asset group against the undiscounted future cash flows using the life of the primary assets. If the carrying amounts of the long-lived assets are not recoverable from future cash flows and exceed their fair value, an impairment loss is recognized to reduce the carrying amounts of the long-lived assets to their fair value. Fair value is determined based on discounted cash flows, third-party appraisals or other methods that provide appropriate estimates of value. Determining whether a triggering event has occurred, performing the impairment analysis and estimating the fair value of the assets require numerous assumptions and a considerable amount of management judgment.

Investments in affiliates — We had aggregate investments in affiliates of \$182 at December 31, 2019 and \$208 at December 31, 2018. We monitor our investments in affiliates for indicators of other-than-temporary declines in value on an ongoing basis in accordance with GAAP. If we determine that an other-than-temporary decline in value has occurred, we recognize an impairment loss, which is measured as the difference between the recorded carrying value and the fair value of the investment. Fair value is generally determined using the discounted cash flows (an income approach) or guideline public company (a market approach) methods.

Warranty — Costs related to product warranty obligations are estimated and accrued at the time of sale with a charge against cost of sales. Warranty accruals are evaluated and adjusted as appropriate based on occurrences giving rise to potential warranty exposure and associated experience. Warranty accruals and adjustments require significant judgment, including a determination of our involvement in the matter giving rise to the potential warranty issue or claim, our contractual requirements, estimates of units requiring repair and estimates of repair costs. If actual experience differs from expectations, our financial position and results of operations in future periods could be affected.

Contingency reserves — We have numerous other loss exposures, such as product liability and warranty claims and matters involving litigation. Establishing loss reserves for these matters requires the use of estimates and judgment regarding risk of exposure and ultimate liability. Product liability and warranty claims are generally estimated based on historical experience and the estimated costs associated with specific events giving rise to potential field campaigns or recalls. In the case of legal contingencies, estimates are made of the likely outcome of legal proceedings and potential exposure where reasonably determinable based on the information presently known to us. New information and other developments in these matters could materially affect our recorded liabilities.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to fluctuations in foreign currency exchange rates, commodity prices for products we use in our manufacturing and interest rates. To reduce our exposure to these risks, we maintain risk management controls to monitor these risks and take appropriate actions to attempt to mitigate such forms of market risks.

Foreign currency exchange rate risk — Our foreign currency exposures are primarily associated with intercompany and third party sales and purchase transactions, cross-currency intercompany loans and external debt. We use forward contracts to manage our foreign currency exchange rate risk associated with a portion of our forecasted foreign currency-denominated sales and purchase transactions and with certain foreign currency-denominated assets and liabilities. We also use currency swaps, including fixed-to-fixed cross-currency interest rate swaps, to manage foreign currency exchange rate risk associated with our intercompany loans and external debt. Foreign currency exposures are reviewed quarterly, at a minimum, and natural offsets are considered prior to entering into derivative instruments.

Changes in the fair value of derivative instruments treated as cash flow hedges are reported in other comprehensive income (loss) (OCI). Deferred gains and losses are reclassified to earnings in the same period in which the underlying transactions affect earnings. Specifically, with respect to the cross-currency interest rate swap, to the extent we recognize an exchange gain or loss on the underlying external debt, we reclassify an offsetting portion from OCI to earnings in the same period.

Changes in the fair value of derivative instruments not treated as cash flow hedges are recognized in earnings in the period in which those changes occur. Changes in the fair value of derivative instruments associated with product-related transactions are recorded in cost of sales, while those associated with non-product transactions are recorded in other income (expense), net. See Note 16 to our consolidated financial statements in Item 8.

The following table summarizes the sensitivity of the fair value of our derivative instruments, including forward contracts and currency swaps, at December 31, 2019 to a 10% change in foreign exchange rates.

	10% Increase in Rates Gain (Loss)	10% Decrease in Rates Gain (Loss)
<i>Foreign currency rate sensitivity:</i>		
Currency swaps	\$ (132)	\$ 130
Forward contracts	\$ (39)	\$ 47

At December 31, 2019, of the \$1,598 total notional amount of foreign currency derivatives, approximately 68% represents the aggregate of three fixed-to-fixed cross-currency interest rate swaps associated with recorded foreign currency-denominated external debt and certain foreign currency-denominated intercompany loans while the remaining 32% primarily represents forward contracts associated with our forecasted foreign currency-denominated sales and purchase transactions.

To manage our global liquidity objectives, we periodically execute intercompany loans, some of which are foreign currency-denominated. With respect to such intercompany loans, the total notional amount outstanding at December 31, 2019 is approximately \$550. Depending on the specific objective of each intercompany loan arrangement, certain intercompany loans may be hedged while others remain unhedged for strategic reasons. The decision to hedge the loan, to designate the loan itself as a hedge or not to hedge the loan is dependent on management's underlying strategy. Of the approximately \$550 of foreign currency-denominated intercompany loans outstanding at December 31, 2019, approximately two-thirds, or \$315, has been hedged by one of our fixed-to-fixed cross-currency swaps whereby we have protected the income statement from exchange rate risk. Of the remaining one-third of such outstanding intercompany loans, \$37 million has been hedged by foreign currency forwards and the remaining balances have not been hedged. A significant portion of this remaining one-third is deemed to be permanent in nature. The remeasurement of foreign currency-denominated intercompany loans that have been characterized as permanent in nature is recognized as an adjustment to the cumulative translation adjustment component of OCI.

To align our cash requirements with availability by currency, we also periodically issue external debt that is denominated in a currency other than the functional currency of the issuing entity. As of December 31, 2019, we had \$775 of external U.S. dollar debt, issued by a euro-functional entity, all of which has been hedged by our fixed-to-fixed cross-currency interest rate swaps. Such swaps are treated as cash flow hedges whereby the changes in fair value are recorded in OCI to the extent the hedges remain effective.

At December 31, 2018, the total notional amount of our currency derivative portfolio was \$2,104 and included fixed-to-fixed cross-currency interest rate swaps associated with \$775 of external debt. The remaining \$1,329 represents currency swaps and forward contracts associated with certain foreign currency-denominated intercompany loans and forecasted sales and purchase transactions.

Commodity price risk — We do not utilize derivative contracts to manage commodity price risk. Our overall strategy is to pass through commodity risk to our customers in our pricing agreements. A substantial portion of our customer agreements include contractual provisions for the pass-through of commodity price movements. In instances where the risk is not covered contractually, we have generally been able to adjust customer pricing to recover commodity cost increases.

Interest rate risk — Our long-term debt portfolio consists mostly of fixed-rate instruments. On occasion we enter into interest rate swaps to convert fixed-rate debt to floating-rate debt. As described in Note 16 to our consolidated financial statements in Item 8, we entered into a fixed-to-floating interest rate swap during 2015 but terminated that swap prior to the end of 2015. At December 31, 2019, we do not hold any fixed-to-floating interest rate swaps. Our three fixed-to-fixed cross-currency interest rate swaps remain outstanding at December 31, 2019 and act as hedges of the currency risk of certain external and intercompany debt instruments. To partially mitigate our exposure to interest rate fluctuations on our variable rate term loan debt we have entered into interest rate collars with a notional value of \$425 that will mature in December 2021. The interest rate collars were used to lock in a maximum rate if interest rates rise, but allow us to otherwise pay lower market rates, subject to a floor. See Note 15 to our consolidated financial statements in Item 8 for additional information.

The table below indicates interest rate sensitivity on interest expense of our floating rate debt, inclusive of the interest rate collar, based on amounts outstanding as of December 31, 2019.

<i>Change in rate:</i>	Impact on Annual Interest Expense
25 bps decrease	\$ (1)
25 bps increase	\$ 2

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Dana Incorporated

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheet of Dana Incorporated and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive income, of stockholders’ equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes and schedule of valuation and qualifying accounts and reserves for each of the three years in the period ended December 31, 2019 appearing under Item 8 (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s report on internal control over financial reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management’s report on internal control over financial reporting, management has excluded Nordresa Motors, Inc. (Nordresa), Prestolite E-Propulsion Systems (Beijing) Limited (PEPS), Oerlikon Drive Systems (ODS), and SME from its assessment of internal control over financial reporting as of December 31, 2019 because they were acquired by the Company in purchase business combinations during 2019. We have also excluded Nordresa, PEPS, ODS, and SME from our audit of internal control over financial reporting. Nordresa, PEPS, ODS, and SME are subsidiaries whose total assets and total revenues excluded from management’s assessment and our audit of internal control over financial reporting represent approximately

0.1%, 0.7%, 10.7% and 0.2% of total assets, respectively, and approximately 0.0%, 0.1%, 7.3% and 0.2% of total revenues, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2019.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill Impairment Assessment – Off-Highway and Commercial Vehicle Reporting Units

As described in Notes 1 and 4 to the consolidated financial statements, the Company's consolidated goodwill balance was \$493 million as of December 31, 2019, and the goodwill associated with the Off-Highway and Commercial Vehicle reporting units was \$262 million and \$228 million, respectively. Management tests goodwill for impairment annually as of October 31 and more frequently if events occur or circumstances change that would warrant an interim review. Management estimates the fair value of these reporting units using discounted cash flow projections. In determining fair value using discounted cash flow projections, management makes significant assumptions and estimates about the extent and timing of future cash flows, including revenue growth rates, projected gross margins, discount rates, terminal growth rates, and exit earnings multiples.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the Off-Highway and Commercial Vehicle reporting units is a critical audit matter are there was significant judgment by management when developing the fair value measurement of the reporting units. This in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and in evaluating management's significant assumptions, including the revenue growth rates, projected gross margins, discount rates, terminal growth rates, and exit earnings multiples. In addition, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Off-Highway and Commercial Vehicle reporting units. These procedures also included, among others, testing management's process for developing the fair value estimates of the Off-Highway and Commercial Vehicle reporting units, evaluating the appropriateness of management's discounted cash flow projections, testing the completeness, accuracy, and relevance of underlying data used in the discounted cash flow projections, and evaluating the reasonableness of significant assumptions used by management, including the revenue growth rates, projected gross margins, discount rates, terminal growth rates, and exit earnings multiples. Evaluating management's assumptions related to the revenue growth rates and projected gross margins involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting units, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation

of the Company's discounted cash flow projections and certain significant assumptions, including the discount rates, terminal growth rates, and exit earnings multiples.

/s/ PricewaterhouseCoopers LLP

Toledo, Ohio

February 14, 2020

We have served as the Company's auditor since 1916.

Dana Incorporated
Consolidated Statement of Operations
(In millions, except per share amounts)

	2019	2018	2017
Net sales	\$ 8,620	\$ 8,143	\$ 7,209
Costs and expenses			
Cost of sales	7,489	6,986	6,143
Selling, general and administrative expenses	508	499	508
Amortization of intangibles	12	8	11
Restructuring charges, net	29	25	14
Impairment of goodwill and indefinite-lived intangible asset	(6)	(20)	
Gain (loss) on disposal group held for sale		3	(27)
Pension settlement charges	(259)		
Other expense, net	(25)	(29)	(16)
Earnings before interest and income taxes	292	579	490
Loss on extinguishment of debt	(9)		(19)
Interest income	10	11	11
Interest expense	122	96	102
Earnings before income taxes	171	494	380
Income tax expense (benefit)	(32)	78	283
Equity in earnings of affiliates	30	24	19
Net income	233	440	116
Less: Noncontrolling interests net income	13	13	10
Less: Redeemable noncontrolling interests net loss	(6)		(5)
Net income attributable to the parent company	\$ 226	\$ 427	\$ 111
 Net income per share available to common stockholders			
Basic	\$ 1.57	\$ 2.94	\$ 0.72
Diluted	\$ 1.56	\$ 2.91	\$ 0.71
 Weighted-average common shares outstanding			
Basic	144.0	145.0	145.1
Diluted	145.1	146.5	146.9

The accompanying notes are an integral part of the consolidated financial statements.

Dana Incorporated
Consolidated Statement of Comprehensive Income
(In millions)

	2019	2018	2017
Net income	\$ 233	\$ 440	\$ 116
Other comprehensive income (loss), net of tax:			
Currency translation adjustments	8	(63)	(14)
Hedging gains and losses	24	10	(30)
Investment and other gains and losses			2
Defined benefit plans	344	23	(6)
Other comprehensive income (loss)	376	(30)	(48)
Total comprehensive income	609	410	68
Less: Comprehensive income attributable to noncontrolling interests	(9)	(7)	(17)
Less: Comprehensive loss attributable to redeemable noncontrolling interests	1	6	2
Comprehensive income attributable to the parent company	\$ 601	\$ 409	\$ 53

The accompanying notes are an integral part of the consolidated financial statements.

Dana Incorporated
Consolidated Balance Sheet
(In millions, except share and per share amounts)

	2019	2018
Assets		
Current assets		
Cash and cash equivalents	\$ 508	\$ 510
Marketable securities	19	21
Accounts receivable		
Trade, less allowance for doubtful accounts of \$9 in 2019 and 2018	1,103	1,065
Other	202	178
Inventories	1,193	1,031
Other current assets	137	102
Total current assets	3,162	2,907
Goodwill	493	264
Intangibles	240	164
Deferred tax assets	580	445
Other noncurrent assets	120	80
Investments in affiliates	182	208
Operating lease assets	178	
Property, plant and equipment, net	2,265	1,850
Total assets	\$ 7,220	\$ 5,918
 Liabilities and equity		
Current liabilities		
Short-term debt	\$ 14	\$ 8
Current portion of long-term debt	20	20
Accounts payable	1,255	1,217
Accrued payroll and employee benefits	206	186
Taxes on income	46	47
Current portion of operating lease liabilities	42	
Other accrued liabilities	262	269
Total current liabilities	1,845	1,747
Long-term debt, less debt issuance costs of \$28 in 2019 and \$18 in 2018	2,336	1,755
Noncurrent operating lease liabilities	140	
Pension and postretirement obligations	459	561
Other noncurrent liabilities	305	313
Total liabilities	5,085	4,376
Commitments and contingencies (Note 17)		
Redeemable noncontrolling interests	167	100
Parent company stockholders' equity		
Preferred stock, 50,000,000 shares authorized, \$0.01 par value, no shares outstanding	—	—
Common stock, 450,000,000 shares authorized, \$0.01 par value, 143,942,539 and 144,663,403 shares outstanding	2	2
Additional paid-in capital	2,386	2,368
Retained earnings	622	456
Treasury stock, at cost (10,111,191 and 8,342,185 shares)	(150)	(119)
Accumulated other comprehensive loss	(987)	(1,362)
Total parent company stockholders' equity	1,873	1,345
Noncontrolling interests	95	97
Total equity	1,968	1,442
Total liabilities and equity	\$ 7,220	\$ 5,918

The accompanying notes are an integral part of the consolidated financial statements.

Dana Incorporated
Consolidated Statement of Cash Flows
(In millions)

	2019	2018	2017
Operating activities			
Net income	\$ 233	\$ 440	\$ 116
Depreciation	322	260	220
Amortization	17	10	13
Amortization of deferred financing charges	6	4	5
Call premium on debt	7		15
Write-off of deferred financing costs	2		4
Earnings of affiliates, net of dividends received	(9)	(4)	(3)
Stock compensation expense	19	16	23
Deferred income taxes	(137)	(64)	179
Pension expense, net	211	3	(6)
Impairment of goodwill and indefinite-lived intangible asset	6	20	
Gain on sale of subsidiaries			(3)
(Gain) loss on disposal group held for sale		(2)	27
Change in working capital	(17)	(113)	(8)
Change in other noncurrent assets and liabilities	(18)	(12)	(9)
Other, net	(5)	10	(19)
Net cash provided by operating activities	<u>637</u>	<u>568</u>	<u>554</u>
Investing activities			
Purchases of property, plant and equipment	(426)	(325)	(393)
Acquisition of businesses, net of cash acquired	(668)	(153)	(185)
Proceeds from previous acquisition		9	
Purchases of marketable securities	(33)	(37)	(35)
Proceeds from sales of marketable securities	6	15	1
Proceeds from maturities of marketable securities	29	37	27
Proceeds from sale of subsidiaries, net of cash disposed	1	(6)	3
Settlements of undesignated derivatives	(20)		
Other, net	(12)	(2)	(1)
Net cash used in investing activities	<u>(1,123)</u>	<u>(462)</u>	<u>(583)</u>
Financing activities			
Net change in short-term debt	(3)	(21)	(90)
Proceeds from long-term debt	975		676
Repayment of long-term debt	(423)	(13)	(640)
Call premium on debt	(7)		(15)
Deferred financing payments	(20)	(1)	(9)
Dividends paid to common stockholders	(58)	(58)	(35)
Distributions to noncontrolling interests	(19)	(42)	(12)
Sale of interest to noncontrolling shareholder	53		
Contributions from noncontrolling interests	4	25	
Payments to acquire redeemable noncontrolling interests		(43)	
Repurchases of common stock	(25)	(25)	
Other, net	2	(2)	5
Net cash provided by (used in) financing activities	<u>479</u>	<u>(180)</u>	<u>(120)</u>
Net decrease in cash, cash equivalents and restricted cash	<u>(7)</u>	<u>(74)</u>	<u>(149)</u>
Cash, cash equivalents and restricted cash - beginning of period	520	610	716
Effect of exchange rate changes on cash balances	5	(16)	43
Cash, cash equivalents and restricted cash - end of period	<u>\$ 518</u>	<u>\$ 520</u>	<u>\$ 610</u>

The accompanying notes are an integral part of the consolidated financial statements.

Dana Incorporated
Consolidated Statement of Stockholders' Equity
(In millions)

	Parent Company Stockholders'								
	Preferred Stock	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Compre- hensive Loss	Parent Company Stockholders' Equity	Non- controlling Interests	Total Equity
Balance, December 31, 2016	\$ —	\$ 2	\$ 2,327	\$ 195	\$ (83)	\$ (1,284)	\$ 1,157	\$ 85	\$ 1,242
Adoption of ASU 2016-16 tax adjustment, January 1, 2017				(179)			(179)		(179)
Net income				111			111	10	121
Other comprehensive loss						(58)	(58)	7	(51)
Common stock dividends (\$0.24 per share)				(35)			(35)		(35)
Distributions to noncontrolling interests								(12)	(12)
Increase from business combination								12	12
Redeemable noncontrolling interests adjustment to redemption value				(6)			(6)		(6)
Purchase of noncontrolling interests								(1)	(1)
Stock compensation			27				27		27
Stock withheld for employees taxes					(4)		(4)		(4)
Balance, December 31, 2017	—	2	2,354	86	(87)	(1,342)	1,013	101	1,114
Adoption of ASU 2016-01 financial instruments adjustment, January 1, 2018				2		(2)			
Net income				427			427	13	440
Other comprehensive loss						(18)	(18)	(6)	(24)
Common stock dividends (\$0.40 per share)			1	(59)			(58)		(58)
Distributions to noncontrolling interests								(42)	(42)
Purchase of noncontrolling interests			(9)				(9)	9	
Purchase of redeemable noncontrolling interests			2				2		2
Contribution from noncontrolling interest								22	22
Common stock share repurchases					(25)		(25)		(25)
Stock compensation			20				20		20
Stock withheld for employees taxes					(7)		(7)		(7)
Balance, December 31, 2018	—	2	2,368	456	(119)	(1,362)	1,345	97	1,442
Adoption of ASU 2016-02 leases, January 1, 2019				(1)			(1)		(1)
Net income				226			226	13	239
Other comprehensive income						375	375	(4)	371
Common stock dividends (\$0.40 per share)			1	(59)			(58)		(58)
Distributions to noncontrolling interests								(19)	(19)
Increase from business combination								8	8
Common stock share repurchases					(25)		(25)		(25)
Stock compensation			17				17		17
Stock withheld for employees taxes					(6)		(6)		(6)
Balance, December 31, 2019	\$ —	\$ 2	\$ 2,386	\$ 622	\$ (150)	\$ (987)	\$ 1,873	\$ 95	\$ 1,968

The accompanying notes are an integral part of the consolidated financial statements.

Dana Incorporated
Index to Notes to the Consolidated
Financial Statements

	Page
1. Organization and Summary of Significant Accounting Policies	53
2. Acquisitions	58
3. Disposal Groups and Divestitures	64
4. Goodwill and Other Intangible Assets	65
5. Restructuring of Operations	66
6. Inventories	67
7. Supplemental Balance Sheet and Cash Flow Information	68
8. Leases	69
9. Stockholders' Equity	70
10. Redeemable Noncontrolling Interests	72
11. Earnings per Share	73
12. Stock Compensation	73
13. Pension and Postretirement Benefit Plans	75
14. Marketable Securities	82
15. Financing Agreements	82
16. Fair Value Measurements and Derivatives	85
17. Commitments and Contingencies	89
18. Warranty Obligations	89
19. Income Taxes	90
20. Other Expense, Net	94
21. Revenue from Contracts with Customers	94
22. Segments, Geographical Area and Major Customer Information	95
23. Equity Affiliates	98

Notes to the Consolidated Financial Statements
(In millions, except share and per share amounts)

Note 1. Organization and Summary of Significant Accounting Policies

General

Dana Incorporated (Dana) is headquartered in Maumee, Ohio, and was incorporated in Delaware in 2007. As a global provider of high technology driveline (axles, driveshafts and transmissions); sealing and thermal-management products; and motors, power inverters, and control systems for electric vehicles, our customer base includes virtually every major vehicle manufacturer in the global light vehicle, medium/heavy vehicle, and off-highway markets.

The terms "Dana," "we," "our" and "us," when used in this report are references to Dana. These references include the subsidiaries of Dana unless otherwise indicated or the context requires otherwise.

Summary of significant accounting policies

Basis of presentation — Our consolidated financial statements include the accounts of all subsidiaries where we hold a controlling financial interest. All significant intercompany balances and transactions have been eliminated in consolidation. Investments in 20 to 50%-owned affiliates, which are not required to be consolidated, are generally accounted for under the equity method. Equity in earnings of these investments is presented separately in the consolidated statement of operations, net of tax. Investments in less-than-20%-owned companies are generally included in the financial statements at the cost of our investment. Dividends, royalties and fees from these cost basis affiliates are recorded in income when received.

During the fourth quarter of 2019, we reclassified certain expenses previously reported as selling, general and administrative expenses to cost of sales. The reclassification aligns the financial reporting of the recently acquired ODS operations with our classification of similar expenses. The reclassification was retrospectively applied by restating the first, second, third and fourth quarters of 2019. Reference is made to the Quarterly Results disclosure in Item 8 below. The impact on the consolidated financial statements for the prior periods presented was insignificant.

Held for sale — We classify long-lived assets or disposal groups as held for sale in the period: management commits to a plan to sell; the long-lived asset or disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such long-lived assets or disposal groups; an active program to locate a buyer and other actions required to complete the plan to sell have been initiated; the sale is probable within one year; the asset or disposal group is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn. Long-lived assets and disposal groups classified as held for sale are measured at the lower of their carrying amount or fair value less costs to sell.

Discontinued operations — The results of operations of a component or a group of components that either has been disposed of or is classified as held for sale is reported in discontinued operations if the disposal represents a strategic shift that has (or will have) a major effect on operations and financial results.

Estimates — Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (GAAP), which require the use of estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying disclosures. We believe our assumptions and estimates are reasonable and appropriate. However, due to the inherent uncertainties in making estimates, actual results could differ from those estimates.

Fair value measurements — A three-tier fair value hierarchy is used to prioritize the inputs to valuation techniques used to measure fair value. The three levels of inputs are as follows: Level 1 inputs (highest priority) include unadjusted quoted prices in active markets for identical instruments. Level 2 inputs include quoted prices for similar instruments that are observable either directly or indirectly. Level 3 inputs (lowest priority) include unobservable inputs in which there is little or no market data, which require management to develop its own assumptions. Classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The inputs we use in our valuation techniques include market data or assumptions that we believe market participants would use in pricing an asset or liability, including assumptions about risk when appropriate. Our valuation techniques include a combination of observable and unobservable inputs. When available, we use quoted market prices to determine the fair value (market approach). In the absence of active markets for the identical assets or liabilities, such measurements involve developing

assumptions based on market observable data and, in the absence of such data, we consider the amount and timing of estimated future cash flows and assumed discount rates reflecting varying degrees of credit risk that is consistent with what market participants would use in a hypothetical transaction that occurs at the measurement date (income approach). Fair values may not represent actual values of the financial instruments that could be realized as of the balance sheet date or that will be realized in the future.

Cash and cash equivalents — Cash and cash equivalents includes cash on hand, demand deposits and short-term cash investments that are highly liquid in nature and have maturities of three months or less when purchased.

Marketable securities — Our investments in marketable securities reported in the accompanying balance sheet are classified as available for sale and carried at fair value. We recorded unrealized gains and losses in accumulated other comprehensive income (loss) (AOCI) through the end of 2017 but recorded them in net income beginning in 2018 to comply with new accounting guidance. Realized gains and losses are recorded using the specific identification method.

Inventories — Inventories are valued at the lower of cost or net realizable value. Cost is determined using the average or first-in, first-out (FIFO) cost method.

Property, plant and equipment — Property, plant and equipment are recorded at cost. Depreciation is recognized over the estimated useful lives using primarily the straight-line method for financial reporting purposes and accelerated depreciation methods for federal income tax purposes. Useful lives of newly acquired assets are generally twenty to thirty years for buildings and building improvements, five to ten years for machinery and equipment, three to five years for tooling and office equipment and three to ten years for furniture and fixtures. If assets are impaired, their value is reduced via an increase in accumulated depreciation.

Leases — Our global lease portfolio represents leases of real estate, including manufacturing, assembly and office facilities, while the remainder represents leases of personal property, including manufacturing, material handling and IT equipment. We have lease agreements with lease and non-lease components, which are accounted for separately. Leases with an initial term of 12 months or less are not recorded on the balance sheet, and we recognize lease expense for these leases on a straight-line basis over the lease term. Generally, we use our incremental borrowing rate in determining the present value of lease payments, unless there is a rate stated in the lease agreement.

Pre-production costs related to long-term supply arrangements — The costs of tooling used to make products sold under long-term supply arrangements are capitalized as part of property, plant and equipment and amortized over their useful lives if we own the tooling or if we fund the purchase but our customer owns the tooling and grants us the irrevocable right to use the tooling over the contract period. If we have a contractual right to bill our customers, costs incurred in connection with the design and development of tooling are carried as a component of other accounts receivable until invoiced. Design and development costs related to customer products are deferred if we have an agreement to collect such costs from the customer; otherwise, they are expensed when incurred. At December 31, 2019, the machinery and equipment component of property, plant and equipment includes \$66 of our tooling related to long-term supply arrangements. Also at December 31, 2019, trade and other accounts receivable includes \$38 of costs related to tooling that we have a contractual right to collect from our customers.

Goodwill — We test goodwill for impairment annually as of October 31 and more frequently if events occur or circumstances change that would warrant an interim review. Goodwill impairment testing is performed at the reporting unit level, which is the operating segment in the case of our Off-Highway and Commercial Vehicle goodwill. We estimate the fair value of the reporting units using various valuation methodologies, including discounted cash flow projections and multiples of current earnings. In determining fair value using discounted cash flow projections, we make significant assumptions and estimates about the extent and timing of future cash flows, including revenue growth rates, projected gross margins, discount rates, terminal growth rates, and exit earnings multiples. If the estimated fair value of the reporting unit exceeds its carrying value, the goodwill is considered not impaired. If the carrying value of the reporting unit exceeds its estimated fair value, a goodwill impairment charge is recorded for the difference. See Note 4 for more information about goodwill.

Intangible assets — Intangible assets include the value of core technology, trademarks and trade names, customer relationships and intangible assets used in research and development activities. Core technology and customer relationships have definite lives while intangible assets used in research and development activities and substantially all of our trademarks and trade names have indefinite lives. Definite-lived intangible assets are amortized over their useful life using the straight-line method of amortization and are periodically reviewed for impairment indicators. Amortization of core technology is charged to cost of sales. Amortization of trademarks and trade names and customer relationships is charged to amortization of intangibles. Intangible assets used in research and development activities have an indefinite life until completion of the associated research

and development efforts. Upon completion of development, the assets are amortized over their useful life; if the project is abandoned, the assets are written off immediately. Indefinite-lived intangible assets are tested for impairment annually and more frequently if impairment indicators exist. See Note 4 for more information about intangible assets.

Investments in affiliates — Investments in affiliates include investments accounted for under the equity and cost methods. We monitor our investments in affiliates for indicators of other-than-temporary declines in value on an ongoing basis in accordance with GAAP. Indicators include, but are not limited to, current economic and market conditions, operating performance of the affiliate, including current earnings trends and undiscounted cash flows, and other affiliate-specific information. If we determine that an other-than-temporary decline in value has occurred, we recognize an impairment loss, which is measured as the excess of the investment's recorded carrying value over its fair value. The fair value determination, particularly for investments in privately-held companies, requires significant judgment to determine appropriate estimates and assumptions. Changes in these estimates and assumptions could affect the calculation of the fair value of the investments and determination of whether any identified impairment is other than temporary. See Note 23 for further information about our investment in affiliates.

Tangible asset impairments — We review the carrying value of amortizable long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the assets to the undiscounted future net cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds their fair value. Assets to be disposed of are reported at the lower of their carrying amount or fair value less costs to sell and are no longer depreciated.

Other long-lived assets and liabilities — We discount our workers' compensation obligations by applying blended risk-free rates that are appropriate for the duration of the projected cash flows. The use of risk-free rates is considered appropriate given that other risks affecting the volume and timing of payments have been considered in developing the probability-weighted projected cash flows. The blended risk-free rates are revised annually to consider incremental cash flow projections.

Financial instruments — The carrying values of cash and cash equivalents, trade receivables and short-term borrowings approximate fair value. Notes receivable are carried at fair value, which considers the contractual call or selling price, if applicable. Borrowings under our credit facilities are carried at historical cost and adjusted for principal payments and foreign currency fluctuations.

Derivatives — Foreign currency forward contracts and currency swaps are carried at fair value. We enter into these contracts to manage our exposure to the impact of currency fluctuations on certain foreign currency-denominated assets and liabilities and on a portion of our forecasted purchase and sale transactions. On occasion, we also enter into net investment hedges to protect the translated U.S. dollar value of our investment in certain foreign subsidiaries. We also periodically enter into fixed-to-fixed cross-currency swaps on foreign currency-denominated external or intercompany debt instruments to reduce our exposure to foreign currency exchange rate risk. Such fixed-to-fixed cross-currency swaps are designated as cash flow hedges. We do not use derivatives for trading or speculative purposes and we do not hedge all of our exposures.

For derivative instruments designated as cash flow hedges, at the cash flow hedge's inception and on an ongoing basis, the company formally assesses whether the cash flow hedging instruments have been highly effective in offsetting changes in the cash flows of the hedged transactions and whether those cash flow hedging instruments may be expected to remain highly effective in future periods. Changes in the fair value of currency-related contracts treated as cash flow hedges are deferred and included as a component of other comprehensive income (loss) (OCI). For our fixed-to-fixed cross-currency swaps, a review of critical terms is performed each period to establish that an assumption of effectiveness remains appropriate. Deferred gains and losses are reclassified to earnings in the same periods in which the underlying transactions affect earnings.

Changes in the fair value of contracts not treated as cash flow hedges or as net investment hedges are recognized in other expense, net in the period in which those changes occur. Changes in the fair value of contracts treated as net investment hedges are recorded in the cumulative translation adjustment (CTA) component of OCI. Amounts recorded in CTA are deferred until such time as the investment in the associated subsidiary is substantially liquidated.

We may also use fixed-to-floating or floating-to-fixed interest rate swaps or other similar derivatives to manage exposure to fluctuations in interest rates and to adjust the mix of our fixed-rate and variable-rate debt. As a fair value hedge of the underlying debt, changes in the fair values of the swap and the underlying debt are recorded in interest expense. No such fixed-to-floating or floating-to-fixed swaps were outstanding at December 31, 2019. See Note 16 for additional information.

Cash flows associated with designated derivatives are classified within the same category as the item being hedged on the consolidated statement of cash flows. Cash flows associated with undesignated derivatives are included in the investing category on the consolidated statement of cash flows.

Warranty — Costs related to product warranty obligations are estimated and accrued at the time of sale with a charge against cost of sales. Warranty accruals are evaluated and adjusted as appropriate based on occurrences giving rise to potential warranty exposure and associated experience. Warranty accruals and adjustments require significant judgment, including a determination of our involvement in the matter giving rise to the potential warranty issue or claim, our contractual requirements, estimates of units requiring repair and estimates of repair costs.

Environmental compliance and remediation — Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Expenditures that relate to existing conditions caused by past operations that do not contribute to our current or future revenue generation are expensed. Liabilities are recorded when environmental assessments and/or remedial efforts are probable and the costs can be reasonably estimated. We consider the most probable method of remediation, current laws and regulations and existing technology in determining our environmental liabilities.

Pension and other postretirement defined benefits — Net pension and postretirement benefits expenses and the related liabilities are determined on an actuarial basis. These plan expenses and obligations are dependent on management's assumptions developed in consultation with our actuaries. We review these actuarial assumptions at least annually and make modifications when appropriate. With the input of independent actuaries and other relevant sources, we believe that the assumptions used are reasonable; however, changes in these assumptions, or experience different from that assumed, could impact our financial position, results of operations or cash flows.

Postemployment benefits — Costs to provide postemployment benefits to employees are accounted for on an accrual basis. Obligations that do not accumulate or vest are recorded when payment is probable and the amount can be reasonably estimated. For those obligations that accumulate or vest and the amount can be reasonably estimated, expense and the related liability are recorded as service is rendered.

Equity-based compensation — We measure compensation cost arising from the grant of share-based awards to employees at fair value. We recognize such costs in income over the period during which the requisite service is provided, usually the vesting period. The grant date fair value is estimated using valuation techniques that require the input of management estimates and assumptions.

Revenue recognition — Sales are recognized when products are shipped and risk of loss has transferred to the customer. We accrue for warranty costs, sales returns and other allowances based on experience and other relevant factors when sales are recognized. Adjustments are made as new information becomes available. Shipping and handling fees billed to customers are included in sales, while costs of shipping and handling are included in cost of sales. Taxes collected from customers are excluded from revenues and credited directly to obligations to the appropriate governmental agencies. See Note 21 for additional information.

Foreign currency translation — The financial statements of subsidiaries and equity affiliates outside the U.S. located in non-highly inflationary economies are measured using the currency of the primary economic environment in which they operate as the functional currency, which typically is the local currency. Transaction gains and losses resulting from translating assets and liabilities of these entities into the functional currency are included in other expense, net or in equity in earnings of affiliates. When translating into U.S. dollars, income and expense items are translated at average monthly rates of exchange, while assets and liabilities are translated at the rates of exchange at the balance sheet date. Translation adjustments resulting from translating the functional currency into U.S. dollars are deferred and included as a component of AOCI in stockholders' equity. For operations whose functional currency is the U.S. dollar, nonmonetary assets are translated into U.S. dollars at historical exchange rates and monetary assets are translated at current exchange rates.

Effective July 1, 2018, we accounted for Argentina as a highly inflationary economy, as the three-year cumulative inflation rate exceeded 100%. As such, beginning July 1, 2018 we began to remeasure the financial statements of our Argentine subsidiaries as if their functional currency was the U.S. dollar.

Income taxes — In the ordinary course of business there is inherent uncertainty in quantifying our income tax positions. We assess our income tax positions and record tax assets or liabilities for all years subject to examination based upon management's evaluation of the facts and circumstances and information available at the reporting dates. For those tax positions where it is more likely than not that a tax benefit will be sustained, we have recorded the largest amount of tax benefit with a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of

all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements. Where applicable, the related interest cost has also been recognized as a component of the income tax provision.

Research and development — Research and development costs include expenditures for research activities relating to product development and improvement. Salaries, fringes and occupancy costs, including building, utility and overhead costs, comprise the vast majority of these expenses and are expensed as incurred. Research and development expenses were \$112, \$103 and \$102 in 2019, 2018 and 2017.

Recently adopted accounting pronouncements

On January 1, 2019, we adopted *Accounting Standards Update (ASU) 2016-02, Leases (Topic 842)*, using the modified retrospective approach and an application date of January 1, 2019. Prior period amounts have not been adjusted and continue to be reflected in accordance with our historical accounting. This transition method resulted in the recognition of a right-of-use asset and a lease liability for virtually all leases at the application date with a cumulative-effect adjustment to retained earnings.

We elected the package of practical expedients, which among other things, allowed us to carry forward the historical lease classification. We did not elect the practical expedient that allowed for hindsight to determine the lease term of existing leases. We separated the lease components from the non-lease components of each lease arrangement and, therefore, did not elect the practical expedient that would enable us to not separate them.

During the fourth quarter of 2019 we adopted *ASU 2017-04, Goodwill – Simplifying the Test for Goodwill Impairment*, guidance which simplifies how an entity is required to test goodwill for impairment by eliminating Step 2 of the goodwill impairment test. The new guidance quantifies goodwill impairment as the amount by which the carrying amount of a reporting unit, including goodwill, exceeds its fair value, with the impairment loss limited to the total amount of goodwill allocated to that reporting unit. We performed our annual goodwill impairment tests as of October 31, 2019 in accordance with ASU 2017-04. See Note 4 for more information about goodwill and the results of our annual impairment tests.

We also adopted the following standard during 2019, which did not have a material impact on our financial statements or financial statement disclosures:

	Standard	Effective Date
2017-11	Earnings Per Share, Distinguishing Liabilities from Equity, Derivatives and Hedging – (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception	January 1, 2019

Recently issued accounting pronouncements

In December 2019, the FASB issued *ASU 2019-12, Income Taxes – Simplifying the Accounting for Income Taxes*. This guidance is intended to simplify various aspects of income tax accounting including the elimination of certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The new guidance also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. This guidance becomes effective January 1, 2021 and early adoption is permitted. Adoption of this guidance requires certain changes to primarily be made prospectively, with some changes to be made retrospectively. We are currently assessing the impact of this guidance on our consolidated financial statements.

In August 2018, the FASB issued *ASU 2018-15, Intangibles – Goodwill and Other – Internal-Use Software, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This guidance allows for capitalization of implementation costs associated with certain cloud computing arrangements. This guidance becomes effective January 1, 2020 and early adoption is permitted. The guidance is to be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. We do not expect the adoption of this guidance to impact our consolidated financial statements.

In August 2018, the FASB issued *ASU 2018-14, Compensation – Retirement Benefits – Defined Benefit Plans – General, Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*. The guidance eliminated certain disclosures about defined benefit plans, added new disclosures, and clarified other requirements. This guidance becomes

effective January 1, 2020 and early adoption is permitted. There were no changes to interim disclosure requirements. Adoption of this guidance will not have a material effect on our annual financial statement disclosures.

In August 2018, the FASB issued *ASU 2018-13, Fair Value Measurement, Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. The guidance removed or modified some disclosures while others were added. The removal and amendment of certain disclosures can be adopted immediately with retrospective application. The additional disclosure guidance becomes effective January 1, 2020. Adoption of this guidance will not have a material effect on our financial statement disclosures.

In June 2016, the FASB issued *ASU 2016-13, Credit Losses – Measurement of Credit Losses on Financial Instruments*, new guidance for the accounting for credit losses on certain financial instruments. This guidance introduces a new approach to estimating credit losses on certain types of financial instruments and modifies the impairment model for available-for-sale debt securities. This guidance, which becomes effective January 1, 2020, will not have a material impact on our consolidated financial statements.

Note 2. Acquisitions

Nordresa — On August 26, 2019, we acquired a 100% ownership interest in Nordresa Motors, Inc. (Nordresa) for consideration of \$12, using cash on hand. Nordresa is a prominent integration and application engineering expert for the development and commercialization of electric powertrains for commercial vehicles. The investment further enhances Dana's electrification capabilities by combining its complete portfolio of motors, inverters, chargers, gearboxes, and thermal-management products with Nordresa's proprietary battery-management system, electric powertrain controls and integration expertise to deliver complete electric powertrain systems. The results of operations of the business are reported within our Commercial Vehicle operating segment. The pro forma effects of this acquisition would not materially impact our reported results for any period presented, and as a result no pro forma financial information is presented.

Hydro-Québec Relationship — On July 29, 2019, we broadened our relationship with Hydro-Québec, with Hydro-Québec acquiring an indirect 45% redeemable noncontrolling interest in S.M.E. S.p.A. (SME) and increasing its existing indirect 22.5% noncontrolling interest in Prestolite E-Propulsion Systems (Beijing) Limited (PEPS) to 45%. We received \$65 at closing, consisting of \$53 of cash and a note receivable of \$12. The note is payable in five years and bears annual interest of 5%. Dana will continue to consolidate SME and PEPS as the governing documents continue to provide Dana with a controlling financial interest in these subsidiaries. See Note 10 for additional information. See below for a discussion of Dana's acquisitions of PEPS, SME and TM4.

Prestolite E-Propulsion Systems (Beijing) Limited — On June 6, 2019, we acquired Prestolite Electric Beijing Limited's (PEBL) 50% ownership interest in PEPS. PEPS manufactures and distributes electric mobility solutions, including electric motors, inverters, and generators for commercial vehicles and heavy machinery. PEPS has a state-of-the-art facility in China, enabling us to expand motor and inverter manufacturing capabilities in the world's largest electric-mobility market. The acquisition of PEBL's interest in PEPS, along with our existing ownership interest in PEPS through our TM4 subsidiary, provides us with a 100% ownership interest and a controlling financial interest in PEPS. We recognized a \$2 gain to other expense, net on the required remeasurement of our previously held equity method investment in PEPS to fair value. See Hydro-Québec relationship discussion above for details of the subsequent change in our ownership interest in PEPS.

We paid \$50 at closing using cash on hand. The purchase consideration and related provisional allocation to the acquisition date fair values of the assets acquired and liabilities assumed are presented in the following table:

Purchase consideration paid at closing	\$ 50
Fair value of previously held equity method investment	45
Total purchase consideration	<u>\$ 95</u>
Cash and cash equivalents	\$ 2
Accounts receivable - Trade	17
Inventories	9
Goodwill	63
Intangibles	10
Property, plant and equipment	2
Accounts payable	(4)
Other accrued liabilities	(3)
Other noncurrent liabilities	(1)
Total purchase consideration allocation	<u>\$ 95</u>

The fair value of the assets acquired and liabilities assumed, as well as the fair value of our previously held equity method investment, are provisional and could be revised as a result of additional information obtained regarding indemnified matters and liabilities assumed and revisions of provisional estimates of fair values, including but not limited to, the completion of independent appraisals and valuations related to inventories, intangibles and property, plant and equipment.

Goodwill recognized in this transaction is primarily attributable to synergies expected to arise after the acquisition and the assembled workforce and is not deductible for tax purposes. We used a combination of the discounted cash flow method, an income approach, and the guideline public company method, a market approach, to value our previously held equity method investment in PEPS. The fair value assigned to intangibles includes \$10 allocated to customer relationships. We used the multi-period excess earnings method, an income approach, to value customer relationships. The customer relationships intangible asset is being amortized on a straight-line basis over seven years.

The results of operations of the business are reported in our Commercial Vehicle operating segment from the date of acquisition. The pro forma effects of this acquisition would not materially impact our reported results for any period presented, and as a result no pro forma financial information is presented. PEPS had an insignificant impact on our consolidated results of operations during 2019.

Oerlikon Drive Systems — On February 28, 2019, we acquired a 100% ownership interest in the Oerlikon Drive Systems (ODS) segment of the Oerlikon Group. ODS is a global manufacturer of high-precision gears, planetary hub drives for wheeled and tracked vehicles, and products, controls, and software that support vehicle electrification across the mobility industry. The acquisition of ODS is expected to deliver significant long-term value by accelerating our commitment to vehicle electrification and strengthening the technology portfolio for each of our end markets while further expanding and balancing the manufacturing presence of our off-highway business in key geographical markets.

We paid \$626 at closing which was funded primarily through debt proceeds. See Note 15 for additional information. The purchase consideration and related allocation to the acquisition date fair values of the assets acquired and liabilities assumed are presented in the following table:

Purchase consideration paid at closing	\$	626
Less purchase consideration to be recovered for indemnified matters		(11)
Total purchase consideration	<u>\$</u>	<u>615</u>
Cash and cash equivalents	\$	76
Accounts receivable - Trade		150
Accounts receivable - Other		15
Inventories		190
Other current assets		16
Goodwill		92
Intangibles		58
Deferred tax assets		27
Other noncurrent assets		1
Investments in affiliates		7
Operating lease assets		4
Property, plant and equipment		333
Current portion of long-term debt		(2)
Accounts payable		(151)
Accrued payroll and employee benefits		(37)
Current portion of operating lease liabilities		(1)
Taxes on income		(5)
Other accrued liabilities		(61)
Long-term debt		(8)
Pension and postretirement obligations		(49)
Noncurrent operating lease liabilities		(2)
Other noncurrent liabilities		(30)
Noncontrolling interests		(8)
Total purchase consideration allocation	<u>\$</u>	<u>615</u>

The valuation of current and deferred income tax assets and liabilities and certain non-income tax liabilities are provisional and subject to change as these amounts are finalized in the first quarter of 2020. Goodwill recognized in this transaction is primarily attributable to synergies expected to arise after the acquisition and the assembled workforce and is not deductible for tax purposes. The fair values assigned to intangibles includes \$11 allocated to developed technology, \$13 allocated to trademarks and trade names and \$34 allocated to customer relationships. Various valuation techniques were used to determine the fair value of the intangible assets, with the primary techniques being forms of the income approach, specifically, the relief-from-royalty and excess earnings valuation methods, which use significant unobservable inputs, or Level 3 inputs, as defined by the fair value hierarchy. Under these valuation approaches, Dana is required to make estimates and assumptions about sales, operating margins, growth rates, customer attrition rates, royalty rates and discount rates based on anticipated future cash flows and marketplace data. We used a replacement cost method to value fixed assets. The developed technology, trademarks and trade names and customer relationship intangible assets are being amortized on a straight-line basis over seven, ten and twelve years, respectively. Property, plant and equipment is being depreciated on a straight-line basis over useful lives ranging from three to twenty-five years.

The results of operations of the business are primarily reported in our Off-Highway and Commercial Vehicle operating segments. Transaction related expenses associated with completion of the acquisition totaling \$13 were charged to other expense, net. During 2019, the business contributed sales of \$630.

The following unaudited pro forma information has been prepared as if the ODS acquisition and the related debt financing had occurred on January 1, 2018.

	<u>2019</u>	<u>2018</u>
Net sales	\$ 8,765	\$ 9,013
Net income	\$ 273	\$ 425

The unaudited pro forma results include adjustments primarily related to purchase accounting, interest expense related to the debt proceeds used in connection with the acquisition of ODS, and non-recurring strategic transaction expenses. The

unaudited pro forma financial information is not indicative of the operational results that would have been obtained had the transactions actually occurred as of that date, nor is it necessarily indicative of Dana's future operational results.

SME — On January 11, 2019, we acquired a 100% ownership interest in SME. SME designs, engineers, and manufactures low-voltage AC induction and synchronous reluctance motors, inverters, and controls for a wide range of off-highway electric vehicle applications, including material handling, agriculture, construction, and automated-guided vehicles. The addition of SME's low-voltage motors and inverters, which are primarily designed to meet the evolution of electrification in off-highway equipment, significantly expands Dana's electrified product portfolio. See Hydro-Québec relationship discussion above for details of the subsequent change in our ownership interest in SME.

We paid \$88 at closing, consisting of \$62 in cash on hand and a note payable of \$26 which allows for net settlement of potential contingencies as defined in the purchase agreement. The note is payable in five years and bears annual interest of 5%. The purchase consideration and the related allocation to the acquisition date fair values of the assets acquired and liabilities assumed are presented in the following table:

Total purchase consideration	<u>\$</u>	<u>88</u>
Accounts receivable - Trade	\$	4
Accounts receivable - Other		1
Inventories		8
Goodwill		68
Intangibles		24
Property, plant and equipment		5
Short-term debt		(8)
Accounts payable		(6)
Accrued payroll and employee benefits		(1)
Other accrued liabilities		(1)
Other noncurrent liabilities		(6)
Total purchase consideration allocation	<u>\$</u>	<u>88</u>

Goodwill recognized in this transaction is primarily attributable to synergies expected to arise after the acquisition and the assembled workforce and is not deductible for tax purposes. The fair values assigned to intangibles include \$15 allocated to developed technology and \$9 allocated to customer relationships. We used the relief from royalty method, an income approach, to value developed technology. We used the multi-period excess earnings method, an income approach, to value customer relationships. We used a replacement cost method to value fixed assets. The developed technology and customer relationship intangible assets are being amortized on a straight-line basis over twelve and ten years, respectively, and property, plant and equipment is being depreciated on a straight-line basis over useful lives ranging from one to twenty years.

The results of operations of the business are reported in our Off-Highway operating segment from the date of acquisition. The pro forma effects of this acquisition would not materially impact our reported results for any period presented, and as a result no pro forma financial information is presented. During 2019, the business contributed sales of \$21.

TM4 — On June 22, 2018, we acquired a 55% ownership interest in TM4 Inc. (TM4) from Hydro-Québec. TM4 designs and manufactures motors, power inverters, and control systems for electric vehicles, offering a complementary portfolio to Dana's electric gearboxes and thermal-management technologies for batteries, motors, and inverters. The transaction establishes Dana as the only supplier with full e-Drive design, engineering, and manufacturing capabilities – offering electro-mechanical propulsion solutions to each of its end markets. The transaction further strengthens Dana's position in China, the world's fastest-growing market for electric vehicles. The terms of the agreement provide Hydro-Québec with the right to put all, and not less than all, of its shares in TM4 to Dana at fair value any time after June 22, 2021, see Note 10 for additional information. TM4 owns a 50% interest in PEPS, a joint venture in China with PEBL, which offers electric mobility solutions throughout China and Asia. See discussion of Dana's subsequent acquisition of PEBL's 50% interest in PEPS above.

We paid \$125 at closing, using cash on hand. The purchase consideration and the related allocation to the acquisition date fair values of the assets acquired and liabilities assumed are presented in the following table:

Total purchase consideration	<u>\$</u> <u>125</u>
Cash and cash equivalents	\$ 3
Accounts receivable - Trade	3
Accounts receivable - Other	1
Inventories	4
Goodwill	148
Intangibles	24
Investment in affiliates	49
Property, plant and equipment	5
Accounts payable	(2)
Accrued payroll and employee benefits	(1)
Other accrued liabilities	(7)
Redeemable noncontrolling interest	(102)
Total purchase consideration allocation	<u>\$</u> <u>125</u>

Goodwill recognized in this transaction is primarily attributable to synergies expected to arise after the acquisition and the assembled workforce and is not deductible for tax purposes. The fair values assigned to intangibles include \$14 allocated to developed technology and \$10 allocated to trademarks and trade names. We used the relief from royalty method, an income approach, to value developed technology and the trademarks and trade names. We used a replacement cost method to value fixed assets. We used a combination of the discounted cash flow, an income approach, and the guideline public company method, a market approach, to value the equity method investment in PEPS. The developed technology intangible assets are being amortized on a straight-line basis over ten years, and property, plant and equipment is being depreciated on a straight-line basis over useful lives ranging from five to six years. The trademarks and trade names are considered indefinite-lived intangible assets.

Dana is consolidating TM4 as the governing documents provide Dana with a controlling financial interest. The results of operations of the business are reported in our Commercial Vehicle operating segment from the date of acquisition. Transaction related expenses associated with completion of the acquisition totaling \$5 were charged to other expense, net in 2018. The pro forma effects of this acquisition would not materially impact our reported results for any period presented, and as a result no pro forma financial statements are presented. During 2018, the business contributed sales of \$11.

USM – Warren — On March 1, 2017, we acquired certain assets and liabilities relating to the Warren, Michigan production unit of U.S. Manufacturing Corporation (USM). The production unit acquired is in the business of manufacturing axle housings, extruded tubular products and machined components for the automotive industry. The acquisition will increase Dana's revenue from light and commercial vehicle manufacturers and will vertically integrate a significant element of Dana's supply chain. It also provides Dana with new lightweight product and process technologies.

USM contributed certain assets and liabilities relating to its Warren, Michigan production unit to Warren Manufacturing LLC (USM – Warren), a newly created legal entity, and Dana acquired all of the company units of USM – Warren. The company units were acquired by Dana free and clear of any liens. We paid \$104 at closing, including \$25 to effectively settle trade payable obligations originating from product purchases Dana made from USM prior to the acquisition, and received \$1 in the third quarter of 2017 for purchase price adjustments determined under the terms of the agreement. The acquisition has been accounted for as a business combination. The purchase consideration and the related allocation to the acquisition date fair values of the assets acquired and liabilities assumed are presented in the following table:

Total purchase consideration	<u>\$</u> <u>78</u>
Accounts receivable - Trade	\$ 17
Accounts receivable - Other	3
Inventories	9
Goodwill	3
Intangibles	33
Property, plant and equipment	50
Accounts payable	(34)
Accrued payroll and employee benefits	(2)
Other accrued liabilities	(1)
Total purchase consideration allocation	<u>\$</u> <u>78</u>

Goodwill recognized in this transaction is primarily attributable to synergies expected to arise after the acquisition and the assembled workforce and is deductible for tax purposes. Intangibles includes \$30 allocated to customer relationships and \$3 allocated to developed technology. We used the relief from royalty method, an income approach, to value developed technology. We used the multi-period excess earnings method, an income approach, to value customer relationships. We used a replacement cost method to value fixed assets. The developed technology and customer relationship intangible assets are being amortized on a straight-line basis over eighteen and eleven years, respectively, and property, plant and equipment is being depreciated on a straight-line basis over useful lives ranging from one to seventeen years.

The results of operations of the business are reported in our Light Vehicle operating segment from the date of acquisition. We incurred transaction related expenses to complete the acquisition in 2017 totaling \$5, which were charged to other expense, net. The pro forma effects of this acquisition would not materially impact our reported results for any period presented, and as a result no pro forma financial statements are presented. During 2017, the business contributed sales of \$96.

BFP and BPT — On February 1, 2017, we acquired 80% ownership interests in Brevini Fluid Power S.p.A. (BFP) and Brevini Power Transmission S.p.A. (BPT) from Brevini Group S.p.A. (Brevini). The acquisition expands our Off-Highway operating segment product portfolio to include technologies for tracked vehicles, doubling our addressable market for off-highway driveline systems and establishing Dana as the only off-highway solutions provider that can manage the power to both move the equipment and perform its critical work functions. This acquisition also brings a platform of technologies that can be leveraged in our light and commercial-vehicle end markets, helping to accelerate our hybridization and electrification initiatives.

We paid \$181 at closing, using cash on hand, and refinanced a significant portion of the debt assumed in the transaction during the first half of 2017. In December 2017, a purchase price reduction of \$9 was agreed under the sale and purchase agreement provisions for determination of the net indebtedness and net working capital levels of BFP and BPT as of the closing date. The terms of the agreement provided Dana the right to call half of Brevini's noncontrolling interests in BFP and BPT, and Brevini the right to put half of its noncontrolling interests in BFP and BPT to Dana, assuming Dana did not exercise its call right, after the 2017 BFP and BPT financial statements had been approved by the board of directors. Further, Dana had the right to call Brevini's remaining noncontrolling interests in BFP and BPT, and Brevini the right to put its remaining noncontrolling interests in BFP and BPT to Dana, assuming Dana does not exercise its call right, after the 2019 BFP and BPT financial statements had been approved by the board of directors. The call and put prices were based on the amount Dana paid to acquire its initial 80% interest in BFP and BPT subject to adjustment based on the actual EBITDA and free cash flows, as defined in the agreement, of BFP and BPT. In connection with the acquisition of BFP and BPT, Dana agreed to purchase certain real estate being leased by BPT from a Brevini affiliate for €25. Completion of the real estate purchase and receipt of the purchase price adjustment occurred in the second quarter of 2018 with a net cash payment of \$20. The purchase consideration and the related allocation to the acquisition date fair values of the assets acquired and liabilities assumed are presented in the following table:

Total purchase consideration	<u>\$</u> <u>201</u>
Cash and cash equivalents	\$ 75
Accounts receivable - Trade	78
Accounts receivable - Other	18
Inventories	134
Other current assets	9
Goodwill	20
Intangibles	41
Deferred tax assets	3
Other noncurrent assets	4
Property, plant and equipment	174
Notes payable, including current portion of long-term debt	(130)
Accounts payable	(51)
Accrued payroll and employee benefits	(14)
Taxes on income	(1)
Other accrued liabilities	(19)
Long-term debt	(51)
Pension and postretirement obligations	(11)
Other noncurrent liabilities	(22)
Redeemable noncontrolling interest	(44)
Noncontrolling interests	(12)
Total purchase consideration allocation	<u>\$</u> <u>201</u>

Goodwill recognized in this transaction is primarily attributable to synergies expected to arise after the acquisition and the assembled workforce and is not deductible for tax purposes. Intangibles includes \$29 allocated to customer relationships and \$12 allocated to trademarks and trade names. We used the multi-period excess earnings method, an income approach, to value the customer relationships. We used the relief from royalty method, an income approach, to value trademarks and trade names. We used a replacement cost method to value fixed assets. We used a discounted cash flow approach to value the redeemable noncontrolling interests, inclusive of the put and call provisions. We used both discounted cash flow and cost approaches to value the noncontrolling interests. The customer relationships and trademarks and trade names intangible assets are being amortized on a straight-line basis over seventeen years, and property, plant and equipment is being depreciated on a straight-line basis over useful lives ranging from three to thirty years.

The results of operations of the businesses are reported in our Off-Highway operating segment from the date of acquisition. Transaction related expenses in 2017 associated with completion of the acquisition totaling \$7 were charged to other expense, net. The pro forma effects of this acquisition would not materially impact our reported results for any period presented, and as a result no pro forma financial statements are presented. During 2017, the businesses contributed sales of \$401.

On August 8, 2018, we entered into an agreement to acquire Interfind S.p.A.'s, formerly Brevini Group S.p.A., remaining 20% ownership interests in BFP and BPT and to settle all claims between the parties. We paid \$43 to acquire Interfind S.p.A.'s remaining ownership interests and received \$10 in settlement of all pending and future claims. See Note 10 for additional information.

Note 3. Disposal Groups and Divestitures

Disposal group — In December 2017, we entered into an agreement to divest our Brazil suspension components business (the disposal group) for no consideration to an unaffiliated company. The results of operations of the Brazil suspension components business are reported within our Commercial Vehicle operating segment. To effectuate the sale, Dana was obligated to contribute \$10 of additional cash to the business prior to closing. We classified the disposal group as held for sale at December 31, 2017, recognizing a \$27 loss to adjust the carrying value of the net assets to fair value and to recognize the liability for the additional cash required to be contributed to the business prior to closing. During the first quarter of 2018, we made the required cash contribution to the disposal group. After being unable to complete the transaction with the counterparty to the December 2017 agreement, we entered into an agreement with another third party in June 2018. The transaction with the new counterparty closed in July 2018 and we received cash proceeds of \$2. We reversed \$3 of the previously recognized \$27 pre-tax loss, inclusive of the proceeds received in July 2018, during the second quarter of 2018.

Note 4. Goodwill and Other Intangible Assets

Goodwill —The increase in the carrying amount of goodwill in 2019 was due to the acquisitions of Nordresa, PEPS, ODS and SME and currency fluctuation. As a result of our annual goodwill impairment test performed in the fourth quarter of 2019, we concluded that the goodwill resulting from the acquisition of Magnum Gaskets in 2016 was unrecoverable. Accordingly, a full impairment charge of \$6 was recorded for the year ended December 31, 2019. The estimated fair value of our Off-Highway and Commercial Vehicle reporting units were greater than their carrying values at October 31, 2019. The change in the carrying amount of goodwill in 2018 was due to the acquisition of a 55% interest in TM4 and currency fluctuation. See Note 2 for additional information on recent acquisitions.

Changes in the carrying amount of goodwill by segment —

	Light Vehicle	Commercial Vehicle	Off-Highway	Power Technologies	Total
Balance, December 31, 2017	\$ 3	\$ 8	\$ 110	\$ 6	\$ 127
Acquisitions		148			148
Currency impact		(6)	(5)		(11)
Balance, December 31, 2018	3	150	105	6	264
Acquisition		74	160		234
Impairment				(6)	(6)
Currency impact		4	(3)		1
Balance, December 31, 2019	<u>\$ 3</u>	<u>\$ 228</u>	<u>\$ 262</u>	<u>\$ —</u>	<u>\$ 493</u>

Non-amortizable intangible assets — Our non-amortizable intangible assets include a portion of our trademarks and trade names. Non-amortizable trademarks and trade names consist of the Dana[®], Spicer[®] and TM4[®] trademarks and trade names utilized in our Commercial Vehicle and Off-Highway segments. We value trademarks and trade names using a relief from royalty method which is based on revenue streams. No impairment was recorded during the two years ended December 31, 2019 in connection with the required annual assessment for trademarks and trade names.

During the third quarter of 2012, we entered a strategic alliance with Fallbrook Technologies Inc. (Fallbrook). The transaction with Fallbrook was accounted for as a business combination and the original purchase price allocation included \$20 of intangible assets used in research and development activities, which had been classified as indefinite-lived. Since the third quarter of 2012, we had been working with several customers to commercialize the continuously variable planetary (CVP) technology primarily in combustion engine applications. During the second quarter of 2018 key customers notified us of their intention to redirect their development efforts to electrification and cease further development efforts of the CVP technology in combustion engine applications. We determined that it was more likely than not that the fair value of the related intangible assets was less than their carrying amount. We used the multi-period excess earnings method, an income approach, to fair value the assets used in research and development activities. Given the lack of adequate identifiable future revenue streams, it was determined that the \$20 of intangible assets used in research and development activities was fully impaired during the second quarter of 2018.

Amortizable intangible assets — Our amortizable intangible assets include core technology, customer relationships and a portion of our trademarks and trade names. Core technology includes the proprietary know-how and expertise that is inherent in our products and manufacturing processes. Customer relationships include the established relationships with our customers and the related ability of these customers to continue to generate future recurring revenue and income. Amortizable trademarks and trade names includes the Graziano[™], Fairfield[®] and Brevini[®] trademarks and trade names utilized in our Off-Highway segment.

These assets are tested for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We group the assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluate the asset group against the undiscounted future cash flows. We use our internal forecasts, which we update quarterly, to develop our cash flow projections. These forecasts are based on our knowledge of our customers' production forecasts, our assessment of market growth rates, net new business, material and labor cost estimates, cost recovery agreements with customers and our estimate of savings expected from our restructuring activities. The most likely factors that would significantly impact our forecasts are changes in customer production levels and loss of significant portions of our business. Our valuation is applied over the life of the primary assets within the asset groups. If the undiscounted cash flows do not indicate that the carrying amount of the asset group is recoverable, an impairment charge

is recorded if the carrying amount of the asset group exceeds its fair value based on discounted cash flow analyses or appraisals. There were no impairments recorded during the two years ended December 31, 2019.

Components of other intangible assets —

	Weighted Average Useful Life (years)	December 31, 2019			December 31, 2018		
		Gross Carrying Amount	Accumulated Impairment and Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Impairment and Amortization	Net Carrying Amount
Amortizable intangible assets							
Core technology	8	\$ 133	\$ (94)	\$ 39	\$ 107	\$ (89)	\$ 18
Trademarks and trade names	13	30	(6)	24	16	(4)	12
Customer relationships	8	509	(407)	102	460	(400)	60
Non-amortizable intangible assets							
Trademarks and trade names		75		75	74		74
Used in research and development activities				—	20	(20)	—
		<u>\$ 747</u>	<u>\$ (507)</u>	<u>\$ 240</u>	<u>\$ 677</u>	<u>\$ (513)</u>	<u>\$ 164</u>

The net carrying amounts of intangible assets, other than goodwill, attributable to each of our operating segments at December 31, 2019 were as follows: Light Vehicle – \$25, Commercial Vehicle – \$62, Off-Highway – \$145 and Power Technologies – \$8.

Amortization expense related to amortizable intangible assets —

	2019	2018	2017
Charged to cost of sales	\$ 5	\$ 2	\$ 2
Charged to amortization of intangibles	12	8	11
Total amortization	<u>\$ 17</u>	<u>\$ 10</u>	<u>\$ 13</u>

The following table provides the estimated aggregate pre-tax amortization expense related to intangible assets for each of the next five years based on December 31, 2019 exchange rates. Actual amounts may differ from these estimates due to such factors as currency translation, customer turnover, impairments, additional intangible asset acquisitions and other events.

	2020	2021	2022	2023	2024
Amortization expense	\$ 18	\$ 17	\$ 17	\$ 17	\$ 17

Note 5. Restructuring of Operations

Our restructuring activities have historically included rationalizing our operating footprint by consolidating facilities, positioning operations in lower cost locations and reducing overhead costs. In recent years, our focus has been primarily headcount reduction initiatives to reduce operating costs, including actions taken at acquired businesses to rationalize cost structures and achieve operating synergies. Restructuring expense includes costs associated with current and previously announced actions and is comprised of contractual and noncontractual separation costs and exit costs, including certain operating costs of facilities that we are in the process of closing.

Restructuring charges of \$29 in 2019 were comprised of severance and benefit costs related to integration of recent acquisitions, headcount reductions across our operations and exit costs related to previously announced actions.

Restructuring charges of \$25 in 2018 were primarily comprised of severance and benefit costs related to a voluntary retirement program in North America, headcount reduction actions in our operations and corporate functions in Brazil and administrative cost reduction initiatives primarily in Europe and North America. In response to continued market recovery in our Off-Highway business in Europe, management re-evaluated the economic conditions of our global Off-Highway business and determined that \$7 of the previously approved restructuring actions were no longer economically prudent.

During 2017, we approved plans to implement certain headcount reduction initiatives in our Off-Highway business as part of the BFP and BPT acquisition integration, resulting in the recognition of \$14, primarily for severance and benefits costs, during 2017. Including costs associated with the newly approved actions during 2017 and costs associated with previously announced initiatives, net of the reversal described below, restructuring expense during 2017 was \$14, including \$8 of severance and benefits costs and \$6 of exit costs. During the fourth quarter of 2017, in response to better-than-expected market recovery in our Off-Highway business in Europe, management re-evaluated the economic conditions of our global Off-Highway business and determined that a portion of the previously approved 2016 restructuring program is no longer economically prudent. This change in facts and circumstances led to the decision to reverse \$8 of previously accrued liabilities.

Accrued restructuring costs and activity, including noncurrent portion —

	Employee Termination Benefits	Exit Costs	Total
Balance, December 31, 2016	\$ 32	\$ 6	\$ 38
Charges to restructuring	16	6	22
Adjustments of accruals	(8)		(8)
Cash payments	(21)	(7)	(28)
Currency impact	2		2
Balance, December 31, 2017	21	5	26
Charges to restructuring	28	4	32
Adjustments of accruals	(7)		(7)
Cash payments	(16)	(5)	(21)
Currency impact	(1)		(1)
Balance, December 31, 2018	25	4	29
Charges to restructuring	21	10	31
Adjustments of accruals	(2)		(2)
Cash payments	(31)	(9)	(40)
Currency impact			—
Lease cease-use reclassification		(4)	(4)
Balance, December 31, 2019	<u>\$ 13</u>	<u>\$ 1</u>	<u>\$ 14</u>

At December 31, 2019, accrued employee termination benefits include costs to reduce approximately 200 employees over the next year.

Cost to complete — The following table provides project-to-date and estimated future restructuring expenses for completion of our approved restructuring initiatives for our business segments at December 31, 2019.

	Expense Recognized			Future Cost to Complete
	Prior to 2019	2019	Total to Date	
Commercial Vehicle	\$ 35	\$ 4	\$ 39	\$ 4

The future cost to complete primarily includes exit costs through 2021, equipment transfers and other costs which are required to be recognized as closures are finalized or as incurred during the closure.

Note 6. Inventories

Inventory components at December 31 —

	2019	2018
Raw materials	\$ 470	\$ 433
Work in process and finished goods	787	649
Inventory reserves	(64)	(51)
Total	<u>\$ 1,193</u>	<u>\$ 1,031</u>

Note 7. Supplemental Balance Sheet and Cash Flow Information

Supplemental balance sheet information at December 31 —

	2019	2018
Other current assets:		
Prepaid expenses	\$ 109	\$ 76
Other	28	26
Total	<u>\$ 137</u>	<u>\$ 102</u>
Other noncurrent assets:		
Contract asset	\$ 37	\$ 25
Prepaid expenses	3	3
Deferred financing costs	6	4
Pension assets, net of related obligations	4	3
Other	70	45
Total	<u>\$ 120</u>	<u>\$ 80</u>
Property, plant and equipment, net:		
Land and improvements to land	\$ 223	\$ 207
Buildings and building fixtures	621	552
Machinery and equipment	3,355	2,817
Finance lease right-of-use assets	41	
Total cost	<u>4,240</u>	<u>3,576</u>
Less: accumulated depreciation	<u>(1,975)</u>	<u>(1,726)</u>
Net	<u>\$ 2,265</u>	<u>\$ 1,850</u>
Other accrued liabilities (current):		
Non-income taxes payable	\$ 65	\$ 53
Accrued interest	11	13
Warranty reserves	36	34
Deferred income	6	6
Work place injury costs	5	5
Restructuring costs	14	26
Payable under forward contracts	5	11
Environmental	5	5
Other expense accruals	115	116
Total	<u>\$ 262</u>	<u>\$ 269</u>
Other noncurrent liabilities:		
Income tax liability	\$ 47	\$ 48
Interest rate swap market valuation	71	118
Deferred income tax liability	40	28
Work place injury costs	17	19
Warranty reserves	65	41
Restructuring costs		3
Other noncurrent liabilities	65	56
Total	<u>\$ 305</u>	<u>\$ 313</u>

Cash, cash equivalents and restricted cash at —

	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016
Cash and cash equivalents	\$ 508	\$ 510	\$ 603	\$ 707
Restricted cash included in other current assets	6	7	3	5
Restricted cash included in other noncurrent assets	4	3	4	4
Total cash, cash equivalents and restricted cash	<u>\$ 518</u>	<u>\$ 520</u>	<u>\$ 610</u>	<u>\$ 716</u>

Supplemental cash flow information —

	2019	2018	2017
Change in working capital:			
Change in accounts receivable	\$ 134	\$ (113)	\$ (141)
Change in inventories	35	(110)	(146)
Change in accounts payable	(96)	97	234
Change in accrued payroll and employee benefits	(21)	(28)	53
Change in accrued income taxes	(19)	(3)	26
Change in other current assets and liabilities	(50)	44	(34)
Net	<u>\$ (17)</u>	<u>\$ (113)</u>	<u>\$ (8)</u>
Cash paid during the period for:			
Interest	\$ 117	\$ 90	\$ 104
Income taxes	125	145	87
Noncash investing and financing activities:			
Purchases of property, plant and equipment held in accounts payable	\$ 71	\$ 91	\$ 86
Stock compensation plans	17	18	17
Noncash dividends declared	1	1	

Note 8. Leases

Our leases generally have remaining lease terms of 1 year to 11 years, some of which include options to extend the leases for up to 10 years. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The following table provides a summary of the location and amounts related to finance leases recognized in the consolidated balance sheet. Short-term lease costs were insignificant as of December 31, 2019.

	Classification	2019
Finance lease right-of-use assets	Property, plant and equipment, net	\$ 41
Finance lease liabilities	Current portion of long-term debt	5
Finance lease liabilities	Long-term debt	24

Components of lease expense —

	2019
Operating lease cost	<u>\$ 50</u>
Finance lease cost:	
Amortization of right-of-use assets	\$ 3
Interest on lease liabilities	1
Total finance lease cost	<u>\$ 4</u>

Supplemental cash flow information related to leases —

	2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 50
Operating cash flows from finance leases	1
Financing cash flows from finance leases	3
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	\$ 24
Finance leases	13

Supplemental balance sheet information related to leases —

	2019
Weighted-average remaining lease term (years):	
Operating leases	6
Finance leases	9
Weighted-average discount rate:	
Operating leases	6.0%
Finance leases	4.0%

Maturities —

	Operating Leases	Finance Leases
2020	\$ 50	\$ 5
2021	42	5
2022	32	5
2023	24	4
2024	19	2
Thereafter	46	13
Total lease payments	213	34
Less: interest	31	5
Present value of lease liabilities	\$ 182	\$ 29

Disclosures related to periods prior to adoption of ASU 2016-02 —

Cash obligations under future minimum rental commitments under operating leases as of December 31, 2018 are shown in the table below. Operating lease commitments are primarily related to facilities.

	2019	2020	2021	2022	2023	Thereafter	Total
Lease commitments	\$ 57	\$ 41	\$ 35	\$ 27	\$ 21	\$ 64	\$ 245

Note 9. Stockholders' Equity

Preferred Stock

We are authorized to issue 50,000,000 of Dana preferred stock, par value \$0.01 per share. There were no preferred shares outstanding at December 31, 2019 or 2018.

Common Stock

We are authorized to issue 450,000,000 shares of Dana common stock, par value \$0.01 per share. At December 31, 2019, there were 154,053,730 shares of our common stock issued and 143,942,539 shares outstanding, net of 10,111,191 in treasury shares. Treasury shares include those shares withheld at cost to satisfy tax obligations from stock awards issued under our stock compensation plan in addition to share repurchases noted below.

Our Board of Directors declared a quarterly cash dividend of ten cents per share of common stock in each quarter of 2019. Aggregate 2019 declared dividends total \$59 and paid cash dividends total \$58. Dividends accrue on restricted stock units (RSUs) granted under our stock compensation program and will be paid in cash or additional units when the underlying units vest.

Share repurchase program — On December 11, 2019 our Board of Directors approved an extension of our existing common stock share repurchase program through December 31, 2021. Under the existing program, we spent \$25 to repurchase 1,432,275 shares of our common stock during the first quarter of 2019 through open market transactions. Approximately \$150 remained available under the program for future share repurchases as of December 31, 2019.

Changes in equity —

During the first quarter of 2018, a wholly-owned subsidiary of Dana purchased the ownership interest in Dana Spicer (Thailand) Limited (a non wholly-owned consolidated subsidiary of Dana) held by ROC Spicer, Ltd. (a non wholly-owned consolidated subsidiary of Dana). Dana maintained its controlling financial interest in Dana Spicer (Thailand) Limited and accordingly accounted for the purchase as an equity transaction. The excess of the fair value of the consideration paid over the carrying value of the investment attributable to the noncontrolling interest in ROC Spicer, Ltd. was recognized as additional noncontrolling interest with a corresponding reduction of the additional paid-in capital of Dana. During the third quarter of 2018, Yulon Motor Co., Ltd. (Yulon) purchased a direct ownership interest in two of our consolidated operating subsidiaries. Yulon's ownership interest in the two consolidated operating subsidiaries did not change as a result of the transactions, as it previously owned the same percentages indirectly through a series of consolidated holding companies. The cash received from Yulon was recognized as additional noncontrolling interest. The amount received, less withholding taxes, was returned to Yulon in the form of a dividend in the fourth quarter of 2018.

Changes in each component of AOCI of the parent —

	Parent Company Stockholders				
	Foreign Currency Translation	Hedging	Investments	Defined Benefit Plans	Accumulated Other Comprehensive Loss
Balance, December 31, 2016	\$ (646)	\$ (34)	\$ —	\$ (604)	\$ (1,284)
Other comprehensive income (loss):					
Currency translation adjustments	(22)				(22)
Holding loss on net investment hedge	(2)				(2)
Holding gains and losses		(162)	1		(161)
Reclassification of amount to net income (a)		128			128
Net actuarial losses				(28)	(28)
Reclassification adjustment for net actuarial losses included in net periodic benefit cost (b)				31	31
Tax (expense) benefit		4	1	(9)	(4)
Other comprehensive income (loss)	(24)	(30)	2	(6)	(58)
Balance, December 31, 2017	(670)	(64)	2	(610)	(1,342)
Other comprehensive income (loss):					
Currency translation adjustments	(48)				(48)
Holding loss on net investment hedge	(3)				(3)
Holding gains and losses		66			66
Reclassification of amount to net income (a)		(56)			(56)
Net actuarial losses				(8)	(8)
Reclassification adjustment for net actuarial losses included in net periodic benefit cost (b)				34	34
Other				2	2
Tax expense				(5)	(5)
Other comprehensive income (loss)	(51)	10	—	23	(18)
Adoption of ASU 2016-01 financial instruments adjustment, January 1, 2018			(2)		(2)
Balance, December 31, 2018	(721)	(54)	—	(587)	(1,362)
Other comprehensive income (loss):					
Currency translation adjustments	8				8
Holding gains and losses		58			58
Reclassification of amount to net income (a)		(33)			(33)
Net actuarial gains				71	71
Reclassification adjustment for net actuarial losses included in net periodic benefit cost (b)				286	286
Tax expense	(1)	(1)		(13)	(15)
Other comprehensive income	7	24	—	344	375
Balance, December 31, 2019	\$ (714)	\$ (30)	\$ —	\$ (243)	\$ (987)

Notes:

- (a) For 2019 and 2018, realized gains and losses from currency-related forward contracts associated with forecasted transactions or from other derivative instruments treated as cash flow hedges are reclassified from AOCI into the same line item in the consolidated statement of operations in which the underlying forecasted transaction or other hedged item is recorded. See Note 16 for additional details. For 2017, reclassifications from AOCI were included in other expense, net.
- (b) See Note 13 for additional details.

Note 10. Redeemable Noncontrolling Interests

In connection with the acquisition of a controlling interest in TM4 from Hydro-Québec on June 22, 2018, we recognized \$102 for Hydro-Québec's 45% redeemable noncontrolling interest in TM4. On July 29, 2019, we broadened our relationship with Hydro-Québec, with Hydro-Québec acquiring an indirect 45% redeemable noncontrolling interest in SME and an additional indirect 22.5% redeemable noncontrolling interest in PEPS which resulted in recognition of additional redeemable noncontrolling interest of \$64. The terms of the agreement provide Hydro-Québec with the right to put all, and not less than all,

of its ownership interests in TM4, SME and PEPS to Dana at fair value any time after June 22, 2021. See Note 2 for additional information.

On August 8, 2018, we entered into an agreement to acquire Brevini's remaining 20% ownership interests in BFP and BPT and to settle all claims between the parties. We paid \$43 to acquire Brevini's remaining ownership interests and received \$10 in settlement of all pending and future claims. AOCI attributable to Brevini's redeemable noncontrolling interests was reclassified to AOCI of the parent company. The difference between the carrying value of Brevini's redeemable noncontrolling interests and the cash paid was recorded to additional paid-in capital of the parent company. See Note 2 for additional information.

Redeemable noncontrolling interests reflected as of the balance sheet date are the greater of the redeemable noncontrolling interest balances adjusted for comprehensive income items and distributions or the redemption values. Redeemable noncontrolling interest adjustments of redemption value are recorded in retained earnings. During 2017 there was a \$6 adjustment to reflect a redemption value in excess of carrying value. See Note 11 for additional information.

Reconciliation of changes in redeemable noncontrolling interests —

	2019	2018
Balance, beginning of period	\$ 100	\$ 47
Initial fair value of redeemable noncontrolling interests of acquired businesses		102
Capital contribution from redeemable noncontrolling interest	4	3
Purchase of redeemable noncontrolling interest		(46)
Sale of redeemable noncontrolling interest	64	
Comprehensive income (loss) adjustments:		
Net loss attributable to redeemable noncontrolling interests	(6)	
Other comprehensive income (loss) attributable to redeemable noncontrolling interests	5	(6)
Balance, end of period	<u>\$ 167</u>	<u>\$ 100</u>

Note 11. Earnings per Share

Reconciliation of the numerators and denominators of the earnings per share calculations —

	2019	2018	2017
Net income attributable to the parent company	\$ 226	\$ 427	\$ 111
Less: Redeemable noncontrolling interests adjustment to redemption value			(6)
Net income available to common stockholders - Numerator basic and diluted	<u>\$ 226</u>	<u>\$ 427</u>	<u>\$ 105</u>
Denominator:			
Weighted-average common shares outstanding - Basic	144.0	145.0	145.1
Employee compensation-related shares, including stock options	1.1	1.5	1.8
Weighted-average common shares outstanding - Diluted	<u>145.1</u>	<u>146.5</u>	<u>146.9</u>

The share count for diluted earnings per share is computed on the basis of the weighted-average number of common shares outstanding plus the effects of dilutive common stock equivalents (CSEs) outstanding during the period. We excluded 0.1 million, 0.2 million and 0.1 million CSEs from the calculations of diluted earnings per share for the years 2019, 2018 and 2017 as the effect of including them would have been anti-dilutive.

Note 12. Stock Compensation

2017 Omnibus Incentive Plan

The 2017 Omnibus Incentive Plan (the Plan) authorizes the grant of stock options, stock appreciation rights (SARs), RSUs and performance share units (PSUs) through April 2027. Cash-settled awards do not count against the maximum aggregate number. At December 31, 2019, there were 4.4 million shares available for future grants. Shares of common stock to be issued under the Plan are made available from authorized and unissued Dana common stock.

Award activity — (shares in millions)

	Options		SARs		RSUs		PSUs	
	Shares	Exercise Price*	Shares	Exercise Price*	Shares	Grant-Date Fair Value*	Shares	Grant-Date Fair Value*
December 31, 2018	0.7	\$ 15.33	0.1		1.8	\$ 20.06	0.5	\$ 22.45
Granted					1.0	17.08	0.4	16.17
Exercised or vested	(0.1)	4.80			(0.7)	14.66	(0.2)	18.63
Forfeited or expired					(0.1)	20.49		
December 31, 2019	<u>0.6</u>	16.13	<u>0.1</u>	\$ 16.27	<u>2.0</u>	20.56	<u>0.7</u>	19.99

* Weighted-average per share

	2019	2018	2017
Total stock compensation expense	\$ 19	\$ 16	\$ 23
Total grant-date fair value of awards vested	16	16	17
Cash received from exercise of stock options		2	10
Cash paid to settle SARs and RSUs	2	2	4
Intrinsic value of stock options and SARs exercised	1	3	8
Intrinsic value of RSUs and PSUs vested	17	18	20

Compensation expense is generally measured based on the fair value at the date of grant and is recognized on a straight-line basis over the vesting period. For options and SARs, we use an option-pricing model to estimate fair value. For RSUs and PSUs, the fair value is based on the closing market price of our common stock at the date of grant. Awards that are settled in cash are subject to liability accounting. Accordingly, the fair value of such awards is remeasured at the end of each reporting period until settled or expired. We had accrued \$3 and \$2 for cash-settled awards at December 31, 2019 and 2018. During 2019 we issued 0.7 million and 0.2 million shares of common stock based on vesting of RSUs and PSUs. At December 31, 2019, the total unrecognized compensation cost related to the nonvested awards granted and expected to vest was \$22. This cost is expected to be recognized over a weighted-average period of 1.8 years.

Stock options and stock appreciation rights — The exercise price of each option or SAR equals the closing market price of our common stock on the date of grant. Options and SARs generally vest over three years and their maximum term is ten years. Shares issued upon the exercise of options are recorded as common stock and additional paid-in capital at the option price. SARs are settled in cash for the difference between the market price on the date of exercise and the exercise price. We have not granted stock options or SARs since 2013. All outstanding awards are fully vested and exercisable. At December 31, 2019, the outstanding awards have an aggregate intrinsic value of \$1 and a weighted-average remaining contractual life of 2.2 years.

Restricted stock units and performance shares units — Each RSU or PSU granted represents the right to receive one share of Dana common stock or, at the election of Dana (for units awarded to board members) or for employees located outside the U.S. (for employee awarded units), cash equal to the market value per share. All RSUs contain dividend equivalent rights. RSUs granted to non-employee directors vest on the first anniversary date of the grant and those granted to employees generally cliff vest fully after three years. PSUs granted to employees vest if specified performance goals are achieved during the respective performance period, generally three years.

The number of PSUs that ultimately vest is contingent on achieving specified return on invested capital targets and specified margin targets, with an even distribution between the two targets. We estimated the fair value at grant date based on the closing market price of our common stock at the date of grant adjusted for the value of assumed dividends over the period because the awards are not dividend protected. The estimated grant date value is accrued over the performance period and adjusted as appropriate based on performance relative to the target.

Cash incentive awards — Our 2017 Omnibus Incentive Plan provides for cash incentive awards. We make awards annually to certain eligible employees designated by Dana, including certain executive officers. Awards under the plan are based on achieving certain financial performance goals. The performance goals of the plan are established annually by the Board of Directors.

Under the 2019, 2018 and 2017 annual incentive programs, participants were eligible to receive cash awards based on achieving earnings and cash flow performance goals. Our 2017 long-term incentive program had a performance-based cash component which had a three-year contractual vesting period. The vesting of the 2017 award was based on achieving a return on invested capital target measured on an average basis over the contractual period. The 2017 award also has a component that

was based on achieving a margin target in the third year of the program that was established at the grant date. We accrued \$27, \$33 and \$77 of expense in 2019, 2018 and 2017 for the expected cash payments under these programs.

Note 13. Pension and Postretirement Benefit Plans

We sponsor various defined benefit, qualified and nonqualified, pension plans covering eligible employees. Other postretirement benefits (OPEB), including medical and life insurance, are provided for certain employees upon retirement.

We also sponsor various defined contribution plans that cover the majority of our employees. Under the terms of the qualified defined contribution retirement plans, employee and employer contributions may be directed into a number of diverse investments. None of these qualified defined contribution plans allow direct investment in our stock.

Components of net periodic benefit cost (credit) and other amounts recognized in OCI —

	Pension Benefits					
	2019		2018		2017	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Interest cost	\$ 40	\$ 8	\$ 43	\$ 7	\$ 51	\$ 7
Expected return on plan assets	(51)	(3)	(71)	(3)	(82)	(3)
Service cost		8		7		7
Amortization of net actuarial loss	22	6	28	6	23	7
Settlement charge	256	3				
Termination benefit						1
Curtailement		(1)				
Other				2		
Net periodic benefit cost (credit)	<u>267</u>	<u>21</u>	<u>—</u>	<u>19</u>	<u>(8)</u>	<u>19</u>
Recognized in OCI:						
Amount due to net actuarial (gains) losses	(107)	33	11	4	22	4
Reclassification adjustment for net actuarial losses in net periodic benefit cost	(278)	(9)	(28)	(6)	(23)	(7)
Curtailement						(1)
Other				(2)		
Total recognized in OCI	<u>(385)</u>	<u>24</u>	<u>(17)</u>	<u>(4)</u>	<u>(1)</u>	<u>(4)</u>
Net recognized in benefit cost (credit) and OCI	<u>\$ (118)</u>	<u>\$ 45</u>	<u>\$ (17)</u>	<u>\$ 15</u>	<u>\$ (9)</u>	<u>\$ 15</u>

	OPEB				
	2019		2018	2017	
	U.S.	Non-U.S.	Non-U.S.	Non-U.S.	
Interest cost	\$ —	\$ 3	\$ 3	\$ 3	
Service cost			1	1	
Amortization of net actuarial gain		(1)			
Net periodic benefit cost	<u>—</u>	<u>2</u>	<u>4</u>	<u>4</u>	
Recognized in OCI:					
Amount due to net actuarial (gains) losses		1	2	(7)	2
Reclassification adjustment for net actuarial gain in net periodic benefit cost			1		
Total recognized in OCI	<u>1</u>	<u>3</u>	<u>(7)</u>	<u>2</u>	
Net recognized in benefit cost (credit) and OCI	<u>\$ 1</u>	<u>\$ 5</u>	<u>\$ (3)</u>	<u>\$ 6</u>	

Our U.S. defined benefit pension plans are frozen and no additional service cost is being accrued. The estimated net actuarial loss for the defined benefit pension plans that will be amortized from AOCI into benefit cost in 2020 is \$11 for our U.S. plans and \$9 for our non-U.S. plans. We use the corridor approach for purposes of systematically amortizing deferred gains or losses as a component of net periodic benefit cost into the income statement in future reporting periods. The amortization period used is generally the average remaining service period of active participants in the plan unless almost all of the plan's participants are inactive, in which case we use the average remaining life expectancy of the inactive participants. No portion of the estimated net actuarial gain related to OPEB plans will be amortized from AOCI into benefit cost in 2020.

In October 2017, upon authorization by the Dana Board of Directors, we commenced the process of terminating one of our U.S. defined benefit pension plans. During the second quarter of 2019, payments were made from plan assets to those plan participants that elected to take the lump-sum payout option. In June 2019, we entered into (a) a definitive commitment agreement by and among Dana, Athene Annuity and Life Company (Athene) and State Street Global Advisors, as independent fiduciary to the plan, and (b) a definitive commitment agreement by and among Dana, Companion Life Insurance Company (Companion) and State Street Global Advisors, as independent fiduciary to the plan. Pursuant to the definitive commitment agreements, the plan purchased group annuity contracts that irrevocably transferred to the insurance companies the remaining future pension benefit obligations of the plan. Plan participant's benefits are unchanged as a result of the termination. We contributed \$59 to the plan prior to the purchase of the group annuity contracts. The purchase of group annuity contracts was then funded directly by the assets of the plan in June 2019. By irrevocably transferring the obligations to Athene and Companion, we reduced our unfunded pension obligation by approximately \$165 and recognized a pre-tax pension settlement charge of \$256 in 2019.

Funded status — The following tables provide reconciliations of the changes in benefit obligations, plan assets and funded status.

	Pension Benefits				OPEB		
	2019		2018		2019		2018
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	Non-U.S.
Reconciliation of benefit obligation:							
Obligation at beginning of period	\$ 1,501	\$ 364	\$ 1,730	\$ 377	\$ —	\$ 83	\$ 99
Interest cost	40	8	43	7		3	3
Service cost		8		7			1
Actuarial (gain) loss	13	41	(148)	7	1	2	(7)
Benefit payments	(90)	(14)	(124)	(14)	(1)	(4)	(5)
Acquisitions	161	25			3		
Settlements	(853)	(13)		(2)			
Curtailement		(1)					
Translation adjustments		(6)		(18)		4	(8)
Obligation at end of period	<u>\$ 772</u>	<u>\$ 412</u>	<u>\$ 1,501</u>	<u>\$ 364</u>	<u>\$ 3</u>	<u>\$ 88</u>	<u>\$ 83</u>

	Pension Benefits				OPEB		
	2019		2018		2019		2018
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	Non-U.S.
Reconciliation of fair value of plan assets:							
Fair value at beginning of period	\$ 1,301	\$ 71	\$ 1,513	\$ 71	\$ —	\$ —	\$ —
Actual return on plan assets	171	11	(88)	6			
Employer contributions	59	17		16	1	4	5
Benefit payments	(90)	(14)	(124)	(14)	(1)	(4)	(5)
Settlements	(853)	(13)		(2)			
Acquisitions	136	7					
Translation adjustments		(1)		(6)			
Fair value at end of period	<u>\$ 724</u>	<u>\$ 78</u>	<u>\$ 1,301</u>	<u>\$ 71</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Funded status at end of period	<u>\$ (48)</u>	<u>\$ (334)</u>	<u>\$ (200)</u>	<u>\$ (293)</u>	<u>\$ (3)</u>	<u>\$ (88)</u>	<u>\$ (83)</u>

Amounts recognized in the balance sheet —

	Pension Benefits				OPEB		
	2019		2018		2019		2018
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	Non-U.S.
Amounts recognized in the consolidated balance sheet:							
Noncurrent assets	\$ —	\$ 4	\$ —	\$ 3	\$ —	\$ —	\$ —
Current liabilities		(13)		(13)		(5)	(5)
Noncurrent liabilities	(48)	(325)	(200)	(283)	(3)	(83)	(78)
Net amount recognized	<u>\$ (48)</u>	<u>\$ (334)</u>	<u>\$ (200)</u>	<u>\$ (293)</u>	<u>\$ (3)</u>	<u>\$ (88)</u>	<u>\$ (83)</u>

Amounts recognized in AOCI —

	Pension Benefits				OPEB		
	2019		2018		2019		2018
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	Non-U.S.
Amounts recognized in AOCI:							
Net actuarial loss (gain)	\$ 157	\$ 108	\$ 542	\$ 84	\$ 1	\$ (12)	\$ (15)
AOCI before tax	157	108	542	84	1	(12)	(15)
Deferred taxes	13	(28)	(6)	(22)		4	4
Net	<u>\$ 170</u>	<u>\$ 80</u>	<u>\$ 536</u>	<u>\$ 62</u>	<u>\$ 1</u>	<u>\$ (8)</u>	<u>\$ (11)</u>

The 2019 actuarial gain of \$107 on the U.S plans was largely the result of the actual return on assets exceeding the expected asset return.

The 2018 actuarial loss of \$11 on the U.S plans was largely the result of the expected return on assets exceeding the actual asset return. Additionally, a custom mortality table was developed during 2018 using our historical mortality experience. These custom mortality tables are projected generationally from 2015 using the Society of Actuaries projection scale, MP-2019, modified to use a 0.75% long-term improvement rate, being attained in 2027.

Aggregate funding levels — The following table presents information regarding the aggregate funding levels of our defined benefit pension plans at December 31:

	2019		2018	
	U.S.	Non-U.S.	U.S.	Non-U.S.
Plans with fair value of plan assets in excess of obligations:				
Accumulated benefit obligation	\$ 15	\$ 17	\$ 14	\$ 15
Projected benefit obligation	15	17	14	16
Fair value of plan assets	16	21	15	19
Plans with obligations in excess of fair value of plan assets:				
Accumulated benefit obligation	\$ 757	\$ 363	\$ 1,487	\$ 322
Projected benefit obligation	757	395	1,487	348
Fair value of plan assets	708	57	1,286	52

Fair value of pension plan assets —

Asset Category	Total	Fair Value Measurements at December 31, 2019							
		U.S.				Non-U.S.			
		Level 1	Level 2	Level 3	NAV (a)	Level 1	Level 2	Level 3	
Equity securities:									
U.S. all cap (b)	\$ 39	\$ 39	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
U.S. large cap	28				28				
EAFE composite	19				19				
Emerging markets	9				9				
Fixed income securities:									
Corporate bonds	492		186		306				
U.S. Treasury strips	37		37						
Non-U.S. government securities	21						21		
Emerging market debt	11				11				
Alternative investments:									
Insurance contracts (d)	50			4					46
Real estate	20				20				
Other	11						11		
Cash and cash equivalents	65		65						
Total	\$ 802	\$ 39	\$ 288	\$ 4	\$ 393	\$ —	\$ 32	\$ 46	

Asset Category	Fair Value Measurements at December 31, 2018						
	Total	U.S.			Non-U.S.		
		Level 1	Level 2	NAV (a)	Level 1	Level 2	Level 3
Equity securities:							
U.S. all cap (b)	\$ 35	\$ 35	\$ —	\$ —	\$ —	\$ —	\$ —
U.S. large cap	43			43			
U.S. small cap	4	4					
EAFE composite	41			41			
Emerging markets	28			28			
Fixed income securities:							
U.S. bonds (c)	33		33				
Corporate bonds	814		616	198			
U.S. Treasury strips	115		115				
Non-U.S. government securities	25					25	
Emerging market debt	48			48			
Alternative investments:							
Insurance contracts (d)	35						35
Real estate	21			21			
Other	10					10	
Cash and cash equivalents	120		119			1	
Total	<u>\$ 1,372</u>	<u>\$ 39</u>	<u>\$ 883</u>	<u>\$ 379</u>	<u>\$ —</u>	<u>\$ 36</u>	<u>\$ 35</u>

Notes:

- Certain assets are measured at fair value using the net asset value (NAV) per share (or its equivalent) practical expedient and have not been classified in the fair value hierarchy.
- This category comprises a combination of small-, mid- and large-cap equity stocks that are allocated at the investment manager's discretion. Investments include common and preferred securities as well as equity funds that invest in these instruments.
- This category represents a combination of high-yield and investment grade corporate bonds, sovereign bonds, Yankee bonds, asset-backed securities and U.S. government bonds. Investments include fixed income funds that invest in these instruments.
- This category comprises contracts placed with insurance companies where the underlying assets are invested in fixed interest securities.

Reconciliation of Level 3 Assets	2019	2019	2018
	U.S. Insurance Contracts	Non-U.S. Insurance Contracts	Non-U.S. Insurance Contracts
Fair value at beginning of period	\$ —	\$ 35	\$ 33
Actual gains relating to assets still held at the reporting date		7	4
Purchases, sales and settlements	4	5	(1)
Currency impact		(1)	(1)
Fair value at end of period	<u>\$ 4</u>	<u>\$ 46</u>	<u>\$ 35</u>

Valuation Methods

Equity securities — The fair value of equity securities held directly by the trust is based on quoted market prices. When the equity securities are held in commingled funds that are not publicly traded, the fair value of our interest in the fund is its NAV as determined by quoted market prices for the underlying holdings.

Fixed income securities — The fair value of fixed income securities held directly by the trust is based on a bid evaluation process with input from independent pricing sources. When the fixed income securities are held in commingled funds that are not publicly traded, the fair value of our interest in the fund is its NAV as determined by a similar valuation of the underlying holdings.

Insurance contracts — The values shown for insurance contracts are the amounts reported by the insurance company and approximate the fair values of the underlying investments.

Real estate — The investments in real estate represent ownership interests in commingled funds and partnerships that invest in real estate. The investment managers determine the NAV of these ownership interests using the fair value of the underlying real

estate which is obtained via independent third party appraisals prepared on a periodic basis. Assumptions used to value the properties are updated quarterly. For the component of the real estate portfolio under development, the investments are carried at cost until they are completed and valued by a third party appraiser.

Cash and cash equivalents — The fair value of cash and cash equivalents is set equal to its amortized cost.

The methods described above may produce a fair value that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while we believe the valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Investment policy — Target asset allocations of U.S. pension plans are established through an investment policy, which is updated periodically and reviewed by an Investment Committee, comprised of certain company officers. The investment policy allows for a flexible asset allocation mix which is intended to provide appropriate diversification to lessen market volatility while assuming a reasonable level of economic risk.

Our policy recognizes that properly managing the relationship between pension assets and pension liabilities serves to mitigate the impact of market volatility on our funding levels. The investment policy permits plan assets to be invested in a number of diverse categories, including a Growth Portfolio, an Immunizing Portfolio and a Liquidity Portfolio. These sub-portfolios are intended to balance the generation of incremental returns with the management of overall risk.

The Growth Portfolio is invested in a diversified pool of assets in order to generate an incremental return with an acceptable level of risk. The Immunizing Portfolio is a hedging portfolio that may be comprised of fixed income securities and overlay positions. This portfolio is designed to offset changes in the value of the pension liability due to changes in interest rates. The Liquidity Portfolio is a cash portfolio designed to meet short-term liquidity needs and reduce the plans' overall risk. As a result of our diversification strategies, there are no significant concentrations of risk within the portfolio of investments.

The allocations among portfolios are adjusted as needed to meet changing objectives and constraints and to manage the risk of adverse changes in the unfunded positions of our plans. At December 31, 2019, the U.S. plans had targets of 20% for the Growth Portfolio (U.S. and non-U.S. equities, high-yield fixed income, real estate, emerging market debt and cash), 78% for the Immunizing Portfolio (long duration U.S. Treasury strips, corporate bonds and cash) and 2% for the Liquidity Portfolio (cash and short-term securities). The assets held at December 31, 2019 by the U.S. plans were invested 20% in the Growth Portfolio, 77% in the Immunizing Portfolio and 3% in the Liquidity Portfolio.

Significant assumptions — The significant weighted-average assumptions used in the measurement of pension benefit obligations at December 31 of each year and the net periodic benefit cost for each year are as follows:

	2019		2018		2017	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Pension benefit obligations:						
Discount rate	3.21%	1.72%	4.22%	2.42%	3.55%	2.25%
Net periodic benefit cost:						
Discount rate	3.41%	2.50%	2.56%	2.54%	3.24%	2.34%
Rate of compensation increase	N/A	3.28%	N/A	3.21%	N/A	3.33%
Expected return on plan assets	6.00%	4.61%	6.00%	4.66%	6.00%	5.92%

The pension plan discount rate assumptions are evaluated annually in consultation with our outside actuarial advisers. Long-term interest rates on high quality corporate debt instruments are used to determine the discount rate. For our largest plans, discount rates are developed using a discounted bond portfolio analysis, with appropriate consideration given to defined benefit payment terms and duration of the liabilities. In the above table, the discount rate used to determine U.S. pension obligations at the end of 2017 and 2018 does not consider the terminated plan which had an implied discount rate of 3.46%.

For pension and other postretirement benefit plans that utilize a full yield curve approach to estimate the interest and service components of net periodic benefit cost, we apply the specific spot rates along the yield curve used in the most recent remeasurement of the benefit obligation to the relevant projected cash flows. We believe this method improves the correlation between the projected cash flows and the corresponding interest rates and provides a more precise measurement of interest and service costs. Since the remeasurement of total benefit obligations is not affected, the resulting reduction in periodic benefit cost is offset by an increase in the actuarial loss.

The expected rate of return on plan assets was selected on the basis of our long-term view of return and risk assumptions for major asset classes. We define long-term as forecasts that span at least the next ten years. Our long-term outlook is influenced by a combination of return expectations by individual asset class, actual historical experience and our diversified investment strategy. We consult with and consider the opinions of financial professionals in developing appropriate capital market assumptions. Return projections are also validated using a simulation model that incorporates yield curves, credit spreads and risk premiums to project long-term prospective returns. The appropriateness of the expected rate of return is assessed on an annual basis and revised if necessary. We have a high percentage of total assets in fixed income securities since the benefit accruals are frozen for all of our U.S. pension plans. Based on this assessment, we have selected a 5.00% expected return on asset assumption for 2020 for our U.S. plans.

The significant weighted-average assumptions used in the measurement of OPEB obligations at December 31 of each year and the net periodic benefit cost for each year are as follows:

	2019		2018	2017
	U.S.	Non-U.S.	Non-U.S.	Non-U.S.
OPEB benefit obligations:				
Discount rate	3.37%	3.10%	3.71%	3.41%
Net periodic benefit cost:				
Discount rate	4.08%	3.76%	3.42%	3.70%
Initial health care cost trend rate	N/A	4.22%	4.12%	5.07%
Ultimate health care cost trend rate	N/A	4.93%	5.10%	5.07%
Year ultimate reached	N/A	2023	2023	2018

The discount rate selection process was similar to the process used for the pension plans. Assumed health care cost trend rates have a significant effect on the health care obligation. To determine the trend rates, consideration is given to the plan design, recent experience and health care economics.

A one-percentage-point change in assumed health care cost trend rates would have the following effects for 2019:

	1% Point Increase		1% Point Decrease	
Effect on total of service and interest cost components	\$	—	\$	—
Effect on OPEB obligations		9		(8)

Estimated future benefit payments and contributions — Expected benefit payments by our pension and OPEB plans for each of the next five years and for the following five-year period are as follows:

Year	Pension Benefits		OPEB	
	U.S.	Non-U.S.	U.S.	Non-U.S.
2020	\$ 52	\$ 19	\$ —	\$ 5
2021	52	15		5
2022	52	17		5
2023	51	17		5
2024	50	20		5
2025 to 2029	236	103	1	24
Total	\$ 493	\$ 191	\$ 1	\$ 49

Pension benefits are funded through deposits with trustees that satisfy, at a minimum, the applicable funding regulations. OPEB benefits are funded as they become due. Projected contributions to be made during 2020 to the defined benefit pension plans are \$1 for our U.S. plans and \$16 for our non-U.S. plans.

Multi-employer pension plans — We participate in the Steelworkers Pension Trust (SPT) multi-employer pension plan which provides pension benefits to certain of our U.S. employees represented by the United Steelworkers and United Automobile Workers unions. Contributions are made in accordance with our collective bargaining agreements and rates are generally based on hours worked. The collective bargaining agreements expire August 18, 2021. The trustees of the SPT have provided us with the latest data available for the plan year ended December 31, 2019. As of that date, the plan is not fully funded. We could be held liable to the plan for our obligations as well as those of other employers as a result of our participation in the plan.

Contribution rates could increase if the plan is required to adopt a funding improvement plan or a rehabilitation plan, if the performance of plan assets does not meet expectations or as a result of future collectively bargained wage and benefit agreements. If we choose to stop participating in the plan, we may be required to pay the plan an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The Pension Protection Act (PPA) defines a zone status for each plan. Plans in the green zone are at least 80% funded, plans in the yellow zone are at least 65% funded and plans in the red zone are generally less than 65% funded. The SPT plan has utilized extended amortization provisions to amortize its losses from 2008. The plan recertified its zone status after using the extended amortization provisions as allowed by law. The SPT plan has not implemented a funding improvement or rehabilitation plan, nor are such plans pending. Our contributions to the SPT exceeded 5% of the total contributions to the plan.

Pension Fund	Employer Identification Number/ Plan Number	PPA Zone Status		Funding Plan Pending/ Implemented	Contributions by Dana			Surcharge Imposed
		2019	2018		2019	2018	2017	
SPT	23-6648508 / 499	Green	Green	No	\$ 13	\$ 12	\$ 11	No

Note 14. Marketable Securities

	2019			2018		
	Cost	Unrealized Gains (Losses)	Fair Value	Cost	Unrealized Gains (Losses)	Fair Value
U.S. government securities	\$ —	\$ —	\$ —	\$ 2	\$ —	\$ 2
Corporate securities				4		4
Certificates of deposit	19		19	15		15
Total marketable securities	<u>\$ 19</u>	<u>\$ —</u>	<u>\$ 19</u>	<u>\$ 21</u>	<u>\$ —</u>	<u>\$ 21</u>

U.S. government securities include bonds issued by government-sponsored agencies and Treasury notes. Corporate securities are primarily debt securities. Certificates of deposit maturing in one year or less total \$19 at December 31, 2019.

Note 15. Financing Agreements

Long-term debt at December 31 —

	Interest Rate	2019	2018
Senior Notes due September 15, 2023	6.000%	\$ —	\$ 300
Senior Notes due December 15, 2024	5.500%	425	425
Senior Notes due April 15, 2025	5.750% *	400	400
Senior Notes due June 1, 2026	6.500% *	375	375
Senior Notes due November 15, 2027	5.375%	300	—
Term Facility A		474	265
Term Facility B		349	—
Other indebtedness		61	28
Debt issuance costs		(28)	(18)
		<u>2,356</u>	<u>1,775</u>
Less: Current portion of long-term debt		20	20
Long-term debt, less debt issuance costs		<u>\$ 2,336</u>	<u>\$ 1,755</u>

* In conjunction with the issuance of the April 2025 Notes we entered into 8-year fixed-to-fixed cross-currency swaps which have the effect of economically converting the April 2025 Notes to euro-denominated debt at a fixed rate of 3.850%. In conjunction with the issuance of the June 2026 Notes we entered into 10-year fixed-to-fixed cross-currency swaps which have the effect of economically converting the June 2026 Notes to euro-denominated debt at a fixed rate of 5.140%. See Note 16 for additional information.

Interest on the senior notes is payable semi-annually and interest on the Term Facilities is payable quarterly. Other indebtedness includes the note payable to SME, borrowings from various financial institutions, finance lease obligations and the unamortized fair value adjustment related to a terminated interest rate swap. See Note 2 for additional information on the note payable to SME and Note 16 for additional information on the terminated interest rate swap.

Scheduled principal payments on long-term debt, excluding finance leases at December 31, 2019 —

	2020	2021	2022	2023	2024
Maturities	\$ 15	\$ 31	\$ 30	\$ 30	\$ 821

Senior notes activity — In November 2019, we completed the sale of \$300 in senior unsecured notes (November 2027 Notes) at 5.375%. The November 2027 Notes rank equally with Dana's other unsecured senior notes. Interest on the notes is payable on May 15 and November 15 of each year, beginning on May 15, 2020. The November 2027 Notes will mature on November 15, 2027. Net proceeds of the offering totaled \$296. Financing costs of \$4 were recorded as deferred costs and are being amortized to interest expense over the life of the notes. The proceeds from the offering were used to redeem our September 2023 Notes. On November 22, 2019, we redeemed \$162 of our September 2023 Notes pursuant to a tender offer at a weighted average price equal to 102.250% plus accrued and unpaid interest. On November 26, 2019, we called the remaining \$138 of our September 2023 Notes at a price equal to 102.000% plus accrued and unpaid interest. The \$9 loss on extinguishment of debt recorded in November 2019 includes the redemption premiums and transaction costs associated with the tender offer and the call and the write-off of \$2 of previously deferred financing costs associated with the September 2023 Notes.

On April 4, 2017, Dana Financing Luxembourg S.à r.l., a wholly-owned subsidiary of Dana, issued \$400 in senior notes (April 2025 Notes) at 5.750%, which are guaranteed by Dana. The April 2025 Notes were issued through a private placement and will not be registered under the U.S. Securities Act of 1933, as amended (the Securities Act). The April 2025 Notes were offered only to qualified institutional buyers in reliance on Rule 144A under the Securities Act and, outside the United States, only to non-U.S. investors in reliance on Regulation S under the Securities Act. The April 2025 Notes rank equally with Dana's other unsecured senior notes. Interest on the notes is payable on April 15 and October 15 of each year. The April 2025 Notes will mature on April 15, 2025. Net proceeds of the offering totaled \$394. Financing costs of \$6 were recorded as deferred costs and are being amortized to interest expense over the life of the April 2025 Notes. The proceeds from the offering were used to repay indebtedness of our BPT and BFP subsidiaries, repay indebtedness of a wholly-owned subsidiary in Brazil, redeem \$100 of our September 2021 Notes and for general corporate purposes. The September 2021 Notes were redeemed on April 4, 2017 at a price equal to 104.031% plus accrued and unpaid interest. The \$6 loss on extinguishment of debt includes the \$4 redemption premium and the \$1 write-off of previously deferred financing costs associated with the September 2021 Notes and the \$1 redemption premium associated with the repayment of indebtedness of a wholly-owned subsidiary in Brazil. In conjunction with the issuance of the April 2025 Notes, we entered into 8-year fixed-to-fixed cross-currency swaps which have the effect of economically converting the April 2025 Notes to euro-denominated debt at a fixed rate of 3.850%. See Note 16 for additional information. On September 18, 2017, we redeemed the remaining \$350 of our September 2021 Notes at a price equal to 102.688% plus accrued and unpaid interest. The \$13 loss on extinguishment of debt includes the \$10 redemption premium and the \$3 write-off of previously deferred financing costs associated with the September 2021 Notes.

Senior notes redemption provisions — We may redeem some or all of the senior notes at the following redemption prices (expressed as percentages of principal amount), plus accrued and unpaid interest to the redemption date, if redeemed during the 12-month period commencing on the anniversary date of the senior notes in the years set forth below:

Year	Redemption Price			
	December 2024 Notes	April 2025 Notes	June 2026 Notes	November 2027 Notes
2020	101.833%	104.313%		
2021	100.917%	102.875%	103.250%	
2022	100.000%	101.438%	102.167%	102.688%
2023	100.000%	100.000%	101.083%	101.344%
2024		100.000%	100.000%	100.000%
2025			100.000%	100.000%
2026				100.000%

At any time prior to April 15, 2020, we may redeem up to 35% of the aggregate principal amount of the April 2025 Notes in an amount not to exceed the amount of proceeds of one or more equity offerings, at a price equal to 105.750% of the principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date, provided that at least 50% of the original aggregate principal amount of the April 2025 Notes remains outstanding after the redemption. Prior to April 15, 2020, we may redeem some or all of the April 2025 Notes at a redemption price of 100.000% of the aggregate principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date plus a “make-whole” premium. We have not separated the make-whole premium from the underlying debt instrument to account for it as a derivative instrument as the economic

characteristics and the risks of this embedded derivative are clearly and closely related to the economic characteristics and risks of the underlying debt.

Prior to June 1, 2021, we may redeem some or all of the June 2026 Notes at a redemption price of 100.000% of the aggregate principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date plus a “make-whole” premium. We have not separated the make-whole premium from the underlying debt instrument to account for it as a derivative instrument as the economic characteristics and the risks of this embedded derivative are clearly and closely related to the economic characteristics and risks of the underlying debt.

At any time prior to November 15, 2022, we may redeem up to 35% of the aggregate principal amount of the November 2027 Notes in an amount not to exceed the amount of proceeds of one or more equity offerings, at a price equal to 105.375% of the principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date, provided that at least 50% of the original aggregate principal amount of the November 2027 Notes remains outstanding after the redemption. Prior to November 15, 2022, we may redeem some or all of the November 2027 Notes at a redemption price of 100.000% of the aggregate principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date plus a “make-whole” premium. We have not separated the make-whole premium from the underlying debt instrument to account for it as a derivative instrument as the economic characteristics and the risks of this embedded derivative are clearly and closely related to the economic characteristics and risks of the underlying debt.

Credit agreement — On February 28, 2019, we entered into an amended credit and guaranty agreement comprised of a \$500 term facility (the Term A Facility), a \$450 term facility (the Term B Facility and, together with the Term A Facility, the Term Facilities) and a \$750 revolving credit facility (the Revolving Facility). The Term A Facility and the Revolving Facility were expansions of our existing facilities. On February 28, 2019, we drew the \$225 available under the Term A Facility and the \$450 available under the Term B Facility. The proceeds from the Term Facilities were used to acquire the Oerlikon Drive Systems segment of the Oerlikon Group and pay for related integration activities. On September 14, 2017, we borrowed \$275 under the Term A Facility, using the proceeds to repay our September 2021 Notes and for general corporate purposes. We were required to make equal quarterly installments on the Term A Facility on the last day of each fiscal quarter of \$8 beginning March 31, 2019 and 0.25% of the aggregate principal advances of the Term B Facility quarterly commencing on June 30, 2019. On August 30, 2019, we amended our credit and guaranty agreement, increasing the Revolving Facility to \$1,000 and extending the maturities and reducing the interest rates of both the Revolving Facility and the Term A Facility. On August 30, we borrowed \$100 on the Revolving Facility and paid down a similar amount of the Term B Facility. Outstanding borrowings on the Revolving Facility are included in short-term debt. We are now required to make quarterly installments on the Term A Facility on the last day of each fiscal quarter of \$7 beginning on September 30, 2020 and are no longer required to make quarterly installments on the Term B Facility. We may prepay some or all of the amounts under the Term Facilities without penalty. We recorded deferred fees of \$13 and \$4 related to the amendments to the Term Facilities and the Revolving Facility, respectively. The deferred fees are being amortized over the life of the applicable facilities. Deferred financing costs on our Revolving Facility are included in other noncurrent assets. The Revolving Facility and the Term A Facility mature on August 17, 2024. The Term B Facility matures on February 28, 2026.

The Term Facilities and the Revolving Facility are guaranteed by all of our wholly-owned domestic subsidiaries subject to certain exceptions (the guarantors) and are secured by a first-priority lien on substantially all of the assets of Dana and the guarantors, subject to certain exceptions.

Advances under the Term A Facility and Revolving Facility bear interest at a floating rate based on, at our option, the base rate or Eurodollar rate (each as described in the credit agreement) plus a margin as set forth below:

Total Net Leverage Ratio	Margin	
	Base Rate	Eurodollar Rate
Less than or equal to 1.00:1.00	0.25%	1.25%
Greater than 1.00:1.00 but less than or equal to 2.00:1.00	0.50%	1.50%
Greater than 2.00:1.00	0.75%	1.75%

The Term B Facility bears interest based on, at our option, the Base Rate plus 1.25% or the Eurodollar rate plus 2.25%. We have elected to pay interest on our advances under the Term Facilities at the Eurodollar Rate. The interest rate on the Term A Facility was 3.30% and the Term B Facility was 4.05%, inclusive of the applicable margins, as of December 31, 2019.

Commitment fees are applied based on the average daily unused portion of the available amounts under the Revolving Facility as set forth below:

Total Net Leverage Ratio	Commitment Fee
Less than or equal to 1.00:1.00	0.250%
Greater than 1.00:1.00 but less than or equal to 2.00:1.00	0.375%
Greater than 2.00:1.00	0.500%

Up to \$275 of the Revolving Facility may be applied to letters of credit, which reduces availability. We pay a fee for issued and undrawn letters of credit in an amount per annum equal to the applicable margin for Eurodollar rate advances based on a quarterly average availability under issued and undrawn letters of credit under the Revolving Facility and a per annum fronting fee of 0.125%, payable quarterly.

At December 31, 2019, we had no outstanding borrowings under the Revolving Facility but we had utilized \$21 for letters of credit. We had availability at December 31, 2019 under the Revolving Facility of \$979 after deducting the outstanding letters of credit.

Debt covenants — At December 31, 2019, we were in compliance with the covenants of our financing agreements. Under the Term Facilities, Revolving Facility and the senior notes, we are required to comply with certain incurrence-based covenants customary for facilities of these types and, in the case of the Term A Facility and Revolving Facility, a maintenance covenant tested on the last day of each fiscal quarter requiring us to maintain a first lien net leverage ratio not to exceed 2.00 to 1.00.

Note 16. Fair Value Measurements and Derivatives

In measuring the fair value of our assets and liabilities, we use market data or assumptions that we believe market participants would use in pricing an asset or liability including assumptions about risk when appropriate. Our valuation techniques include a combination of observable and unobservable inputs.

Fair value measurements on a recurring basis — Assets and liabilities that are carried in our balance sheet at fair value are as follows:

Category	Balance Sheet Location	Fair Value Level	Fair Value	
			December 31, 2019	December 31, 2018
Available-for-sale securities	Marketable securities	2	\$ 19	\$ 21
Currency forward contracts				
Cash flow hedges	Accounts receivable - Other	2	14	6
Cash flow hedges	Other accrued liabilities	2	2	5
Undesignated	Accounts receivable - Other	2	1	2
Undesignated	Other accrued liabilities	2	1	1
Interest rate collars	Other accrued liabilities	2	3	
Currency swaps				
Cash flow hedges	Other noncurrent liabilities	2	71	118

Fair Value Level 1 assets and liabilities reflect quoted prices in active markets. Fair Value Level 2 assets and liabilities reflect the use of significant other observable inputs.

Fair value of financial instruments — The financial instruments that are not carried in our balance sheet at fair value are as follows:

	Fair Value Level	2019		2018	
		Carrying Value	Fair Value	Carrying Value	Fair Value
Senior notes	2	\$ 1,500	\$ 1,570	\$ 1,500	\$ 1,442
Term Facility	2	823	823	265	265
Other indebtedness*	2	61	57	28	23
Total		<u>\$ 2,384</u>	<u>\$ 2,450</u>	<u>\$ 1,793</u>	<u>\$ 1,730</u>

* The carrying value includes the unamortized portion of a fair value adjustment related to a terminated interest rate swap at both dates.

Interest rate derivatives — Our portfolio of derivative financial instruments periodically includes interest rate swaps designed to mitigate our interest rate risk. As of December 31, 2019, no fixed-to-floating interest rate swaps were outstanding. However, a \$5 fair value adjustment to the carrying amount of our December 2024 Notes, associated with a fixed-to-floating interest rate swap that had been executed but was subsequently terminated during 2015, remains deferred at December 31, 2019. This amount is being amortized as a reduction of interest expense through the period ending December 2024, the scheduled maturity date of the December 2024 Notes. Approximately \$1 was amortized as a reduction of interest expense during the year ended December 31, 2019. We have outstanding interest rate collars with a notional value of \$425 that will mature in December 2021. For interest rate collars, no payments or receipts are exchanged unless interest rates rise or fall in excess of a predetermined ceiling or floor rate.

Foreign currency derivatives — Our foreign currency derivatives include forward contracts associated with forecasted transactions, primarily involving the purchases and sales of inventory through the next eighteen months, as well as currency swaps associated with certain recorded external notes payable and intercompany loans receivable and payable. Periodically, our foreign currency derivatives also include net investment hedges of certain of our investments in foreign operations.

We have executed fixed-to-fixed cross-currency swaps in conjunction with the issuance of certain notes to eliminate the variability in the functional-currency-equivalent cash flows due to changes in exchange rates associated with the forecasted principal and interest payments. All of the underlying designated financial instruments, and any subsequent replacement debt, have been designated as the hedged items in each respective cash flow hedge relationship, as shown in the table below. Designated as cash flow hedges of the forecasted principal and interest payments of the underlying designated financial instruments, or subsequent replacement debt, all of the swaps economically convert the underlying designated financial instruments into the functional currency of each respective holder. The impact of the interest rate differential between the inflow and outflow rates on all fixed-to-fixed cross-currency swaps is recognized during each period as a component of interest expense.

The following fixed-to-fixed cross-currency swaps were outstanding at December 31, 2019:

Description	Underlying Financial Instrument			Derivative Financial Instrument			
	Type	Face Amount	Rate	Designated Notional Amount	Traded Amount	Inflow Rate	Outflow Rate
June 2026 Notes	Payable	\$ 375	6.50%	\$ 375	€ 338	6.50%	5.14%
April 2025 Notes	Payable	\$ 400	5.75%	\$ 400	€ 371	5.75%	3.85%
Luxembourg Intercompany Notes	Receivable	€ 281	3.91%	€ 281	\$ 300	6.00%	3.91%

All of the swaps are expected to be highly effective in offsetting the corresponding currency-based changes in cash outflows related to the underlying designated financial instruments. Based on our qualitative assessment that the critical terms of all of the underlying designated financial instruments and all of the associated swaps match and that all other required criteria have been met, we do not expect to incur any ineffectiveness. As effective cash flow hedges, changes in the fair value of the swaps will be recorded in OCI during each period. Additionally, to the extent the swaps remain effective, the appropriate portion of AOCI will be reclassified to earnings each period as an offset to the foreign exchange gain or loss resulting from the remeasurement of the underlying designated financial instruments. See Note 15 for additional information about the June 2026 Notes and the April 2025 Notes. To the extent the swaps are no longer effective, changes in their fair values will be recorded in earnings.

The total notional amount of outstanding foreign currency forward contracts, involving the exchange of various currencies, was \$508 at December 31, 2019 and \$1,007 at December 31, 2018. The total notional amount of outstanding foreign currency swaps, including the fixed-to-fixed cross-currency swaps, was \$1,090 at December 31, 2019 and \$1,097 at December 31, 2018.

The following currency derivatives were outstanding at December 31, 2019:

Functional Currency	Traded Currency	Notional Amount (U.S. Dollar Equivalent)			Maturity
		Designated	Undesignated	Total	
U.S. dollar	Mexican peso, euro	\$ 161	\$ 16	\$ 177	Mar-21
Euro	U.S. dollar, Canadian dollar, Hungarian forint, British pound, Swiss franc, Indian rupee, Russian ruble, Chinese renminbi, Mexican peso, Australian dollar, Japanese yen	110	21	131	Jan-24
British pound	U.S. dollar, euro	2	5	7	Nov-20
Swedish krona	euro		1	1	Jan-20
South African rand	U.S. dollar, euro, Thai baht	7	4	11	Dec-20
Canadian dollar	U.S. dollar	11		11	Feb-21
Thai baht	U.S. dollar, euro	14	38	52	Sep-20
Brazilian real	U.S. dollar, euro	64	10	74	Dec-20
Indian rupee	U.S. dollar, British pound, euro		37	37	Dec-20
Chinese renminbi	U.S. dollar, Canadian dollar, euro		7	7	Feb-20
Total forward contracts		<u>369</u>	<u>139</u>	<u>508</u>	
U.S. dollar	Euro	315		315	Sep-23
Euro	U.S. dollar	775		775	Jun-26
Total currency swaps		<u>1,090</u>	<u>—</u>	<u>1,090</u>	
Total currency derivatives		<u>\$ 1,459</u>	<u>\$ 139</u>	<u>\$ 1,598</u>	

Designated cash flow hedges — With respect to contracts designated as cash flow hedges, changes in fair value during the period in which the contracts remain outstanding are reported in OCI to the extent such contracts remain effective. Effectiveness is measured by using regression analysis to determine the degree of correlation between the change in the fair value of the derivative instrument and the change in the associated foreign currency exchange rates. Changes in fair value of contracts not designated as cash flow hedges or as net investment hedges are recognized in other expense, net in the period in which the changes occur. Realized gains and losses from currency-related forward contracts associated with forecasted transactions or from other derivative instruments, including those that have been designated as cash flow hedges and those that have not been designated, are recognized in the same line item in the consolidated statement of operations in which the underlying forecasted transaction or other hedged item is recorded. Accordingly, amounts are potentially recorded in sales, cost of sales or, in certain circumstances, other expense, net.

The following table provides a summary of deferred gains (losses) reported in AOCI as well as the amount expected to be reclassified to income in one year or less:

	Deferred Gain (Loss) in AOCI		
	December 31, 2019	December 31, 2018	Gain (loss) expected to be reclassified into income in one year or less
Forward Contracts	\$ 6	\$ 2	\$ 6
Collar	(3)		
Cross-Currency Swaps	(36)	(60)	
Total	<u>\$ (33)</u>	<u>\$ (58)</u>	<u>\$ 6</u>

The following table provides a summary of the location and amount of gains or losses recognized in the consolidated statement of operations associated with cash flow hedging relationships:

Derivatives Designated as Cash Flow Hedges	2019		
	Net sales	Cost of sales	Other expense, net
Total amounts of income and expense line items presented in the consolidated statement of operations in which the effects of cash flow hedges are recorded	\$ 8,620	\$ 7,489	\$ 25
(Gain) or loss on cash flow hedging relationships			
Foreign currency forwards			
Amount of (gain) loss reclassified from AOCI into income		(9)	
Cross-currency swaps			
Amount of (gain) loss reclassified from AOCI into income			(24)
Derivatives Designated as Cash Flow Hedges	2018		
	Net sales	Cost of sales	Other expense, net
Total amounts of income and expense line items presented in the consolidated statement of operations in which the effects of cash flow hedges are recorded	\$ 8,143	\$ 6,986	\$ 29
(Gain) or loss on cash flow hedging relationships			
Foreign currency forwards			
Amount of (gain) loss reclassified from AOCI into income		(1)	
Cross-currency swaps			
Amount of (gain) loss reclassified from AOCI into income			(55)

The amounts reclassified from AOCI into income for the cross-currency swaps represent an offset to a foreign exchange loss on our foreign currency-denominated intercompany and external debt instruments.

Certain of our hedges of forecasted transactions have not formally been designated as cash flow hedges. As undesignated forward contracts, the changes in the fair value of such contracts are included in earnings for the duration of the outstanding forward contract. Any realized gain or loss on the settlement of such contracts is recognized in the same period and in the same line item in the consolidated statement of operations as the underlying transaction. The following table provides a summary of the location and amount of gains or losses recognized in the consolidated statement of operations associated with undesignated hedging relationships.

Derivatives Not Designated as Hedging Instruments	Amount of Gain (Loss) Recognized in Income		
	2019	2018	
Foreign currency forward contracts	\$ —	\$ (5)	Cost of sales
Foreign currency forward contracts	(14)	(5)	Other expense, net

During the first quarter of 2019 we settled the outstanding undesignated Swiss franc notional deal contingent forward related to the ODS acquisition for \$21, resulting in a realized loss of \$13 included in other expense, net in the first quarter of 2019.

Net investment hedges — We periodically designate derivative contracts or underlying non-derivative financial instruments as net investment hedges. With respect to contracts designated as net investment hedges, we apply the forward method, but for non-derivative financial instruments designated as net investment hedges, we apply the spot method. Under both methods, we report changes in fair value in the CTA component of OCI during the period in which the contracts remain outstanding to the extent such contracts and non-derivative financial instruments remain effective.

In 2017, we designated the principal amount of an existing non-derivative Mexican peso-denominated intercompany note payable (the "MXN-denominated intercompany note") by Dana European Holdings Luxembourg S.à r.l. to Dana de Mexico Corporacion S. de R.L. de C.V., one of our Mexican subsidiaries, as a net investment hedge of the equivalent portion of the investment in the associated Mexican operations. During the third quarter of 2018 the intercompany note was repaid and no additional net investment hedges are outstanding. On a cumulative basis, a deferred loss of \$4 has been recorded in the

CTA component of AOCI for this non-derivative instrument. Amounts recorded in CTA remain deferred in AOCI until such time as the investments in the associated subsidiaries are substantially liquidated.

Note 17. Commitments and Contingencies

Product liabilities — We had accrued \$10 and \$19 for product liability costs at December 31, 2019 and 2018. We had also recognized amounts recoverable from third parties of \$13 and \$24 at the respective dates. Payments made to claimants precede recovery of amounts from third parties, and may result in recoverable amounts in excess of the total liability. We estimate these liabilities based on current information and assumptions about the value and likelihood of the claims against us.

Environmental liabilities — Accrued environmental liabilities were \$13 and \$10 at December 31, 2019 and 2018. We consider the most probable method of remediation, current laws and regulations and existing technology in estimating our environmental liabilities.

Guarantee of lease obligations — In connection with the divestiture of our Structural Products business in 2010, leases covering three U.S. facilities were assigned to a U.S. affiliate of Metalsa. Under the terms of the sale agreement, we will guarantee the affiliate's performance under the leases, which run through June 2025, including approximately \$6 of annual payments. In the event of a required payment by Dana as guarantor, we are entitled to pursue full recovery from Metalsa of the amounts paid under the guarantee and to take possession of the leased property.

Other legal matters — We are subject to various pending or threatened legal proceedings arising out of the normal course of business or operations. In view of the inherent difficulty of predicting the outcome of such matters, we cannot state what the eventual outcome of these matters will be. However, based on current knowledge and after consultation with legal counsel, we believe that any liabilities that may result from these proceedings will not have a material adverse effect on our liquidity, financial condition or results of operations.

Note 18. Warranty Obligations

We record a liability for estimated warranty obligations at the dates our products are sold. We record the liability based on our estimate of costs to settle future claims. Adjustments to our estimated costs at time of sale are made as claim experience and other new information becomes available. Obligations for service campaigns and other occurrences are recognized as adjustments to prior estimates when the obligation is probable and can be reasonably estimated.

Changes in warranty liabilities —

	2019	2018	2017
Balance, beginning of period	\$ 75	\$ 76	\$ 66
Acquisitions	24		6
Amounts accrued for current period sales	35	37	32
Adjustments of prior estimates	2	(1)	11
Settlements of warranty claims	(35)	(35)	(42)
Currency impact		(2)	3
Balance, end of period	<u>\$ 101</u>	<u>\$ 75</u>	<u>\$ 76</u>

Note 19. Income Taxes

Income tax expense (benefit) —

	2019	2018	2017
Current			
U.S. federal and state	\$ 13	\$ 14	\$ 6
Non-U.S.	92	128	98
Total current	<u>105</u>	<u>142</u>	<u>104</u>
Deferred			
U.S. federal and state	(104)	(47)	164
Non-U.S.	(33)	(17)	15
Total deferred	<u>(137)</u>	<u>(64)</u>	<u>179</u>
Total expense (benefit)	<u>\$ (32)</u>	<u>\$ 78</u>	<u>\$ 283</u>

We record interest and penalties related to uncertain tax positions as a component of income tax expense or benefit. Net interest expense for the periods presented herein is not significant.

Income before income taxes —

	2019	2018	2017
U.S. operations	\$ (166)	\$ 26	\$ 60
Non-U.S. operations	337	468	320
Earnings before income taxes	<u>\$ 171</u>	<u>\$ 494</u>	<u>\$ 380</u>

Income tax audits — We conduct business globally and, as a result, file income tax returns in multiple jurisdictions that are subject to examination by taxing authorities throughout the world. With few exceptions, we are no longer subject to U.S. federal, state and local or foreign income tax examinations for years before 2009.

We are currently under audit by U.S. and foreign authorities for certain taxation years. When the issues related to these periods are settled, the total amounts of unrecognized tax benefits for all open tax years may be modified. Audit outcomes and the timing of the audit settlements are subject to uncertainty and we cannot make an estimate of the impact on our financial position at this time.

U.S. tax reform legislation — On December 22, 2017, the Tax Cuts and Jobs Act ("Act") was signed into law in the U.S. The Act includes a broad range of tax reforms, certain of which were required by GAAP to be recognized upon enactment. Based on our historical financial performance in the U.S., at December 31, 2017, we had a significant net deferred tax asset position. As such, with the Act's reduction of the corporate tax rate from 35% to 21%, we remeasured our net deferred tax assets at the lower corporate rate of 21% and recognized tax expense to adjust net deferred tax assets to the reduced value. The Act introduced provisions that fundamentally change the U.S. approach to taxation of foreign earnings. Under the Act, qualified dividends of foreign subsidiaries are no longer subject to U.S. tax. Under the previously-existing tax rules, dividends from foreign operations were subjected to U.S. tax, and if not considered permanently reinvested, we had recognized expense and recorded a liability for the tax expected to be incurred upon receipt of the dividend of these foreign earnings. Although the Act excludes dividends of foreign subsidiaries from taxation, it included a provision for a mandatory deemed dividend of undistributed foreign earnings at tax rates of 15.5% or 8% ("transition tax") depending on the nature of the foreign operations' assets. Companies may utilize tax attributes (including net operating losses and tax credits) to offset the transition tax. The net effect of applying the provisions of the Act on our 2017 results of operations was a non-cash charge to tax expense of \$186.

Beginning in 2018, the Act may also trigger a taxable deemed dividend to the extent that the annual earnings of our foreign subsidiaries exceed a specified threshold, based on the value of tangible foreign operating assets. The deemed dividend, if any, from this global intangible low-taxed income (GILTI) may be offset by the use of other tax attributes in that year, and specifically, the GILTI rules may impact the amount of cash tax savings that net operating losses provide. The SEC staff has indicated that a company should make and disclose certain policy elections related to accounting for GILTI. As to whether we will recognize deferred taxes for basis differences expected to reverse as GILTI or account for the effect of GILTI as a period cost when incurred, we intend to account for the tax effect of GILTI as a period cost. As to the realizability of the tax benefit provided by net operating losses, we are electing to utilize the tax law ordering approach.

Effective tax rate reconciliation —

	2019	2018	2017
U.S. federal income tax rate	21 %	21%	35%
Adjustments resulting from:			
State and local income taxes, net of federal benefit	(1)	1	1
Non-U.S. income (expense)	15	5	(11)
Credits and tax incentives	(37)	(18)	(16)
Foreign derived intangible income	(2)		
U.S. tax on non-U.S. earnings	12	3	12
Intercompany sale of certain operating assets		1	(6)
Settlement and return adjustments	(11)	6	(2)
Enacted change in tax laws	2	1	49
Pension settlement	43		
Miscellaneous items	(1)		1
Valuation allowance adjustments	(60)	(4)	11
Effective income tax rate	<u>(19)%</u>	<u>16%</u>	<u>74%</u>

During 2019, we recognized a benefit of \$22 for the release of valuation allowance in a subsidiary in Brazil based on recent history of profitability and increased income projections. A pre-tax pension settlement charge of \$259 was recorded, resulting in income tax expense of \$11 and a valuation allowance release of \$18. For the year, we also recognized benefits for the release of valuation allowance in the US of \$34 based on increased income projections and \$30 based on the development of a tax planning strategy related to federal tax credits. Partially offsetting this benefit in the US was \$6 of expense related to a US state law change. During the second quarter of 2019, we also recorded tax benefits of \$48 related to tax actions that adjusted federal tax credits.

During 2018, we recognized a benefit of \$44 related to U.S. state law changes and the development and implementation of a tax planning strategy which adjusted federal tax credits, along with federal and state net operating losses and the associated valuation allowances. We also recognized benefits of \$11 relating to the reversal of a provision for an uncertain tax position, \$5 relating to the release of valuation allowances in the US based on improved income projections and \$7 due to permanent reinvestment assertions. Partially offsetting these benefits was \$5 of expense to settle outstanding tax matters in a foreign jurisdiction.

The net effect in 2017 of applying the U.S. tax reform provisions of the Act was tax expense of \$186. This impact, which increased the effective rate for 2017 by 49%, was principally attributable to the reduction of net deferred tax assets to reflect the reduced corporate tax rate. Foreign tax credits of \$49 which were generated in 2017 but not utilized to offset the transition tax are included as a benefit in the credits and incentives component of the effective rate reconciliation, with an offsetting expense of \$49 in the valuation allowance component to recognize that such credits were not likely to be realized.

Foreign income repatriation — Prior to the U.S. tax reform provisions enacted with passage of the Act, we provided for U.S. federal income and non-U.S. withholding taxes on the earnings of our non-U.S. operations that are not considered to be permanently reinvested. As indicated above, with passage of the Act, dividends of earnings from non-U.S. operations are generally no longer subjected to U.S. income tax. Accordingly, in the fourth quarter of 2017, we reduced the previously recorded liability for U.S. income tax on expected repatriations of non-U.S. earnings. We continue to analyze and adjust the estimated impact of the non-U.S. income and withholding tax liabilities based on the amount and source of these earnings, as well as the expected means through which those earnings may be taxed. We recognized a net expense of \$3 in 2019, net benefit of \$7 in 2018, and net expense of \$2 in 2017 related to future income taxes and non-U.S. withholding taxes on repatriations from operations that are not permanently reinvested. We also paid withholding taxes of \$10, \$11 and \$7 during 2019, 2018 and 2017 related to the actual transfer of funds to the U.S. The unrecognized tax liability associated with the operations in which we are permanently reinvested is \$9 at December 31, 2019.

The earnings of our certain non-U.S. subsidiaries may be repatriated to the U.S. in the form of repayments of intercompany borrowings. Certain of our international operations had intercompany loan obligations to the U.S. totaling \$1,015 at the end of 2019. Included in this amount are intercompany loans and related interest accruals with an equivalent value of \$19 which are denominated in a foreign currency and considered to be permanently invested.

Valuation allowance adjustments — We have recorded valuation allowances in several entities where the recent history of operating losses does not allow us to satisfy the “more likely than not” criterion for the recognition of deferred tax assets. Consequently, there is no income tax expense or benefit recognized on the pre-tax income or losses in these jurisdictions as valuation allowances are adjusted to offset the associated tax expense or benefit.

When evaluating the need for a valuation allowance we consider all components of comprehensive income, and we weigh the positive and negative evidence, putting greater reliance on objectively verifiable evidence than on projections of future profitability that are dependent on actions that have not occurred as of the assessment date. We also consider changes to the historical financial results due to activities that were either new to the business or not expected to recur in the future, in order to identify the core earnings of the business. A sustained period of profitability, after considering changes to the historical results due to implemented actions and nonrecurring events, along with positive expectations for future profitability are necessary to reach a determination that a valuation allowance should be released. During the third quarter of 2019, we recognized a benefit of \$22 for the release of a valuation allowance in a subsidiary in Brazil based on recent history of profitability and increased income projections.

Deferred tax assets and liabilities — Temporary differences and carryforwards give rise to the following deferred tax assets and liabilities.

	2019	2018
Net operating loss carryforwards	\$ 258	\$ 255
Postretirement benefits, including pensions	87	98
Research and development costs	124	94
Expense accruals	81	75
Other tax credits recoverable	244	232
Capital loss carryforwards	42	40
Inventory reserves	19	13
Postemployment and other benefits	6	6
Leasing activities	46	
Total	<u>907</u>	<u>813</u>
Valuation allowances	<u>(190)</u>	<u>(281)</u>
Deferred tax assets	<u>717</u>	<u>532</u>
Unremitted earnings	(4)	(1)
Intangibles	(34)	(11)
Depreciation	(104)	(44)
Other	<u>(33)</u>	<u>(59)</u>
Deferred tax liabilities	<u>(175)</u>	<u>(115)</u>
Net deferred tax assets	<u>\$ 542</u>	<u>\$ 417</u>

Carryforwards — Our deferred tax assets include benefits expected from the utilization of net operating loss (NOL), capital loss and credit carryforwards in the future. The following table identifies the net operating loss deferred tax asset components and the related allowances that existed at December 31, 2019. Due to time limitations on the ability to realize the benefit of the carryforwards, additional portions of these deferred tax assets may become unrealizable in the future.

	Deferred Tax Asset	Valuation Allowance	Carryforward Period	Earliest Year of Expiration
Net operating losses				
U.S. federal	\$ 59	\$ —	20	2030
U.S. state	75	(37)	Various	2020
Brazil	17	(6)	Unlimited	
France	8		Unlimited	
Australia	24	(24)	Unlimited	
Italy	32	(6)	Unlimited	
Germany	6	(6)	Unlimited	
U.K.	3	(3)	Unlimited	
Canada	21	(20)	20	2022
Argentina	1	(1)	5	2024
China	12	(11)	5	2020
Total	<u>\$ 258</u>	<u>\$ (114)</u>		

In addition to the NOL carryforwards listed in the table above, we have deferred tax assets related to capital loss carryforwards of \$42 which are fully offset with valuation allowances at December 31, 2019. We also have deferred tax assets of \$244 related to other credit carryforwards which are partially offset with \$18 of valuation allowances at December 31, 2019. The capital losses can be carried forward indefinitely while the other credits are generally available for 10 to 20 years.

The use of our \$281 U.S. federal NOL as of December 31, 2019 is subject to limitation due to the change in ownership of our stock in January 2008. Generally, the application of the relevant Internal Revenue Code (IRC) provisions will release the limitation on \$84 of pre-change NOLs each year, allowing pre-change losses to offset post-change taxable income. However, there can be no assurance that trading in our shares will not affect another change in ownership under the IRC which could further limit our ability to utilize our available NOLs.

Unrecognized tax benefits — Unrecognized tax benefits are the difference between a tax position taken, or expected to be taken, in a tax return and the benefit recognized for accounting purposes. Interest income or expense, as well as penalties relating to income tax audit adjustments and settlements, are recognized as components of income tax expense or benefit. Interest of \$12 and \$11 was accrued on the uncertain tax positions at December 31, 2019 and 2018.

Reconciliation of gross unrecognized tax benefits —

	2019	2018	2017
Balance, beginning of period	\$ 107	\$ 119	\$ 117
Decrease related to expiration of statute of limitations	(10)	(4)	(3)
Decrease related to prior years tax positions		(15)	(25)
Increase related to prior years tax positions	13	8	15
Increase related to current year tax positions	9	10	15
Decrease related to settlements		(11)	
Balance, end of period	<u>\$ 119</u>	<u>\$ 107</u>	<u>\$ 119</u>

The 2017 decrease related to prior years tax positions includes \$23 that resulted from the reduction of the U.S. income tax rate from 35% to 21% since these positions represent a reduction of U.S. net operating losses. We anticipate that our gross unrecognized tax benefits will decrease by \$17 in the next twelve months upon the expected completion of examinations in various jurisdictions. The settlement of these matters will not impact the effective tax rate. Gross unrecognized tax benefits of \$90 would impact the effective tax rate if recognized. If other open matters are settled with the IRS or other taxing jurisdictions, the total amounts of unrecognized tax benefits for open tax years may be modified.

Note 20. Other Expense, Net

	2019	2018	2017
Non-service cost components of pension and OPEB costs	\$ (23)	\$ (15)	\$ (7)
Government grants and incentives	15	12	7
Foreign exchange loss	(11)	(12)	(3)
Strategic transaction expenses, net of transaction breakup fee income	(41)	(18)	(25)
Non-income tax legal judgment	6		
Gain on sale of marketable securities	1		
Gain on liquidation of foreign subsidiary	12		
Amounts attributable to previously divested/closed operations			3
Other, net	16	4	9
Other expense, net	<u>(25)</u>	<u>(29)</u>	<u>(16)</u>

Foreign exchange gains and losses on cross-currency intercompany loan balances that are not of a long-term investment nature are included above. Foreign exchange gains and losses on intercompany loans that are permanently invested are reported in OCI.

Strategic transaction expenses relate primarily to costs incurred in connection with acquisition and divestiture related activities, including costs to complete the transaction and post-closing integration costs. Strategic transaction expenses in 2019 were primarily attributable to our acquisition of ODS. Strategic transaction expenses in 2018 were primarily attributable to our bid to acquire the driveline business of GKN plc., our acquisition of an ownership interest in TM4, our pending acquisition of the ODS and integration costs associated with our acquisitions of BFP and BPT, and were partially offset by a \$40 transaction breakup fee associated with the GKN plc. transaction. Strategic transaction expenses in 2017 are primarily attributable to our acquisitions of USM - Warren, BFP and BPT. See Note 2 for additional information.

During the first quarter of 2019, we won a legal judgment regarding the methodology used to calculate PIS/COFINS tax on imports into Brazil.

During the fourth quarter of 2019, we liquidated a foreign subsidiary. The resulting non-cash gain is attributable to the recognition of accumulated currency translation adjustments.

Note 21. Revenue from Contracts with Customers

We generate revenue from selling production parts to original equipment manufacturers (OEMs) and service parts to OEMs and aftermarket customers. While we provide production and service parts to certain OEMs under awarded multi-year programs, these multi-year programs do not contain any commitment to volume by the customer. As such, individual customer releases or purchase orders represent the contract with the customer. Our customer contracts do not provide us with an enforceable right to payment for performance completed to date throughout the contract term. As such, we recognize part sales revenue at the point in time when the parts are shipped, and risk of loss has transferred to the customer. We have elected to continue to include shipping and handling fees billed to customers in revenue, while including costs of shipping and handling in costs of sales. Taxes collected from customers are excluded from revenues and credited directly to obligations to the appropriate government agencies. Payment terms with our customers are established based on industry and regional practices and generally do not exceed 180 days.

Certain of our customer contracts include rebate incentives. We estimate expected rebates and accrue the corresponding refund liability, as a reduction of revenue, at the time covered product is sold to the customer based on anticipated customer purchases during the rebate period and contractual rebate percentages. Refund liabilities are included in other accrued liabilities on our consolidated balance sheet. We provide standard fitness for use warranties on the products we sell, accruing for estimated costs related to product warranty obligations at time of sale. See Note 18 for additional information.

Contract liabilities are primarily comprised of cash deposits made by customers with cash in advance payment terms. Generally, our contract liabilities turn over frequently given our relatively short production cycles. Contract liabilities were \$23 and \$12 at December 31, 2019 and December 31, 2018. Contract liabilities are included in other accrued liabilities on our consolidated balance sheet.

Disaggregation of revenue —

The following table disaggregates revenue for each of our operating segments by geographical market:

2019	Light Vehicle	Commercial Vehicle	Off-Highway	Power Technologies	Total
North America	\$ 2,679	\$ 948	\$ 317	\$ 529	\$ 4,473
Europe	325	233	1,617	431	2,606
South America	137	312	40	20	509
Asia Pacific	468	118	386	60	1,032
Total	<u>\$ 3,609</u>	<u>\$ 1,611</u>	<u>\$ 2,360</u>	<u>\$ 1,040</u>	<u>\$ 8,620</u>
2018					
North America	\$ 2,477	\$ 908	\$ 141	\$ 580	\$ 4,106
Europe	347	271	1,423	443	2,484
South America	186	308	34	18	546
Asia Pacific	565	125	246	71	1,007
Total	<u>\$ 3,575</u>	<u>\$ 1,612</u>	<u>\$ 1,844</u>	<u>\$ 1,112</u>	<u>\$ 8,143</u>

Note 22. Segments, Geographical Area and Major Customer Information

We are a global provider of high-technology products to virtually every major vehicle manufacturer in the world. We also serve the stationary industrial market. Our technologies include drive systems (axles, driveshafts, transmissions, and wheel and track drives); motion systems (winches, slew drives, and hub drives); electrodynamic technologies (motors, inverters, software and control systems, battery-management systems, and fuel cell plates); sealing solutions (gaskets, seals, cam covers, and oil pan modules); thermal-management technologies (transmission and engine oil cooling, battery and electronics cooling, charge air cooling, and thermal-acoustical protective shielding); and digital solutions (active and passive system controls and descriptive and predictive analytics). We serve our global light vehicle, medium/heavy vehicle and off-highway markets through four operating segments – Light Vehicle Drive Systems (Light Vehicle), Commercial Vehicle Drive and Motion Systems (Commercial Vehicle), Off-Highway Drive and Motion Systems (Off-Highway) and Power Technologies, which is the center of excellence for sealing and thermal-management technologies that span all customers in our on-highway and off-highway markets. These operating segments have global responsibility and accountability for business commercial activities and financial performance.

Dana evaluates the performance of its operating segments based on external sales and segment EBITDA. Segment EBITDA is a primary driver of cash flows from operations and a measure of our ability to maintain and continue to invest in our operations and provide shareholder returns. Our segments are charged for corporate and other shared administrative costs. Segment EBITDA may not be comparable to similarly titled measures reported by other companies.

Segment information —

	External Sales	Inter-Segment Sales	Segment EBITDA	Capital Spend	Depreciation	Net Assets
2019						
Light Vehicle	\$ 3,609	\$ 124	\$ 438	\$ 179	\$ 149	\$ 1,310
Commercial Vehicle	1,611	100	138	52	37	888
Off-Highway	2,360	17	330	85	87	1,369
Power Technologies	1,040	23	117	46	30	379
Eliminations and other		(264)		64	19	221
Total	<u>\$ 8,620</u>	<u>\$ —</u>	<u>\$ 1,023</u>	<u>\$ 426</u>	<u>\$ 322</u>	<u>\$ 4,167</u>
2018						
Light Vehicle	\$ 3,575	\$ 133	\$ 398	\$ 195	\$ 124	\$ 1,264
Commercial Vehicle	1,612	107	146	27	38	577
Off-Highway	1,844	12	285	36	43	709
Power Technologies	1,112	23	149	36	30	376
Eliminations and other		(275)		31	25	83
Total	<u>\$ 8,143</u>	<u>\$ —</u>	<u>\$ 978</u>	<u>\$ 325</u>	<u>\$ 260</u>	<u>\$ 3,009</u>
2017						
Light Vehicle	\$ 3,172	\$ 130	\$ 359	\$ 279	\$ 88	\$ 1,192
Commercial Vehicle	1,412	97	116	31	41	575
Off-Highway	1,521	4	212	32	40	698
Power Technologies	1,104	17	168	32	29	380
Eliminations and other		(248)		19	22	124
Total	<u>\$ 7,209</u>	<u>\$ —</u>	<u>\$ 855</u>	<u>\$ 393</u>	<u>\$ 220</u>	<u>\$ 2,969</u>

Upon our adoption of ASU 2017-07 on January 1, 2018, we changed our measurement of segment profit to exclude the non-service cost components of pension and OPEB costs. The service cost components continue to be included as part of compensation cost and remain eligible for capitalization in inventory and other assets. Segment EBITDA amounts for 2017 were not recast due to the insignificance of the adjustments. Had amounts been recast to conform with the current presentation, segment EBITDA for 2017 would have been \$359 for Light Vehicle, \$119 for Commercial Vehicle, \$213 for Off-Highway and \$173 for Power Technologies.

Net assets include accounts receivable, inventories, other current assets, goodwill, intangibles, investments in affiliates, other noncurrent assets, net property, plant and equipment, accounts payable and current accrued liabilities.

Reconciliation of segment EBITDA to consolidated net income —

	2019	2018	2017
Segment EBITDA	\$ 1,023	\$ 978	\$ 855
Corporate expense and other items, net	(4)	(21)	(20)
Depreciation	(322)	(260)	(220)
Amortization	(17)	(10)	(13)
Non-service cost components of pension and OPEB costs	(23)	(15)	
Restructuring charges, net	(29)	(25)	(14)
Stock compensation expense	(19)	(16)	(23)
Strategic transaction expenses, net of transaction breakup fee income	(41)	(18)	(25)
Acquisition related inventory adjustments	(13)		(14)
Non-income tax legal judgment	6		
Other items	(11)	(17)	(11)
Gain (loss) on disposal group held for sale		3	(27)
Gain on liquidation of foreign subsidiary	12		
Impairment of goodwill and indefinite-lived intangible asset	(6)	(20)	
Amounts attributable to previously divested/closed operations	(5)		2
Pension settlement charges	(259)		
Earnings before interest and income taxes	292	579	490
Loss on extinguishment of debt	(9)		(19)
Interest expense	122	96	102
Interest income	10	11	11
Earnings before income taxes	171	494	380
Income tax expense (benefit)	(32)	78	283
Equity in earnings of affiliates	30	24	19
Net income	<u>\$ 233</u>	<u>\$ 440</u>	<u>\$ 116</u>

Reconciliation of segment net assets to consolidated total assets —

	2019	2018
Segment net assets	\$ 4,167	\$ 3,009
Accounts payable and other current liabilities	1,723	1,672
Other current and long-term assets	1,330	1,237
Consolidated total assets	<u>\$ 7,220</u>	<u>\$ 5,918</u>

Geographic information — Of our 2019 consolidated net sales, the U.S., Italy and Germany account for 47%, 14% and 6%, respectively. No other country accounted for more than 5% of our consolidated net sales during 2019. Sales are attributed to the location of the product entity recording the sale. Long-lived assets represent property, plant and equipment.

	Net Sales			Long-Lived Assets		
	2019	2018	2017	2019	2018	2017
North America						
United States	\$ 4,069	\$ 3,613	\$ 3,209	\$ 972	\$ 860	\$ 828
Other North America	404	493	479	105	87	82
Total	<u>4,473</u>	<u>4,106</u>	<u>3,688</u>	<u>1,077</u>	<u>947</u>	<u>910</u>
Europe						
Italy	1,186	971	762	248	138	122
Germany	478	513	473	131	133	149
Other Europe	942	1,000	919	265	241	211
Total	<u>2,606</u>	<u>2,484</u>	<u>2,154</u>	<u>644</u>	<u>512</u>	<u>482</u>
South America	509	546	500	126	129	153
Asia Pacific	1,032	1,007	867	418	262	262
Total	<u>\$ 8,620</u>	<u>\$ 8,143</u>	<u>\$ 7,209</u>	<u>\$ 2,265</u>	<u>\$ 1,850</u>	<u>\$ 1,807</u>

Sales to major customers — Ford is the only individual customer to whom sales have exceeded 10% of our consolidated sales in each of the past three years. Sales to Ford were \$1,753 (20%) in 2019, \$1,646 (20%) in 2018 and \$1,553 (22%) in 2017. Sales to FCA (via a directed supply relationship) exceeded the threshold in 2019 at \$988 (11%) and 2018 at \$911 (11%).

Note 23. Equity Affiliates

We have a number of investments in entities that engage in the manufacture and supply of vehicular parts (primarily axles, driveshafts, wheel-end braking systems) and motors for electric vehicles and industrial applications.

Dividends received from equity affiliates were \$21, \$20 and \$16 in 2019, 2018 and 2017.

Equity method investments exceeding \$5 at December 31, 2019 —

	<u>Ownership Percentage</u>	<u>Investment</u>
Dongfeng Dana Axle Co., Ltd. (DDAC)	50%	\$ 97
Bendix Spicer Foundation Brake, LLC	20%	54
Axles India Limited	48%	10
Ashwoods Innovations Ltd.	63%	8
Taiway Ltd	28%	5
All others as a group		<u>6</u>
Investments in equity affiliates		180
Investment in affiliates carried at cost		<u>2</u>
Investment in affiliates		<u><u>\$ 182</u></u>

The decrease in equity method investments from the prior year is due to our acquisition of PEBL's interest in PEPS. The acquisition of PEBL's interest in PEPS, along with our existing ownership interest in PEPS through our TM4 subsidiary, provides us with a controlling financial interest in PEPS. See Note 2 for additional information.

As part of the ODS acquisition, we acquired an ownership interest in Ashwoods Innovations Ltd. (Ashwoods). The minority shareholders in this entity have substantive participating rights that allow them to effectively participate in the decisions made in the ordinary course of business that are significant to its operations. Due to these factors, we do not have control over this entity and therefore account for this investment under the equity method of accounting. Our equity method investment in Ashwoods is included in the net assets of our Off-Highway operating segment.

Our equity method investments in DDAC, Bendix Spicer Foundation Brake, LLC and Axles India Limited are included in the net assets of our Commercial Vehicle operating segment. Our equity method investment in Taiway Ltd. is included in the net assets of our Light Vehicle segment.

The carrying value of our equity method investments at December 31, 2019 was \$22 more than our share of the affiliates' book value, including \$19 attributable to goodwill. The difference between the investment carrying value and the amount of underlying equity in assets, excluding goodwill, is being amortized on a straight-line basis over the underlying assets' estimated useful lives of five to forty-five years.

Dana Incorporated
Quarterly Results (Unaudited)
(In millions, except per share amounts)

2019	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net sales	\$ 2,163	\$ 2,306	\$ 2,164	\$ 1,987
Gross margin	\$ 300	\$ 326	\$ 282	\$ 223
Net income (loss)	\$ 101	\$ (66)	\$ 112	\$ 86
Net income (loss) attributable to the parent company	\$ 98	\$ (68)	\$ 111	\$ 85
Net income (loss) per share available to parent company common stockholders				
Basic	\$ 0.68	\$ (0.47)	\$ 0.77	\$ 0.59
Diluted	\$ 0.68	\$ (0.47)	\$ 0.77	\$ 0.58
<hr/>				
2018	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net sales	\$ 2,138	\$ 2,054	\$ 1,978	\$ 1,973
Gross margin	\$ 307	\$ 308	\$ 286	\$ 256
Net income	\$ 111	\$ 127	\$ 96	\$ 106
Net income attributable to the parent company	\$ 108	\$ 124	\$ 95	\$ 100
Net income per share available to parent company common stockholders				
Basic	\$ 0.74	\$ 0.85	\$ 0.66	\$ 0.69
Diluted	\$ 0.73	\$ 0.85	\$ 0.65	\$ 0.69

Note: Gross margin is net sales less cost of sales.

Net income for the first quarter of 2019 includes \$16 of net income tax benefits related to discrete items. Net loss for the second quarter of 2019 includes a \$258 pre-tax pension settlement charge related to the termination of one of our U.S. defined benefit pension plans and \$87 of net income tax benefits related to discrete items. Net income for the third quarter of 2019 includes \$22 of income tax benefit related to a discrete item. Net income for the fourth quarter of 2019 includes a \$6 pre-tax goodwill impairment charge and a \$9 pre-tax loss on extinguishment of debt.

Net income for the second quarter of 2018 includes a \$20 pre-tax charge to fully impair intangible assets used in research and development activities and \$39 of net income tax benefits related to discrete items. See Note 4 and Note 19 for additional information.

Dana Incorporated
Schedule II
Valuation and Qualifying Accounts and Reserves
(In millions)

Amounts deducted from assets in the balance sheets —

	Balance at beginning of period	Amounts charged (credited) to income	Allowance utilized	Adjustments arising from change in currency exchange rates and other items	Balance at end of period
Accounts Receivable - Allowance for Doubtful					
Accounts					
2019	\$ 9	\$ 2	\$ —	\$ (2)	\$ 9
2018	\$ 8	\$ 3	\$ —	\$ (2)	\$ 9
2017	\$ 6	\$ 2	\$ —	\$ —	\$ 8
Inventory Reserves					
2019	\$ 51	\$ 25	\$ (16)	\$ 4	\$ 64
2018	\$ 53	\$ 15	\$ (11)	\$ (6)	\$ 51
2017	\$ 51	\$ 10	\$ (11)	\$ 3	\$ 53
Deferred Tax Assets - Valuation Allowance					
2019	\$ 281	\$ (102)	\$ —	\$ 11	\$ 190
2018	\$ 301	\$ (31)	\$ —	\$ 11	\$ 281
2017	\$ 285	\$ 29	\$ —	\$ (13)	\$ 301

Item 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Disclosure controls and procedures — Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, (the Exchange Act)) as of the end of the period covered by this report. Based on such evaluations, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, our disclosure controls and procedures are effective.

Management's report on internal control over financial reporting — Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our internal control over financial reporting based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Considering Securities and Exchange Commission guidance, management excluded from its assessment of internal control over financial reporting Nordresa Motors, Inc. (Nordresa) acquired on August 26, 2019, Prestolite E-Propulsion Systems (Beijing) Limited (PEPS) acquired on June 6, 2019, Oerlikon Drive Systems (ODS) acquired on February 28, 2019, and SME acquired on January 11, 2019. Nordresa, PEPS, ODS and SME's total assets and total revenues excluded from management's assessment represent approximately 0.1%, 0.7%, 10.7% and 0.2% of total assets, respectively and approximately 0.0%, 0.1%, 7.3% and 0.2% of total revenues, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2019. Based on this evaluation, management has concluded that, as of December 31, 2019, our internal control over financial reporting was effective.

Because of 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 risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, has audited the effectiveness of our internal control over financial reporting as of December 31, 2019, as stated in its report which is included herein.

Changes in internal control over financial reporting — There has been no change in our internal control over financial reporting during the quarter ended December 31, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Dana has adopted Standards of Business Conduct that apply to all of its officers and employees worldwide. Dana also has adopted Standards of Business Conduct for the Board of Directors. Both documents are available on Dana's Internet website at <http://www.dana.com/investors>.

The remainder of the response to this item will be included under the sections captioned "Corporate Governance," "Board Leadership Structure," "Succession Planning," "Information About the Nominees," "Risk Oversight," "Committees and Meetings of Directors," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" of Dana's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 22, 2020, which sections are hereby incorporated herein by reference.

Item 11. Executive Compensation

The response to this item will be included under the sections captioned "Compensation Committee Interlocks and Insider Participation," "Compensation of Executive Officers," "Compensation Discussion and Analysis," "Compensation of Directors," "Officer Stock Ownership Guidelines," "Compensation Committee Report," "Summary Compensation Table,"

“Grants of Plan-Based Awards at Fiscal Year-End,” “Outstanding Equity Awards at Fiscal Year-End,” “Option Exercises and Stock Vested During Fiscal Year,” “Pension Benefits,” “Nonqualified Deferred Compensation at Fiscal Year-End,” “Executive Agreements” and “Potential Payments and Benefits Upon Termination or Change in Control” of Dana’s definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 22, 2020, which sections are hereby incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The response to this item will be included under the section captioned “Security Ownership of Certain Beneficial Owners and Management” of Dana’s definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 22, 2020, which section is hereby incorporated herein by reference.

Equity Compensation Plan Information

The following table contains information at December 31, 2019 about shares of stock which may be issued under our equity compensation plans, all of which have been approved by our shareholders.

(Shares in millions) Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights(1)	Weighted Average Exercise Price of Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights(2)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	3.4	\$ 16.13	4.4
Equity compensation plans not approved by security holders			
Total	3.4	\$ 16.13	4.4

Notes:

- (1) In addition to stock options, restricted stock units and performance shares have been awarded under Dana's equity compensation plans and were outstanding at December 31, 2019.
- (2) Calculated without taking into account the 2.7 shares of common stock subject to outstanding restricted stock and performance share units that become issuable as those units vest since they have no exercise price and no cash consideration or other payment is required for such shares.

Item 13. Certain Relationships and Related Transactions and Director Independence

The response to this item will be included under the sections captioned “Director Independence and Transactions of Directors with Dana,” “Transactions of Executive Officers with Dana” and “Information about the Nominees” of Dana’s definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 22, 2020, which sections are hereby incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The response to this item will be included under the section captioned "Independent Registered Public Accounting Firm" of Dana's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 22, 2020, which section is hereby incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

10-K
Pages

(a) List of documents filed as a part of this report:

1.	Consolidated Financial Statements:	
	Report of Independent Registered Public Accounting Firm	<u>44</u>
	Consolidated Statement of Operations	<u>47</u>
	Consolidated Statement of Comprehensive Income	<u>48</u>
	Consolidated Balance Sheet	<u>49</u>
	Consolidated Statement of Cash Flows	<u>50</u>
	Consolidated Statement of Stockholders' Equity	<u>51</u>
	Notes to the Consolidated Financial Statements	<u>52</u>
2.	Quarterly Results (Unaudited)	<u>99</u>
3.	Financial Statement Schedule:	
	Valuation and Qualifying Accounts and Reserves (Schedule II)	<u>100</u>
	All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.	
4.	Exhibits	

No.	Description
2.1	<u>Share and Loan Purchase Agreement, dated July 29, 2018 among OC Oerlikon Corporation AG, Pfäffikon and Dana International S.à r.l. Filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed August 2, 2018 and incorporated herein by reference.</u>
3.1	<u>Third Amended and Restated Certification of Incorporation of Dana Incorporated. Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed May 2, 2018 and incorporated herein by reference.</u>
3.2	<u>Amended and Restated Bylaws of Dana Incorporated, effective as of May 2, 2018. Filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed May 2, 2018 and incorporated herein by reference.</u>
4.1	<u>Specimen Common Stock Certificate. Filed as Exhibit 4.1 to Registrant's Registration Statement on Form 8-A dated January 31, 2008, and incorporated herein by reference.</u>
4.2	<u>Indenture, dated as of January 28, 2011, among Dana and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.6 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, and incorporated herein by reference.</u>
4.3	<u>Second Supplemental Indenture, dated as of August 2, 2013, with respect to the Indenture, dated as of January 28, 2011, between Dana Holding Corporation and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated August 5, 2013, and incorporated herein by reference.</u>
4.4	<u>Third Supplemental Indenture, dated as of December 9, 2014, with respect to the Indenture, dated as of January 28, 2011, between Dana Holding Corporation and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated December 9, 2014, and incorporated herein by reference.</u>
4.5	<u>Indenture, dated as of May 27, 2016, among Dana Luxembourg Financing S.à r.l., Dana Holding Corporation and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated May 27, 2016, and incorporated herein by reference.</u>
4.6	<u>Indenture, dated as of April 4, 2017, among Dana Luxembourg Financing S.à r.l., Dana Incorporated and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated April 4, 2017, and incorporated herein by reference.</u>
4.7	<u>Fourth Supplemental Indenture, dated as of November 20, 2019, with respect to the Indenture, dated January 28, 2011, between Dana Incorporated and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated November 20, 2019, and incorporated herein by reference.</u>
4.8	<u>Fifth Supplemental Indenture, dated as of November 21, 2019, with respect to the Indenture, dated January 28, 2011, between Dana Incorporated and Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated November 22, 2019 and incorporated herein by reference.</u>
4.9	<u>Description of Dana Incorporated Common Stock. Filed with this Report.</u>
10.1*	<u>Executive Employment Agreement dated August 11, 2015, by and between James K. Kamsickas and Dana Incorporated. Filed as Exhibit 10.1 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, and incorporated herein by reference.</u>
10.2*	<u>Form of Proprietary Interest Protection and Non-Solicitation Agreement. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011, and incorporated herein by reference.</u>
10.3*	<u>Dana Incorporated Supplemental Executive Retirement Plan. Filed as Exhibit 10.4 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, and incorporated herein by reference.</u>
10.4*	<u>Dana Incorporated 2017 Omnibus Incentive Plan. Filed as Exhibit 10.1 to Registrant's Form S-8 Registration Statement dated August 1, 2017, and incorporated herein by reference.</u>
10.5*	<u>Form of Indemnification Agreement. Filed as Exhibit 10.4 to Registrant's Current Report on Form 8-K dated February 6, 2008, and incorporated herein by reference.</u>
10.6*	<u>Form of Restricted Stock Unit Award Agreement for Non-Employee Directors. Filed as Exhibit 10.23 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, and incorporated herein by reference.</u>
10.7*	<u>Form of Option Agreement. Filed as Exhibit 10.15 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, and incorporated herein by reference.</u>
10.8*	<u>Form of Restricted Stock Unit Agreement. Filed as Exhibit 10.16 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, and incorporated herein by reference.</u>
10.9*	<u>Form of Performance Share Agreement. Filed as Exhibit 10.17 to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, and incorporated herein by reference.</u>

- 10.10* Dana Incorporated Executive Perquisite Plan. Filed as Exhibit 10.4 to Registrant's Current Report on Form 8-K dated April 18, 2008, and incorporated herein by reference.
- 10.11* Dana Incorporated Executive Severance Plan. Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated June 24, 2008, and incorporated herein by reference.
- 10.12 Amended and Restated Change in Control Severance Plan, effective as of April 30, 2018. Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated April 30, 2018, and incorporated herein by reference.
- 10.13 Revolving Credit and Guaranty Agreement, dated as of June 9, 2016, among Dana Incorporated, as borrower, the guarantors party thereto, Citibank, N.A., as administrative agent and collateral agent, and the other lenders party thereto. Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated June 9, 2016, and incorporated herein by reference.
- 10.14 Revolving Facility Security Agreement, dated as of June 9, 2016, from Dana Incorporated and the other guarantors referred to therein, as guarantors, to Citibank, N.A., as collateral agent. Filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated June 9, 2016, and incorporated herein by reference.
- 10.15 Amendment No. 1 to Revolving Credit and Guaranty Agreement and Amendment No. 1 to the Revolving Facility Security Agreement, dated as of August 17, 2017, among Dana Incorporated, certain domestic subsidiaries of Dana Incorporated party thereto, Citibank, N.A., as administrative agent and collateral agent. Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated August 18, 2017, and incorporated herein by reference.
- 10.16 Amendment No. 2 to Credit and Guaranty Agreement, dated as of February 28, 2019, among Dana Incorporated, as borrower, the guarantors party thereto, the lenders party thereto and Citibank, N.A., as administrative agent and collateral agent. Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated March 1, 2019, and incorporated herein by reference.
- 10.17 Amendment No. 3 to Credit and Guaranty Agreement, dated as of August 30, 2019, among Dana Incorporated, as a borrower, Dana International Luxembourg S.à r.l., as a borrower, the guarantors party thereto, the lenders party thereto and Citibank, N.A., as administrative agent and collateral agent. Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated September 4, 2019, and incorporated herein by reference.
- 21 List of Consolidated Subsidiaries of Dana Incorporated. Filed with this Report.
- 23 Consent of PricewaterhouseCoopers LLP. Filed with this Report.
- 24 Power of Attorney. Filed with this Report.
- 31.1 Rule 13a-14(a)/15d-14(a) Certification by Chief Executive Officer. Filed with this Report.
- 31.2 Rule 13a-14(a)/15d-14(a) Certification by Chief Financial Officer. Filed with this Report.
- 32 Section 1350 Certification of Periodic Report (pursuant to Section 906 of the Sarbanes-Oxley Act of 2002). Filed with this Report.
- 101 The following materials from Dana Incorporated's Annual Report on Form 10-K for the year ended December 31, 2019, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Statement of Operations, (ii) the Consolidated Statement of Comprehensive Income, (iii) the Consolidated Balance Sheet, (iv) the Consolidated Statement of Cash Flows, (v) the Consolidated Statement of Shareholders' Equity and (vi) Notes to the Consolidated Financial Statements. Filed with this Report.
- 104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).
- * Management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

DANA INCORPORATED

Date: February 14, 2020

By: /s/ James K. Kamsickas

James K. Kamsickas

Chairman, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on this 14th day of February 2020 by the following persons on behalf of the registrant and in the capacities indicated, including a majority of the directors.

Signature

Title

/s/ James K. Kamsickas

James K. Kamsickas

Chairman, President and Chief Executive Officer
(Principal Executive Officer)

/s/ Jonathan M. Collins

Jonathan M. Collins

Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

/s/ James D. Kellett

James D. Kellett

Vice President and Chief Accounting Officer
(Principal Accounting Officer)

/s/ Rachel A. Gonzalez*

Rachel A. Gonzalez

Director

/s/ Virginia A. Kamsky*

Virginia A. Kamsky

Director

/s/ Bridget E. Karlin*

Bridget E. Karlin

Director

/s/ Michael J. Mack, Jr.*

Michael J. Mack, Jr.

Director

/s/ Raymond E. Mabus, Jr.*

Raymond E. Mabus, Jr.

Director

/s/ R. Bruce McDonald*

R. Bruce McDonald

Director

/s/ Diarmuid B. O'Connell*

Diarmuid B. O'Connell

Director

/s/ Keith E. Wandell*

Keith E. Wandell

Director

*By: /s/ Douglas H. Liedberg

Douglas H. Liedberg, Attorney-in-Fact

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, James K. Kamsickas, certify that:

1. I have reviewed this Annual Report on Form 10-K of Dana Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 14, 2020

/s/ James K. Kamsickas

James K. Kamsickas

Chairman, President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Jonathan M. Collins, certify that:

1. I have reviewed this Annual Report on Form 10-K of Dana Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 14, 2020

/s/ Jonathan M. Collins

Jonathan M. Collins

Executive Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Annual Report of Dana Incorporated (Dana) on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the Report), each of the undersigned officers of Dana certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to such officer's knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Dana as of the dates and for the periods expressed in the Report.

Date: February 14, 2020

/s/ James K. Kamsickas

James K. Kamsickas

Chairman, President and Chief Executive Officer

/s/ Jonathan M. Collins

Jonathan M. Collins

Executive Vice President and Chief Financial Officer

Investor Information

World Headquarters

Dana Incorporated

3939 Technology Drive
Maumee, OH 43537-7000, USA
Telephone: 419-887-3000
Fax: 419-887-5200

Annual Meeting Information

The 2020 Annual Meeting of Shareholders will be held at the company's world headquarters in Maumee, Ohio, on April 22, 2020.

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP

406 Washington St., Suite 200
Toledo, OH, 43604, USA

Form 10-K and Other Reports

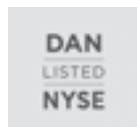
Dana's Annual Report on Form 10-K and its Proxy Statement may be accessed online at www.dana.com/investors, or printed copies may be obtained without charge by writing:

Investor Relations Dana Incorporated

P.O. Box 1000
Maumee, OH 43537-7000, USA

or by calling Dana's Investor Relations Department at 800-537-8823.

Stock Listing



The New York Stock Exchange is the principal market for Dana common stock.

Ticker Symbol: DAN

Shareholder Services

Inquiries related to shareholder records, such as change of name, address, or ownership of stock, should be directed to the transfer agent and registrar:

EQ Shareowner Services

Telephone: 800-468-9716 toll free
or direct: 651-450-4064

Written Requests:
EQ Shareowner Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, MN 55120, USA

EQ Shareowner Services website:
www.shareowneronline.com

Investor Services

Go to www.dana.com/investors to find the latest investor relations information about Dana, including stock quotes, news releases, and financial data.

Requests for information may be directed to:

Investor Relations

Dana Incorporated

P.O. Box 1000
Maumee, OH 43537-7000, USA

E-mail: InvestorRelations@dana.com
Dana's Investor Line: 800-537-8823

Through this 24-hour phone service, a caller may leave his or her name with a message, and the call will be returned by a Dana representative.



People Finding A Better Way®

DANA.COM



Leading the Charge in Sustainability

Dana is committed to creating a more sustainable future. This year's annual report has been printed on 100% recycled paper.