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, 2022 ☐ 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** 26-1531856 (State of incorporation) (IRS Employer Identification Number) 3939 Technology Drive, Maumee, OH 43537 (Address of principal executive offices) (Zip Code) Registrant's telephone number, including area code: (419) 887-3000 Securities registered pursuant to Section 12(b) of the Act: Title of each class **Trading Symbol** Name of exchange on which registered Common stock, par value \$0.01 per share New York Stock Exchange DAN 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 $\sqrt{}$ 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. \Box Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. \Box

There were 143,373,278 shares of the registrant's common stock outstanding at January 31, 2023.

June 30, 2022 was \$2,001,518,198.

by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes \Box

DOCUMENTS INCORPORATED BY REFERENCE

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

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received

No ✓

Portions of the definitive Proxy Statement to be delivered to stockholders in connection with the Annual Meeting of Shareholders to be held on April 26, 2023 are incorporated by reference into Part III.



DANA INCORPORATED FORM 10-K YEAR ENDED DECEMBER 31, 2022

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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), with history dating back to 1904, is headquartered in Maumee, Ohio. 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, transmissions, sealing and thermal products to electrifications products including motors, inverters, controllers, e-sealing, e-thermal and digital solutions, we enable the propulsion of internal combustion engine (ICE), hybrid and electric powered vehicles by supplying nearly every major vehicle manufacturer in the world. We also serve the stationary industrial market. As of December 31, 2022 we employed approximately 41,800 people and operated in 31 countries.

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, 2022, 2021 and 2020 are as follows:

	2022			202	21		0	
	Dollars	% of Total		Dollars	% of Total	Dollars		% of Total
Light Vehicle	\$ 4,090	40.3%	\$	3,773	42.2%	\$	3,038	42.8%
Commercial Vehicle	1,979	19.5%		1,532	17.1%		1,185	16.7%
Off-Highway	2,946	29.0%		2,593	29.0%		1,966	27.6%
Power Technologies	1,141	11.2%		1,047	11.7%		917	12.9%
Total	\$ 10,156		\$	8,945		\$	7,106	

Refer to Segment Results of Operations in Item 7 and Note 20 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, 2022:

Segment	Markets	Products	Largest Customers
Light Vehicle	Light vehicle market: Light trucks (full frame) Sport utility vehicles Crossover utility vehicles Utility vans Sports cars Super sports cars	Axles Driveshafts ICE, hybrid and e-transmissions e-Axle systems e-Transmission systems Inverters Motors Controllers	Ford Motor Company Stellantis N.V.* Toyota Motor Corporation Renault-Nissan-Mitsubishi Alliance Tata Motors Ltd (including Jaguar Land Rover) General Motors Company
Commercial Vehicle	Commercial vehicle market: Medium duty trucks Heavy duty trucks Buses Specialty vehicles	Axles Driveshafts Hybrid and e-transmissions e-Axle systems e-Transmission systems Inverters Motors Controllers	PACCAR Inc Traton SE AB Volvo Daimler Truck AB Ford Motor Company CNH Industrial N.V.
Off-Highway	Off-Highway market: Construction Agricultural Mining Forestry Material handling Industrial stationary Lawn care and recreational	Axles, hub drives and driveshafts ICE, hybrid and e-transmissions e-Axle systems e-Transmission systems e-Hub drive systems Inverters Motors Controllers	Deere & Company CNH Industrial N.V. AGCO Corporation Oshkosh Corporation Manitou Group Sandvik AB
Power Technologies	Light vehicle market Commercial vehicle market Off-Highway market Industrial stationary market	ICE sealing and thermal e-Sealing e-Thermal cooling systems Battery cooling Electronics cooling Hydrogen fuel cell cooling New power industrial cooling	Ford Motor Company General Motors Company Stellantis N.V. Cummins Inc. Volkswagen AG (including Traton SE) Mercedes-Benz Group

^{*} Via a directed supply relationship

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	Eur	rope	South America	Asia Pacific
Canada	Belgium	Netherlands	Argentina	Australia
México	Finland	Norway	Brazil	China
United States	France	South Africa	Colombia	India
	Germany	Spain	Ecuador	Japan
	Hungary	Sweden		New Zealand
	Ireland	Switzerland		Singapore
	Italy	Turkey		South Korea
	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 \$5,488, or 54%, of our 2022 consolidated sales of \$10,156. A summary of sales and long-lived assets by geographic region can be found in Note 20 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 Stellantis N.V. (Stellantis) were the only individual customers accounting for 10% or more of our consolidated sales in 2022. As a percentage of total sales from operations, our sales to Ford were approximately 19% in 2022, 19% in 2021 and 20% in 2020. Our sales to Stellantis (via a directed supply relationship) were approximately 11% in 2022, 12% in 2021 and 12% in 2020. Volkswagen AG (including Traton SE), Deere & Company and PACCAR, Inc were our third, fourth and fifth largest customers in 2022. Our 10 largest customers collectively accounted for approximately 57% of our sales in 2022.

Loss of all or a substantial portion of our sales to Ford, Stellantis 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, bearings, and batteries and related rare earth materials. 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 market demand, capacity limitations, supply chain disruptions, 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 changeovers that occur during this period. Additionally, third-quarter production schedules in Europe are typically impacted by 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, 2022:

Segment	Prin	Principal Competitors									
Light Vehicle	American Axle & Manufacturing Holdings, Inc. BorgWarner Inc. Hofer Powertrain GmbH Jing-Jin Electric Technologies Co. Ltd. Linamar Corporation	Magna International Inc. Schaeffler AG Valeo SE ZF Friedrichshafen AG Vertically integrated OEM operations									
Commercial Vehicle	Allison Transmission Holdings, Inc. BorgWarner Inc. Cummins Inc. Danfoss A/S Eugen Klein GmbH	Hendrickson Holdings, LLC. Tirsan Kardan A.Ş. ZF Friedrichshafen AG Vertically integrated OEM operations									
Off-Highway	Bonfiglioli Riduttori S.p.A. Carraro S.p.A. Comer Industries S.p.A. Curtis Instruments Danfoss A/S	Kessler & Co. SEW-Eurodrive GmbH Zapi S.p.A. ZF Friedrichshafen AG Vertically integrated OEM operations									
Power Technologies	Denso Corporation ElringKlinger AG Freudenberg NOK Group Hanon Systems	Mahle GmbH Tenneco Inc. Valeo SE YinLun Co., LTD									

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 in key markets. 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 or subject to pending applications in many jurisdictions. For example, our Spicer®, Spicer ElectrifiedTM, Victor Reinz®, Long®, GrazianoTM and Dana TM4TM® trademarks are widely recognized in their market segments. We regard our trademarks as valuable assets and strategically pursue available protection of these rights.

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 integrate 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, 2022, we had seven stand-alone technical and engineering centers and eighteen additional sites at which we conduct research and development activities. Our research and development costs were \$201 in 2022, \$178 in 2021 and \$146 in 2020. Total engineering expenses including research and development were \$321 in 2022, \$297 in 2021 and \$246 in 2020. During 2020, we reduced our total engineering spend in response to the COVID pandemic, taking advantage of various government programs and subsidies in the countries in which we operate. We also made the strategic decision to focus our engineering spend more heavily on research and development activities, continuing to progress key electrification initiatives despite the global pandemic. Our focus on key electrification initiatives continued during 2021 and 2022.

Our research and development is targeted to create unique value for our customers. Our technologies are enabling the electrification of vehicles and accessories to improve efficiency and reduce the impact of carbon emissions. Our advanced drivelines are more efficient than ever before and include mechatronic systems to enhance performance. Our power technologies group is also developing new ways to keep batteries and power electronics at optimum temperatures to improve their efficiency and operation. Together the collaborative teamwork between our four business units enable Dana to differentiate by developing complete in-house 4-in-1 electrified propulsion systems, including motors, inverters, axles/transmissions and thermal management solutions. We have developed innovative fuel cell products to support the new-energy hydrogen vehicles and industrial stationary markets.

Human Capital

Our talented people power a customer-centric organization that is continuously improving the performance and efficiency of vehicles and machines around the globe. The following table summarizes our employees by operating segment and geographical region as of December 31, 2022:

Segment	Employees	Region	Employees
Light Vehicle	14,100	North America	15,800
Commercial Vehicle	7,800	Europe	11,300
Off-Highway	12,100	South America	4,800
Power Technologies	5,700	Asia Pacific	9,900
Technical and administrative	2,100	Total	41,800
Total	41,800		

Safety – The health and safety of employees remain our highest priority and we believe our company has an essential responsibility to safeguard life, health, property, and the environment for the well-being of all involved. Through a commitment to proactive processes, we actively promote and pursue safety in all that we do. This is achieved through a consistent commitment to excellence in, health, safety, security management, and risk elimination. Dana's health, safety and security programs ensure that all employees receive training, guidance, and assistance in safety awareness and risk prevention. An implemented, verified, audited, and communicated occupational health and safety management system reflects Dana's internal and external commitment to all our stakeholders in identifying and reducing the health and safety risk of our employees around the world. Dana has developed robust safety systems, including detailed work instructions and processes for standard and non-standard work, as well as regular layer process audits to ensure that we carefully consider safety in each of our work functions.

COVID Response – The company's response to the COVID pandemic has been comprehensive, swift, and decisive with an emphasis on health and safety while maintaining production for our customers. Our top priorities are to protect our employees, communities, customers, and our future. For our employees, we continue to monitor local COVID protocols throughout our global footprint to ensure their health and safety including, but not limited to: restricting access to all facilities; continued strong cleaning and disinfecting protocols; and as appropriate: use of personal protection equipment; adhering to social distancing guidelines; remote work; and restricting travel.

Diversity, Equity and Inclusion – Our vision is to maintain a diverse and inclusive, global organization that develops, fosters, and attracts great people whose perspectives are encouraged, heard, valued, and supported. We are committed to advancing and reflecting the communities we serve. At Dana, we are proud to have an employee-centric organization that challenges the status quo by ensuring our business policies, processes and culture allow us to continuously build upon our diverse strengths to further grow a strong, inclusive work environment. Dana remains focused on cultivating an inclusive culture that embraces diversity and equity to enable Dana people to contribute to their full potential. To achieve this, our diversity, equity, and inclusion strategy is guided by five pillars: leadership commitment; diversity representation; awareness, education and development; employee and community growth; and cross-functional collaboration.

Retention and Employee Development – Dana believes the development of its people is critical to the company's success. The company empowers individuals to lead their development by articulating their professional, personal, and career growth aspirations to their manager. Development of all Dana people is strongly encouraged and should be considered each year as a part of their goals. Fair access to development opportunities to maintain a sustainable, diverse, and high-performance pipeline of talent is supported by Dana leaders at all levels of the organization. The company also provides regular training for our associates across the globe, providing the opportunity to enhance their skills and keep pace with technological change and offers a mentorship program to help guide and coach employees to ensure the company is developing a diverse leadership talent pool. This development is supported and measured with robust performance management and development plans that encourages employees to continuously improve upon their past performance and build on critical skills the company requires to remain competitive.

Business Resource Groups – Dana has a network of Business Resource Groups (BRGs) to empower employees and enhance Dana's ability to develop, retain, and attract top talent. These BRGs are executive leadership-supported, employee-led initiatives with the mission to inspire growth and innovation and foster diversity for all employees. BRGs provide employees opportunities for development, mentoring, networking, and utilizing their talents in ways that positively impact the business. Our BRGs currently include:

- Dana Women's Network (DAWN) The company's DAWN group is focused on providing professional networking and career development for women at Dana. They also promote activities that engage Dana's senior leaders to better understand how the company can support women at work.
- African American Resource Group (AARG) Dana's AARG group is committed to supporting the career development of African American talent through thought-leadership workshops and community events. The group provides Dana insight to the best practices for sourcing and retaining top talent.
- LGBTQ+A The LGBTQ+A group focuses on maintaining an inclusive working environment that enables the company to leverage a diverse leadership pipeline. It has assisted in providing educational resources and community activities to engage the Dana team on best ways to support our LGBTQ+A colleagues.
- Green Team Dana's Green Team resource group helps to advance Dana's mission to be sustainably responsible in our business practices. The group helps to inform and drive grassroots employee initiatives on reducing our impact on the environment.
- New to Dana (NTD) The NTD group is open to all new Dana employees to help acclimate them to the Dana business culture and understand the company's rich history. It provides resources, support, and professional development opportunities to new employees as they transition into their job responsibilities at Dana.
- Dana Alumni With more than a century of rich history, Dana leverages its vast network of Alumni, including retirees and former long-time employees to help them remain informed about the company's latest initiatives and to gather ideas on how to best continue to engage our workforce.
- Military and Veterans The military and veterans group supports active-duty and veteran military personnel by understanding their unique needs and finding the best ways to support them. This group's understanding of the needs of those who have served also allows the company to consider the best way to engage candidates and recruit them to Dana.

Recruiting – As a company, we are always collaborating with internationally recognized organizations to reach out to diverse talent and implement best practices for recruiting individuals who work within our core business functions. Dana's talent acquisition group focuses on recruitment of talented people to the company while continuing to maintain best-in-class processes to address the unique market conditions we face across our global facilities.

Health and Wellness — Dana understands the importance of advocating for the health and well-being of our employees. Health initiatives can have a long-lasting, sustainable impact on employee well-being, but healthy habits do not develop overnight. The company is continuously evaluating new opportunities for programs that help address factors that influence health-related behaviors, which can have a long-lasting impact on an employee's well-being. Dana understands the needs of individuals are unique and continues to offer initiatives spanning the spectrum of health and wellness to help provide a supportive work environment where employees strive for balance in their lives. We have enhanced our employee assistance programs around the world to support the emotional, physical and financial needs of our employees. Our program includes the traditional employee assistance services, but also gives employees access to legal services, dependent care support, financial advice, and mindfulness programs, such as meditation, positivity training tools, and inspirational videos to help manage anxiety, depression, stress, sleep and more.

We encourage you to review the "Empowering People" section of our annual Sustainability and Social Responsibility Report (located on our website) for more detailed information regarding our Human Capital programs and initiatives. Nothing on our website, including our annual Sustainability and Social Responsibility Report or sections thereof, shall be deemed incorporated by reference into this Annual Report.

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 2022.

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, commercial 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. 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.

There is global scientific consensus that emissions of greenhouse gases (GHG) continue to alter the composition of Earth's atmosphere in ways that are affecting and are expected to continue to affect the global climate. These considerations may lead to new international, national, regional, or local legislative or regulatory responses. Various stakeholders, including legislators and regulators, shareholders, and non-governmental organizations, as well as companies in many business sectors, including Dana, are continuing to look for ways to reduce GHG emissions. The regulation of GHG emissions from certain stationary or mobile sources or the imposition of carbon pricing mechanisms could result in additional costs to Dana in the form of taxes or emission allowances, facilities improvements, and energy costs, which would increase Dana's operating costs through higher utility, transportation, and materials costs. Because the impact of any future climate change-related legislative, regulatory, or product standard requirements on Dana's global businesses and products is dependent on the timing and design of mandates or standards, Dana is unable to predict their potential impact at this time. The potential physical impacts of climate change on Dana's facilities, suppliers, and customers and therefore on Dana's operations are highly uncertain and will be particular to the circumstances developing in various geographic regions. These may include extreme weather events and long-term changes in temperature levels and water availability. These potential physical effects may adversely affect the demand for Dana's products and the cost, production, sales, and financial performance of Dana's operations.

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.

In addition, our global operations expose us to risks associated with public health crises, such as epidemics and pandemics, which could harm our business and cause our operating results to suffer. Pandemics, such as the novel coronavirus disease (COVID) pandemic, may have an adverse effect on our business, results of operations, cash flows and financial condition. Efforts to combat a pandemic can be complicated by viral variants and uneven access to, and acceptance and effectiveness of, vaccines globally. Pandemics may negatively impact the global economy, disrupted our operations as well as those of our customers, suppliers, and the global supply chains in which we participate, and create significant volatility and disruption of financial markets. The extent of the impact of a pandemic on our business and financial performance, including our ability to execute our near-term and long-term operational, strategic, and capital structure initiatives, will depend on the duration and severity of the pandemic, which are uncertain and cannot be predicted.

We may face facility closure requirements and other operational restrictions with respect to some or all of our locations for prolonged periods of time due to, among other factors, evolving and increasingly stringent governmental restrictions including public health directives, quarantine policies or social distancing measures. We operate as part of the complex integrated global supply chains of our largest customers. As a pandemic dissipates at varying times and rates in different regions around the world, there could be a prolonged negative impact on these global supply chains. Our ability to continue operations at specific facilities will be impacted by the interdependencies of the various participants of these global supply chains, which are largely beyond our direct control. A prolonged shut down of these global supply chains would have a material adverse effect on our business, results of operations, cash flows and financial condition.

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.

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 57% of our overall sales in 2022. 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 31 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, 2022, our net asset exposure related to Argentina was approximately \$44, including \$18 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. Tariffs imposed on imported steel and aluminum could raise the costs associated with manufacturing our products. We work with our customers to recover a portion of any increased costs, and with our suppliers to defray costs, associated with 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 54% of our sales in 2022 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 could 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 (including costs of steel and other raw materials), labor, transportation and energy costs from our customers.

Commodity, labor, transportation and energy costs have risen sharply over the past couple of years creating pressure on our profit margins. 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 may also experience labor shortages in certain geographies and increased competition for qualified candidates. These shortages could adversely affect our ability to meet customer demand and increase labor costs, which would reduce our profitability. Standard freight may increase due to shipping container and truck driver shortages and port congestion attributable to global supply chain disruptions resulting from regional and global pandemics and conflicts. We may also incur significant premium freight, resulting from frequent changes in customer order patterns. If we are unable to pass labor, transportation and energy cost increases on to our customer base or otherwise mitigate the costs, our profit margin could be adversely affected.

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 may 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 15 and 16 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, 2022. 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 12 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.

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.

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.

We could be adversely impacted by increased competition in the markets we serve.

The mobility industry is beginning to shift away from petroleum fuel vehicles ("ICE" vehicles) and migrate to alternate fuel vehicles (as a group "EV-based vehicles"). As the market transitions from ICE vehicles to EV-based vehicles, the Company anticipates its content per vehicle opportunity will increase up to three-fold on a dollar basis. The Company's primary driveline content on ICE vehicles includes axles and driveshafts. As the market transitions to EV-based vehicles we anticipate losing driveshaft content but adding additional driveline content in the form of gearboxes, e-motors, e-axles, power electronics, and software controls. We anticipate a similar three-fold opportunity in thermal and sealing products, as current ICE-vehicle content is replaced with EV-based vehicle content including metallic bipolar plates, battery cold plates and power electronic cooling modules. With the increased content opportunity presented by EV-based vehicles, we are beginning to see increased competition when it comes to bidding on new customer programs. The number of competitors bidding on EV-based vehicle programs is higher than what we historically experienced on ICE vehicle programs. In addition, our OEM customers continue to assess which EV-based components they will vertically integrate and for which programs. A significant increase in competition for EV-based vehicle programs from existing and new market entrants could negatively impact our sales and profitability. A significant increase in vertical integration of EV-based vehicle components by our OEM customers could negatively impact our sales and profitability.

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 cyclicality, 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 31 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 working capital requirements may negatively affect our liquidity.

Our working capital requirements can vary significantly, depending in part on the level, variability and timing of our customers' orders and production schedules and availability of raw materials and components from our suppliers. As production volumes increase, our working capital requirements to support the higher volumes generally increase. During 2022, residual effects of the COVID pandemic continued to negatively impact the global supply chains in which we participate, necessitating that we carry significantly higher levels of inventory to satisfy customer demand. If our working capital needs exceed our cash flows from operations, we look to our cash and cash equivalents balances and unused capacity of our Revolving Facility to satisfy those needs, as well as other potential sources of additional capital, which may not be available on satisfactory terms or in adequate amounts.

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, 2022, Dana had consolidated debt obligations of \$2,430, with cash and cash equivalents of \$425 and unused revolving credit capacity of \$1,109. 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.

Increased scrutiny from the public, investors, and others regarding our environmental, social, and governance ("ESG") practices could impact our reputation.

We have a board committee and an executive officer position with responsibility for sustainability, additional dedicated employee resources, a cross-functional/business sustainability leadership team to further develop and implement an enterprise-wide sustainability strategy, and we have published a sustainability report. Our sustainability report includes our policies and practices on a variety of ESG matters, including the value creation opportunities provided by our products; diversity, equity, and inclusion; employee health and safety; community giving; and human capital management. These efforts may result in increased investor, media, employee, and other stakeholder attention to such initiatives, and such stakeholders may not be satisfied with our ESG practices or initiatives. Additionally, organizations that inform investors on ESG matters have developed rating systems for evaluating companies on their approach to ESG. Unfavorable ratings may lead to negative investor sentiment, which could negatively impact our stock price and our ability to access capital at competitive prices. Any failure, or perceived failure, to respond to ESG concerns could harm our business and reputation.

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

	Light	Commercial		Power	
	Vehicle	Vehicle	Off-Highway	Technologies	Total
Manufacturing and assembly plants	32	16	21	19	88

As of December 31, 2022, we had eighty-eight major manufacturing and assembly plants. In addition, we had seven aftermarket sales and services facilities supporting our mobility customers and twenty-three service and assembly facilities supporting our stationary equipment customers. We maintain seven stand-alone technical and engineering centers in addition to eighteen technical and engineering centers housed within our manufacturing and assembly plants.

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. We operate numerous other management, marketing and administrative facilities globally.

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 15 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

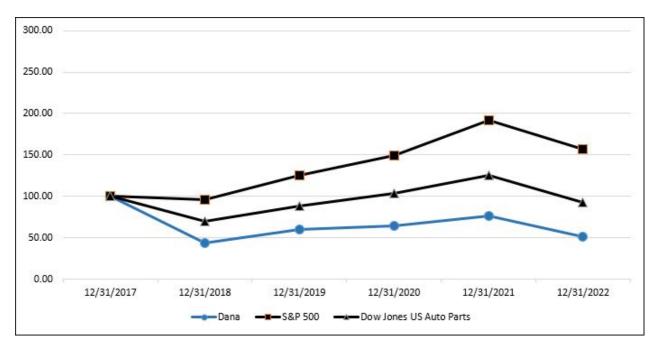
Market information — Our common stock trades on the New York Stock Exchange (NYSE) under the symbol "DAN."

Holders of common stock — Based on reports by our transfer agent, there were approximately 2,444 registered holders of our common stock on January 31, 2023.

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, 2017. 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, 2017. Each of the returns shown assumes that all dividends paid were reinvested.

Performance chart



Index

	12/3	31/2017	12.	/31/2018	1	2/31/2019	1.	2/31/2020	12	2/31/2021	12	/31/2022
Dana Incorporated	\$	100.00	\$	43.46	\$	59.50	\$	64.44	\$	76.27	\$	51.18
S&P 500		100.00		95.62		125.72		148.85		191.58		156.89
Dow Jones US Auto Parts Index		100.00		69.37		88.40		103.88		125.69		92.46

Issuer's purchases of equity securities — On February 16, 2021, our Board of Directors approved an extension of our existing common stock share repurchase program through December 31, 2023. Approximately \$102 remained available under the program for future share repurchases as of December 31, 2022. 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 2022.

Annual meeting — We will hold an annual meeting of shareholders on April 26, 2023.

Item 6. [Reserved]

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

Discussion and analysis of our results of operations pertaining to 2021 compared to 2020 not included in this Form 10-K can be found in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2021. The following discussion and analysis of our 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 2022, 48% of our sales came from North American operations and 52% from operations throughout the rest of the world. Our sales by operating segment were Light Vehicle – 40%, Commercial Vehicle – 20%, Off-Highway – 29% and Power Technologies – 11%.

Operational and Strategic Initiatives

Our enterprise strategy builds on our strong technology foundation and leverages our resources across the organization while driving a customercentric 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 on customer relationships and providing value to our customers. These relationships are strengthened as we are physically located 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.

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 as well as 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. We continue to enhance and expand our global footprint, optimizing it to capture growth across all of our end 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 last several years we continue to deliver on our goal to accelerate vehicle electrification through both core Dana technologies and targeted strategic acquisitions and are positioned today to lead the market. The nine recent investments in 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 electric vehicles.

Capital Structure Initiatives

In addition to investing in our business, we plan to prioritize a balanced allocation of capital while maintaining a strong financial position. We continue to drive toward investment grade metrics as part of our balanced allocation approach with a 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. Through the first quarter of 2020, we had declared and paid quarterly common stock dividends for thirty-three consecutive quarters. In response to the COVID pandemic, we temporarily suspended the declaration and payment of dividends to common shareholders and the repurchase of common stock under our \$200 common stock share repurchase program. With the impacts of the COVID pandemic largely behind us we resumed the declaration and payment of quarterly common stock dividends during the first quarter of 2021. In addition, we resumed the repurchase of common shares using \$25 and \$23 of cash to repurchase common shares under the program in 2022 and 2021, respectively. The share repurchase program expires on December 31, 2023, and \$102 remains available for future share repurchases as of December 31, 2022.

Financing actions — We have taken advantage of competitive debt markets, eliminating our secured debt and extending and restructuring our senior note maturity schedule. Our current portfolio of unsecured senior notes is structured such that no more than \$400 of senior notes comes due in any calendar year, with no maturities until the second quarter of 2025. In addition, during 2021 we increased our revolving credit facility to \$1,150 and extended its maturity to March 25, 2026. See Note 13 to our consolidated financial statements in Item 8 for additional information.

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®, Spicer ElectrifiedTM, Victor Reinz®, Glaser®, GWB®, Thompson®, Tru-Cool®, SVL®, and TransejesTM, 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 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

Over the past several years we have actively grown our electric vehicle capabilities through multiple acquisitions, positioning us to deliver complete e-Propulsion systems with in-house electrodynamics. Our acquisitions of TM4 Inc. (TM4), S.M.E. S.p.A. (SME), Prestolite E-Propulsion Systems (Beijing) Limited (PEPS), Ashwoods Innovations Limited (Ashwoods), Oerlikon Drive Systems, Nordresa Motors, Inc., Rational Motion GmbH and Pi Innovo Holding Limited have enhanced our portfolio of core technologies including e-motors, power inverters, software and controls, and advance mechatronics. Our strategic partner, Hydro-Québec, owns 45% redeemable noncontrolling interests in the Dana TM4 joint venture entities. See Note 9 to our consolidated financial statements in Item 8 for additional information.

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

We serve our customers in three core global end markets: light vehicle, primarily full frame trucks and SUVs; commercial vehicle, including mediumand heavy-duty trucks and busses; and off-highway, including construction, mining, and agriculture equipment.

Each of our end-markets has unique cyclical dynamics and market drivers. These cycles are impacted by periods of investment where end-user vehicle fleets are refreshed or expanded in reaction to demand usage patterns, regulatory changes, or when the age of vehicles in service reach their useful life. Key market drivers include regional economic growth rates; cost and availability of end customer financing; industrial output; commodity production and pricing; and residential and nonresidential construction rates. Our multi-market coverage and broad customer base help provide stability across the cycles while mitigating secular variability. In 2020, all of our end-markets were impacted to varying degrees by the COVID pandemic, which initially resulted in lower demand driven by production shutdowns related to virus mitigation efforts in the regions we serve. During 2021, we generally saw improvement across all of our end markets despite production levels being muted by continued global supply chain disruptions driven in part by transportation inefficiencies and labor, commodity and semiconductor chip shortages. During 2022, we continued to see incremental improvements across our end markets despite continuing, but lessening, global supply chain disruptions.

Light vehicle markets — Our driveline business is weighted more heavily to the truck and SUV segments of the light-vehicle market versus the passenger-car segment. Our vehicle content is greater on rear-wheel drive, four-wheel drive, and all-wheel drive vehicles, as well as hybrid and electric vehicles. During 2022, light-truck markets improved across all regions and were up 6% on a global basis compared to 2021. The outlook for the full year of 2023 reflects global light-truck production being relatively stable across all regions, as production constraints continue to ease, vehicle inventories return to more normal levels, and constrained customer demand is fulfilled.

Commercial vehicle markets — Our primary business is driveline systems for medium and heavy-duty trucks and busses, including the emerging market for hybrid and electric vehicles. Key regional markets are North America, South America (primarily Brazil) and Asia Pacific. During 2022, production of Class-8 trucks in North America increased 24% over 2021 reflecting increased demand driven by strong transport and construction activity resulting from higher freight volumes and rates and increased fleet utilization levels. The strong demand was muted by continued global supply chain disruptions. The outlook for 2023 is for continued strong demand with production slightly above 2022 levels driven by solid order backlogs. Medium-duty truck production in North America experienced a modest 3% year-over-year increase from 2021 to 2022. The outlook for 2023 is for a slight increase in production over the prior year. Outside of North America, production of medium- and heavy-duty trucks in South America declined 3% in 2022 as demand moderated following a significant ramp up in production in 2021 with the dissipation of the COVID pandemic in the region. The 2023 outlook for South America is for a modest 1% increase in production from 2022 as local economic conditions remain relatively stable. Production of medium- and heavy-duty trucks in Asia Pacific, driven by China and India, decreased 27% in 2022 compared to 2021 due to China experiencing COVID outbreaks in certain regions and India's continued struggles to recover from the pandemic. The 2023 outlook for Asia Pacific is for a modest increase in production from the prior year driven by the market recovery in India gaining traction.

Off-highway markets — Our off-highway business has a large presence outside of North America, with 66% of its 2022 sales coming from products manufactured in Europe; however, a large portion of these products are utilized in vehicle production outside the region. The construction equipment segment of the off-highway market is closely related to global economic growth and infrastructure investment. The global construction equipment market continued to rebound in 2022 with production up 10% over the prior year. The outlook for 2023 is for continued modest growth. End-user investment in the mining equipment segment is driven by prices for commodity products produced by underground mining. The global mining equipment market has been mostly stable over the past several years as industry participants have maintained vehicle inventory levels to match commodity output, and this trend is expected to continue in 2023. The agriculture equipment market is the third of our key off-highway segments. Like the underground mining segment, investment in agriculture equipment is primarily driven by prices for farm commodities. Farm commodity price increases in 2022 spurred a 6% increase in agriculture equipment production. The outlook for 2023 is for global end-market demand to remain relatively flat with the prior year.

Foreign currency — With 54% of our 2022 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 11% of our 2022 non-U.S. sales, respectively, while India and China accounted for 10% and 9%, respectively. Although sales in South Africa are less than 5% of our non-U.S. sales, the rand has been volatile and significantly impacted sales from time to time. International currencies weakened against the U.S. dollar in 2022, decreasing 2022 sales by \$420. A weaker euro, Indian rupee, Thai baht, Chinese renminbi and South African rand were partially offset by a stronger Brazilian real.

Argentina has experienced significant inflationary pressures the past several 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 2022 of approximately \$151 are 1% of our consolidated sales and our net asset exposure related to Argentina was approximately \$44, including \$18 of net fixed assets, at December 31, 2022. 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. dollar 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.

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, brass and rare earth materials. 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, batteries and component parts that include commodities. 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. Higher commodity prices decreased year-over-year earnings by \$447 in 2022. Material recovery pricing actions increased year-over-year earnings by \$446 in 2022.

Sales, Earnings and Cash Flow Outlook

	2023			
	Outlook	2022	2021	2020
Sales	\$10,350 - \$10,850	\$ 10,156	\$ 8,945	\$ 7,106
Adjusted EBITDA	\$750 - \$850	\$ 700	\$ 795	\$ 593
Net cash provided by operating activities	\$510 - \$560	\$ 649	\$ 158	\$ 386
Purchases of property, plant and equipment	~5% of sales	\$ 440	\$ 369	\$ 326
Free Cash Flow	\$0 - \$50	\$ 209	\$ (211)	\$ 60

Adjusted EBITDA and 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.

Our 2023 sales outlook is \$10,350 to \$10,850, reflecting a modest improvement in global market demand, continued material and inflationary cost recoveries and \$300 of net new business backlog. Based on our current sales and exchange rate outlook for 2023, we expect overall stability in international currencies with a modest headwind to sales. At sales levels in our current outlook for 2023, a 5% movement on the euro would impact our annual sales by approximately \$140. A 5% change on the Chinese renminbi, Indian rupee or Brazilian real rates would impact our annual sales in each of those countries by approximately \$30. At our current sales outlook for 2023, we expect full year 2023 adjusted EBITDA to approximate \$750 to \$850. Adjusted EBITDA Margin is expected to be 7.5% at the midpoint of our guidance range, a 60 basis-point improvement over 2022, reflecting higher margin net new business and the benefit of material cost recoveries as commodity costs begin to abate being partially offset by continued operational inefficiencies, driven by continuing global supply chain disruptions and customer order volatility, and increased investment to support our electrification strategy. We expect to generate free cash flow of approximately \$25 at the midpoint of our guidance range reflecting the benefit of higher year-over-year adjusted EBITDA being largely offset by higher capital spending to support new business and our continued investment in our electrification strategy.

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 awarded that will be launching over the next three years, 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, 2023, our sales backlog of net new business for the 2023 through 2025 period was \$900. We expect to realize \$300 of our sales backlog in 2023, with incremental sales backlog of \$350 and \$250 being realized in 2024 and 2025, respectively. Our sales backlog is approximately 65% attributable to electric-vehicle content with the balance attributable to traditional ICE-vehicle content. Our sales backlog is balanced across all of our end markets.

Consolidated Results of Operations

Summary Consolidated Results of Operations (2022 versus 2021)

	2022						
			% of		% of		Increase/
		Dollars	Net Sales	Dollars	Net Sales		(Decrease)
Net sales	\$	10,156		\$ 8,9	45	\$	1,211
Cost of sales		9,393	92.5%	8,1	08 90.	6%	1,285
Gross margin		763	7.5%	8	9.4	4%	(74)
Selling, general and administrative expenses		495	4.9%	4	60 5.	1%	35
Amortization of intangibles		14			14		_
Restructuring charges, net		(1)					(1)
Impairment of goodwill		(191)					(191)
Other income (expense), net		22			32		(10)
Earnings before interest and income taxes		86		3	95		(309)
Loss on extinguishment of debt				(29)		29
Interest income		11			9		2
Interest expense		128		1	31		(3)
Earnings (loss) before income taxes		(31)		2	44		(275)
Income tax expense		284			72		212
Equity in earnings of affiliates		4			28		(24)
Net income (loss)		(311)		2	00		(511)
Less: Noncontrolling interests net income		15			14		1
Less: Redeemable noncontrolling interests net loss		(84)		(11)		(73)
Net income (loss) attributable to the parent company	\$	(242)		\$ 1	97	\$	(439)

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

					Amount of Change Due To				
				Increase/	Currency	Aco	quisitions		Organic
	2022	2021	((Decrease)	Effects	(Div	vestitures)		Change
North America	\$ 4,923	\$ 4,230	\$	693	\$ (4)	\$	1	\$	696
Europe	3,059	2,836		223	(347)				570
South America	788	590		198	16				182
Asia Pacific	1,386	1,289		97	(85)		(9)		191
Total	\$ 10,156	\$ 8,945	\$	1,211	\$ (420)	\$	(8)	\$	1,639

Sales in 2022 were \$1,211 higher than in 2021. Weaker international currencies reduced sales by \$420, principally due to a weaker euro, Indian rupee, Thai baht and Chinese renminbi, partially offset by a stronger Brazilian real. The organic sales increase of \$1,639, or 18%, resulted from improved overall market demand and the conversion of sales backlog. Pricing actions, including material commodity price and inflationary cost adjustments, increased sales by \$772.

The North America organic sales increase of 16% was driven principally by stronger light-, medium- and heavy-duty truck production volumes, higher light-vehicle engine production levels and the conversion of sales backlog. Full-frame light-truck production was up 7% while light-vehicle engine production was up 13% compared with 2021. Year-over-year Class 8 truck production was up 24% while Classes 5-7 truck production was up 3%. Excluding currency effects, sales in Europe were up 20% compared with 2021. With our significant Off-Highway presence in the region, stronger construction/mining and agricultural markets were a major factor. Organic sales in this operating segment were up 23% compared to 2021. Excluding currency effects, sales in South America increased 31% compared to 2021 due primarily to improved light-duty truck production and continued strengthening of medium/heavy-duty truck related sales despite overall medium/heavy-duty truck production volumes moderating. Light-duty truck production was up 13% while medium/heavy-duty truck production was down 3% compared to 2021. Excluding currency effects and the impact of divestitures, sales in Asia Pacific increased 15% compared to 2021 due to stronger construction/mining and agricultural equipment markets and higher medium/heavy-duty truck related sales despite overall medium/heavy-duty truck production volumes declining 27% compared to 2021.

Cost of sales and gross margin — Cost of sales for 2022 increased \$1,285, or 16%, when compared to 2021. Cost of sales as a percent of sales was 190 basis points higher than in the previous year. Incremental margins provided by increased sales volumes were more than offset by higher year-over-year commodity costs of \$447, non-material inflationary cost impacts of \$357, higher spending on electrification initiatives of \$50 and operational inefficiencies primarily attributable to continued global supply chain disruptions and frequent customer order changes made with little to no advance notification. Commodity cost increases are being driven by certain grades of steel and aluminum. Non-material inflation includes higher labor, energy and transportation rates. Continued material cost savings and supplier recoveries provided a partial offset, reducing cost of sales by approximately \$66.

Gross margin of \$763 for 2022 decreased \$74 from 2021. Gross margin as a percent of sales was 7.5% in 2022, 190 basis points lower than in 2021. The degradation in gross margin as a percent of sales was driven principally by the cost of sales factors referenced above along with recovery of non-material inflation typically not being specifically provided for in our current contracts with customers resulting in prolonged negotiations and indeterminate recoveries. In addition, gross margin during 2022 was negatively impacted by material cost recovery mechanisms with our customers lagging material cost increases charged by our suppliers by approximately 90 days.

Selling, general and administrative expenses (SG&A) — SG&A expenses in 2022 were \$495 (4.9% of sales) as compared to \$460 (5.1% of sales) in 2021. SG&A expenses were \$35 higher in 2022 primarily due to higher salaried employee wages and incentive compensation, increased software technology investments, travel expenses and professional fees.

Amortization of intangibles — Amortization expense was \$14 in both 2021 and 2021.

Restructuring charges, net — Net restructuring charges were (\$1) in 2022. See Note 4 of our consolidated financial statements in Item 8 for additional information

Impairment of goodwill — During the third quarter of 2022, we recorded a \$191 goodwill impairment charge. See Note 3 of our consolidated financial statements in Item 8 for additional information.

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

	2022	2021
Non-service cost components of pension and OPEB costs	\$ (7) \$	(10)
Government assistance	8	
Foreign exchange gain	4	2
Strategic transaction expenses	(8)	(13)
Loss on investment in Hyliion		(20)
Loss on disposal group held for sale		(7)
Loss on de-designation of fixed-to-fixed cross currency swaps		(9)
Gain on sale leaseback		66
Other, net	 25	23
Other income (expense), net	\$ 22 \$	32

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 2022 were primarily attributable to investigating potential acquisitions and business ventures and other strategic initiatives. Strategic transaction expenses in 2021 were primarily attributable to our pursuit of the acquisition of a portion of the thermal-management business of Modine Manufacturing Company and certain other strategic initiatives. We held convertible notes receivable from our investment in Hyliion Inc. On October 1, 2020, Hyliion Inc. completed its merger with Tortoise Acquisition Corp. The business combination resulted in the combined company being renamed Hyliion Holdings Corp. (Hyliion), with its common stock being listed on the New York Stock Exchange under the ticker symbol HYLN. Effective with the completed merger, our notes receivable were converted into 2,988,229 common shares of HYLN. Our investment in Hyliion was included in noncurrent marketable securities and carried at fair value with changes in fair value included in net income. During the third quarter of 2021, we sold all of our Hyliion shares. In conjunction with our acquisition of ODS, we acquired a controlling financial interest in a joint venture in China. We were required to divest our interest in this joint venture as it violates competitive restrictions of another of our China joint venture shareholder agreements. During the first quarter of 2021, we recorded an impairment charge of \$7, as we determined the carrying value of the disposal group exceeded its fair value less costs to sell. We completed the disposal of this business in April 2021. We had previously entered into fixed-tofixed cross currency swaps as a hedge against our June 2026 Notes. In June 2021, we redeemed all of the June 2026 Notes and de-designated the fixed-tofixed cross currency swaps. During December 2021, we completed a sale-leaseback transaction on three of our U.S. manufacturing facilities. We received proceeds of \$77 from the sale of the properties, which had carrying values totaling \$11, resulting in a \$66 gain on the sale transaction. See Note 18 of our consolidated financial statements in Item 8 for additional information.

Loss on extinguishment of debt — During May 2021, we redeemed our December 2024 Notes. We incurred redemption premiums of \$8 in connection with these repayments and wrote off \$3 of previously deferred financing costs associated with the December 2024 Notes. These charges were partially offset by the recognition of \$3 related to an unamortized fair value adjustment associated with a fixed-to-floating interest rate swap that was terminated in 2015. On June 10, 2021, in connection with the issuance of our July 2029 Notes, we redeemed all of our June 2026 Notes. We incurred redemption premiums of \$12 in connection with these repayments and wrote off \$4 of previously deferred financing costs associated with the June 2026 Notes. On November 30, 2021, in connection with the issuance of our February 2032 Notes, we fully paid down our Term B Facility. We wrote off \$5 of previously deferred financing costs associated with the Term B Facility. See Note 13 of our consolidated financial statements in Item 8 for additional information.

Interest income and interest expense — Interest income was \$11 in 2022 and \$9 in 2021. Interest expense decreased from \$131 in 2021 to \$128 in 2022, with higher average debt levels being more than offset by lower interest rates on outstanding borrowings. Average effective interest rates, inclusive of amortization of debt issuance costs, approximated 4.7% in 2022 and 5.1% in 2021.

Income tax expense — Income tax expense was \$284 in 2022 and \$72 in 2021. During 2022, we recognized tax expense of \$240 to record valuation allowance in the U.S., which includes \$189 on U.S. federal credits and attributes and \$51 related to U.S. state attributes. In addition, we recorded a tax benefit of \$32 for U.S. tax credits generated. During 2022, we recorded a pre-tax goodwill impairment charge of \$191 with an associated income tax benefit of \$2. During 2021, we recognized tax expense of \$46 to record valuation allowance in the U.S. due to reduced income projections. We also recognized tax benefit of \$46 for the release of valuation allowances in several foreign jurisdictions based on recent history of profitability and increased income projections. The contrast of these two positions is representative of the jurisdictional mix of results and relative attributes. We also recognized tax expense of \$18 related to the expiration of federal tax credits. See Note 17 to our consolidated financial statements in Item 8 for additional information.

Equity in earnings of affiliates — Net earnings from equity investments was \$4 in 2022 and \$28 in 2021. Equity in earnings from Dongfeng Dana Axle Co., Ltd. (DDAC) was a loss of \$1 in 2022 and earnings of \$22 in 2021. The decrease in DDAC's earnings is due to lower year-over-year sales driven by significant 2021 medium- and heavy-duty vehicle pre-buy activity in advance of new emission standards going into effect in China and Chinese government incentives driving new constructions and infrastructure projects in 2021, increasing demand for medium- and heavy-duty vehicles.

Segment Results of Operations (2022 versus 2021)

Light Vehicle

	Sales	Segment EBITDA	Segment EBITDA Margin	
2021	\$ 3,773	\$ 274	7.	.3%
Volume and mix	250	37		
Divestitures	(8)			
Product line transfer	(80)	(10)		
Performance	238	(137)		
Currency effects	(83)	(6)		
2022	\$ 4,090	\$ 158	3.	.9%

Light Vehicle sales in 2022, exclusive of currency effects, the impact of divestitures and the product line transfer to Commercial Vehicle, were 13% higher than 2021 reflecting stronger markets in all regions, cost recovery actions and the conversion of sales backlog. Year-over-year North America full-frame light-truck production increased 7% while light-truck production in Europe, South America and Asia Pacific increased 5%, 13% and 6%, respectively. Net customer pricing and cost recovery actions increased year-over-year sales by \$238.

Light Vehicle segment EBITDA decreased by \$116 in 2022. Higher sales volumes provided a year-over-year benefit of \$37 (14.8% incremental margin). The year-over-year performance-related earnings decrease was driven by inflationary cost increases of \$134, commodity cost increases of \$130, operational inefficiencies of \$93, higher program launch costs of \$18, higher spending on electrification initiatives of \$8, higher incentive compensation of \$5 and higher warranty costs of \$1. Partially offsetting these performance-related decreases were net customer pricing and cost recovery actions of \$238, higher material cost savings and supplier recoveries of \$10 and lower premium freight costs of \$4.

Commercial Vehicle

	Sales	Segm EBIT		Segment EBITDA Margin	
2021	\$ 1,532	\$	48		3.1%
Volume and mix	215		34		
Product line transfer	80		10		
Performance	178		(48)		
Currency effects	(26)		(1)		
2022	\$ 1,979	\$	43		2.2%

Commercial Vehicles sales in 2022, exclusive of currency effects and the product line transfer from Light Vehicle, were 26% higher than 2021 reflecting continued strengthening of medium/heavy-duty truck production volumes in North America and Europe and cost recovery actions. Year-over-year North America Class 8 production was up 24% and Classes 5-7 production was up 3%. Year-over-year medium/heavy-truck production in Europe was up 14% while medium/heavy-truck production in South America and Asia Pacific were down 3% and 27%, respectively. Net customer pricing and cost recovery actions increased year-over-year sales by \$178.

Commercial Vehicle segment EBITDA decreased by \$5 in 2022. Higher sales volumes provided a year-over-year benefit of \$34 (15.8% incremental margin). The year-over-year performance-related decrease was driven by commodity cost increases of \$114, inflationary cost increases of \$66, operational inefficiencies of \$52, higher spending on electrification initiatives of \$16, higher incentive compensation of \$4 and higher program launch costs of \$3. Partially offsetting these performance-related decreases were net customer pricing and cost recovery actions of \$178, higher material cost savings of \$23, lower warranty costs of \$4 and lower premium freight costs of \$2.

Off-Highway

	Sales	Segment EBITDA	Segment EBITDA Margin
2021	\$ 2,593	\$ 353	13.6%
Volume and mix	326	76	
Performance	277	9	
Currency effects	(250)	(34)	
2022	\$ 2,946	\$ 404	13.7%

Off-Highway sales in 2022, exclusive of currency effects, were 23% higher than 2021 reflecting improved global markets, cost recovery actions and the conversion of sales backlog. Year-over-year global construction/mining and agricultural equipment markets reflected marked improvement with global production increasing 10% and 6%, respectively, over 2021. Net customer pricing and cost recovery actions increased year-over-year sales by \$277.

Off-Highway segment EBITDA increased by \$51 in 2022. Higher sales volumes provided a year-over-year benefit of \$76 (23.3% incremental margin). The year-over-year performance-related earnings increase was driven by net customer pricing and cost recovery actions of \$277 and higher material cost savings of \$26. Partially offsetting these performance-related increases were commodity cost increases of \$134, inflationary cost increases of \$130, operational inefficiencies of \$11, higher spending on electrification initiatives of \$9, higher incentive compensation of \$4, higher premium freight costs of \$4 and higher warranty costs of \$2.

Power Technologies

	Sales	Segment EBITDA	Segment EBITDA Margin
2021	\$ 1,047	\$ 123	11.7%
Volume and mix	76	13	
Performance	79	(37)	
Currency effects	(61)	(5)	
2022	\$ 1,141	\$ 94	8.2%

Power Technologies primarily serves the light-vehicle market but also sells product to the medium/heavy-truck and off-highway markets. Power Technologies sales in 2022, exclusive of currency effects, were \$155 higher than in 2022 reflecting improved global markets, cost recovery actions and conversion of sales backlog. Year-over-year light-vehicle engine production in North America, South America and Asia Pacific increased 13%, 13% and 6%, respectively, while year-over-year light-vehicle engine production in Europe decreased 1%. Net customer pricing and cost recovery actions increased year-over-year sales by \$79.

Power Technologies segment EBITDA decreased by \$29 in 2022. Higher sales volumes provided a year-over-year benefit of \$13 (17.1% incremental margin). The year-over-year performance-related earnings decrease was driven by commodity cost increases of \$69, inflationary cost increases of \$27, operational inefficiencies of \$11, higher program launch costs of \$6, higher spending on electrification initiatives of \$4, higher incentive compensation of \$3 and higher warranty costs of \$3. Partially offsetting these performance-related decreases were net customer pricing and cost recovery actions of \$79 and higher material cost savings of \$7.

Non-GAAP Financial Measures

Adjusted EBITDA

We have defined adjusted EBITDA as net income (loss) 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 (loss) 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 (loss) to adjusted EBITDA.

	2022	2021
Net income (loss)	\$ (311) \$	200
Equity in earnings of affiliates	4	28
Income tax expense (benefit)	284	72
Earnings (loss) before income taxes	 (31)	244
Depreciation and amortization	388	389
Restructuring charges, net	(1)	
Interest expense, net	117	122
Loss on extinguishment of debt		29
(Gain) loss on investment in Hyliion		20
Loss on disposal group held for sale		7
Loss on de-designation of fixed-to-fixed cross currency swaps		9
Gain on sale leaseback		(66)
Impairment of goodwill	191	
Other*	36	41
Adjusted EBITDA	\$ 700 \$	795

Other includes stock compensation expense, non-service cost components of pension and OPEB costs, strategic transaction expenses and other items. See Note 20 of our consolidated financial statements in Item 8 for additional details.

Free Cash Flow

We have defined free cash flow as cash provided by operating activities less purchases of property, plant and equipment. We believe free cash flow is useful to investors in evaluating the operational cash flow of the company inclusive of the spending required to maintain the operations. Free cash flow is 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 may not be comparable to similarly titled measures reported by other companies.

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

		2022	202	21
Net cash provided by operating activities		\$ 649	\$	158
Purchases of property, plant and equipment		(440)		(369)
Free cash flow		\$ 209	\$	(211)
	22			

Liquidity

The following table provides a reconciliation of cash and cash equivalents to liquidity, a non-GAAP measure, at December 31, 2022:

Cash and cash equivalents	\$ 425
Less: Deposits supporting obligations	(1)
Available cash	424
Additional cash availability from Revolving Facility	1,109
Total liquidity	\$ 1,533

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. We had availability of \$1,109 at December 31, 2022 under our Revolving Facility after deducting \$25 of outstanding borrowings and \$16 of outstanding letters of credit.

The components of our December 31, 2022 consolidated cash balance were as follows:

	U.	.S.	N	on-U.S.	Total
Cash and cash equivalents	\$		\$	322	\$ 322
Cash and cash equivalents held as deposits				1	1
Cash and cash equivalents held at less than wholly-owned subsidiaries		6		96	102
Consolidated cash balance	\$	6	\$	419	\$ 425

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.

At December 31, 2022, we were in compliance with the covenants of our financing agreements. Under 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 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 at the time of incurrence. 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 Revolving Facility is 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.

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. In addition, we may enter into sale-leaseback transactions related to certain of our real estate holdings and factor receivables. 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.

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 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.

Cash Flow

	2022	2021
Cash provided by (used for) changes in working capital	\$ 199	\$ (455)
Other cash provided by operations	450	 613
Net cash provided by operating activities	649	158
Net cash used in investing activities	(426)	(293)
Net cash used in financing activities	 (42)	(127)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 181	\$ (262)

The table above summarizes our consolidated statement of cash flows.

Operating activities — Exclusive of working capital, other cash provided by operations was \$450 in 2022 and \$613 in 2021. The year-over-year decrease is primarily attributable to lower operating earnings and higher cash paid for income taxes.

Working capital provided cash of \$199 in 2022 and used cash of \$455 in 2021. Cash of \$81 and \$189 was used to finance receivables in 2022 and 2021, respectively. The lower level of cash used to finance receivables in 2022 is being driven by shorter customer payment terms having been negotiated with certain customers. Cash of \$99 and \$471 was used to fund higher inventory levels during 2022 and 2021, respectively. While we continue to carry higher levels of inventory to mitigate on-going global-supply-chain disruptions, ensuring continuous supply for our customers, we have actively managed down our inventory days on hand during 2022. Increases in accounts payable and other net liabilities provided cash of \$379 and \$205 in 2022 and 2021, respectively.

Investing activities — Expenditures for property plant and equipment were \$440 and \$369 in 2022 and 2021. The increase in capital spend during 2022 is in support of awarded next generation programs and new business. During December 2021, we completed a sale-leaseback transaction on three of our U.S. manufacturing facilities receiving proceeds of \$77 from the sale of the properties. During 2021, we paid \$17, net of cash acquired, to acquire an additional 51% interest in Pi Innovo. The acquisition of the additional ownership interest provided us with a 100% ownership interest in Pi Innovo. During 2021, we acquired a 1% ownership interest in Switch Mobility Limited for \$18. During 2020, we sold our 20% ownership interest in Bendix Spicer Foundation Brake, LLC (BSFB) for \$50, consisting of \$21 in cash, a note receivable of \$25 and deferred proceeds of \$4. During 2021, we received \$29 in settlement of the note receivable and deferred proceeds from the BSFB transaction. During 2022, purchases of marketable securities were largely funded by proceeds from sales and maturities of marketable securities. During 2021, we sold all of our Hyllion shares for \$29. During 2021, we dedesignated the fixed-to-fixed cross currency swaps associated with our June 2026 Notes and settled certain of the fixed-to-fixed cross currency swaps resulting in a net cash outflow of \$22

Financing activities — During 2022, we had net borrowings of \$25 on our Revolving Facility. During 2021, we completed the issuance of €325 of our July 2029 Notes, \$400 of our September 2030 Notes and \$350 of our February 2032 Notes, paying financing costs of \$16. Also during 2021, we redeemed all \$375 of our June 2026 Notes and all \$425 of our December 2024 Notes, paying redemption premiums of \$21. During 2021, we fully paid down our Term B Facility, making principal payments of \$349. During 2021, we paid financing costs of \$2 to amend our credit and guaranty agreement, increasing the Revolving Facility to \$1,150 and extending its maturity to March 25, 2026. We used \$58 for dividend payments to common stockholders during both 2022 and 2021. We used cash of \$25 and \$23 to repurchase common shares under our share repurchase program during 2022 and 2021. Distributions to noncontrolling interests totaled \$9 and \$15 in 2022 and 2021. Hydro-Québec made cash contribution to Dana TM4 of \$51 in 2022 and \$14 in 2021. During 2021, we sold a portion of our ownership interest in Tai Ya Investment (HK) Co., Limited (Tai Ya) to China Motor Corporation, reducing our ownership interest in Tai Ya to 50%. In conjunction with the decrease in our ownership interest, the Tai Ya shareholders agreement was amended, eliminating our controlling financial interest in Tai Ya. Upon our loss of control, we deconsolidated Tai Ya, including \$6 of cash and cash equivalents.

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, 2022.

		Payments Due by Period						
Contractual Cash Obligations	Total	2023	202	4 - 2025	2026 - 20	27	Afte	er 2027
Long-term debt(1)	\$ 2,326		\$	427	\$	400	\$	1,499
Interest payments(2)	657	110		212		177		158
Operating leases(3)	453	54		98		79		222
Financing leases(4)	71	9		15		12		35
Unconditional purchase obligations(5)	446	313		66		28		39
Pension contribution(6)	16	16						
Retiree health care benefits(7)	38	4		8		8		18
Uncertain income tax positions(8)	 _							
Total contractual cash obligations	\$ 4,007	\$ 506	\$	826	\$	704	\$	1,971

Notes

- (1) Principal payments on long-term debt.
- (2) Interest payments are based on long-term debt in place at December 31, 2022 and the interest rates applicable to such obligations.
- (3) Operating lease obligations, including interest, related to real estate, manufacturing and material handling equipment, vehicles and other assets.
- (4) Finance lease obligations, including interest, 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 2023 minimum required contributions to our global defined benefit pension plans. We have not estimated pension contributions beyond 2023 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, 2022 of \$102. See Note 17 of our consolidated financial statements in Item 8 for additional discussion.

At December 31, 2022, we maintained cash balances of \$1 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 15 of 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 of 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 that are prudent and feasible.

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 17 of 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 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 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, 2022. 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.

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 \$11. 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 6.0% expected return in 2023 is appropriate for our U.S. pension plans. See Note 12 to our consolidated financial statements in Item 8 for information about the investing and allocation objectives related to our U.S. pension plan assets.

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, 2022, we have \$141 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 do not expect to make any contributions during 2023.

See Note 12 of 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, liabilities assumed and any redeemable noncontrolling interests or noncontrolling interests 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.

Redeemable noncontrolling interests — 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. We estimate the fair value of the redemption value using an income based approach based on discounted cash flow projections. 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 EBITDA, discount rates, and terminal growth rates. See additional discussion of redeemable noncontrolling interests in Note 9 of our consolidated financial statements in Item 8.

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, 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, 2021 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 \$138 at December 31, 2022 and \$174 at December 31, 2021. 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 14 of 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, 2022 to a 10% change in foreign exchange rates.

	10% Increase in Rates Gain (Loss)	10% Decrease in Rates Gain (Loss)	
Foreign currency rate sensitivity:			
Currency swaps	\$ (63)	\$ 63	
Forward contracts	\$ (39)	\$ 46	

At December 31, 2022, of the \$1,575 total notional amount of foreign currency derivatives, approximately 61% represents the aggregate of fixed-to-fixed cross-currency interest rate swaps while the remaining 39% 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, 2022 is approximately \$846. 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 \$846 of foreign currency-denominated intercompany loans outstanding at December 31, 2022, \$298, or 35%, 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 65% of such outstanding intercompany loans, \$68 million has been hedged by foreign currency forwards and the remaining balances have not been hedged.

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, 2022, we had \$400 of external U.S. dollar debt, issued by a euro-functional entity, \$300 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. The remaining \$100 has been economically hedged by an offsetting intercompany loan.

At December 31, 2021, the total notional amount of our currency derivative portfolio was \$1,545 and included fixed-to-fixed cross-currency interest rate swaps associated with \$588 of external debt. The remaining \$957 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.

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, 2022 and 2021, 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, 2022, 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, 2022 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, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 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, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

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.

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.

Interim Goodwill Impairment Assessment - Commercial Vehicle Reporting Unit

As described in Notes 1 and 3 to the consolidated financial statements, goodwill impairment testing is performed at the reporting unit level, which is the operating segment in the case of both Off-Highway and Commercial Vehicle goodwill. The Company's consolidated goodwill balance was \$259 million as of December 31, 2022. During the third quarter of 2022, management concluded a triggering event had occurred and performed interim goodwill impairment analyses for the Commercial Vehicle and Off-Highway reporting units. Based on the results of management's interim impairment analyses, management concluded that the carrying value exceeded fair value of the Commercial Vehicle reporting unit and the Company recorded a goodwill impairment charge of \$191 million, representing a full impairment of goodwill assigned to the Commercial Vehicle reporting unit. Management estimates the fair value of the reporting units using a model that incorporates various valuation methodologies, including discounted cash flow projections and multiples of current earnings. 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 segment EBITDA, discount rates, and terminal growth rates

The principal considerations for our determination that performing procedures relating to the interim goodwill impairment assessment of the Commercial Vehicle reporting unit is a critical audit matter are (i) the significant judgment by management when developing the fair value estimate of the Commercial Vehicle reporting unit; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to projected segment EBITDA and the discount rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

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 interim goodwill impairment assessment, including controls over the valuation of the Commercial Vehicle reporting unit. These procedures also included, among others (i) testing management's process for developing the fair value estimate of the Commercial Vehicle reporting unit; (ii) evaluating the appropriateness of the discounted cash flow model; (iii) testing the completeness and accuracy of the underlying data used in the discounted cash flow model; and (iv) evaluating the reasonableness of the significant assumptions used by management related to projected segment EBITDA and the discount rate. Evaluating management's significant assumption related to projected segment EBITDA involved evaluating whether the assumption used by management was reasonable considering (i) the current and past performance of the Commercial Vehicle reporting unit; (ii) the consistency with external market and industry data; and (iii) whether this assumption was consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the appropriateness of the discounted cash flow model and (ii) the reasonableness of the discount rate significant assumption.

/s/ PricewaterhouseCoopers LLP

Toledo, Ohio February 21, 2023

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

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

	2022	2021	2020
Net sales	\$ 10,156	\$ 8,945 \$	7,106
Costs and expenses			
Cost of sales	9,393	8,108	6,485
Selling, general and administrative expenses	495	460	421
Amortization of intangibles	14	14	13
Restructuring charges, net	(1)		34
Impairment of goodwill	(191)		(51)
Other income (expense), net	22	32	22
Earnings before interest and income taxes	 86	395	124
Loss on extinguishment of debt		(29)	(8)
Interest income	11	9	9
Interest expense	128	131	138
Earnings (loss) before income taxes	 (31)	244	(13)
Income tax expense	284	72	58
Equity in earnings of affiliates	4	28	20
Net income (loss)	(311)	200	(51)
Less: Noncontrolling interests net income	15	14	10
Less: Redeemable noncontrolling interests net loss	 (84)	(11)	(30)
Net income (loss) attributable to the parent company	\$ (242)	\$ 197 \$	(31)
Net income (loss) per share available to common stockholders			
Basic	\$ (1.69)	\$ 1.36 \$	(0.21)
Diluted	\$ (1.69)	\$ 1.35 \$	(0.21)
Weighted-average common shares outstanding			
Basic	143.6	144.8	144.5
Diluted	143.6	146.2	144.5

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

Dana Incorporated Consolidated Statement of Comprehensive Income (In millions)

		2022	2021	202	20
Net income (loss)	\$	(311)	\$ 200	\$	(51)
Other comprehensive income (loss), net of tax:					
Currency translation adjustments		(102)	(9)		(77)
Hedging gains and losses		17	(5)		39
Defined benefit plans		53	53		9
Other comprehensive income (loss)	<u> </u>	(32)	39	-	(29)
Total comprehensive income (loss)		(343)	239		(80)
Less: Comprehensive income attributable to noncontrolling interests		(10)	(2)		(27)
Less: Comprehensive loss attributable to redeemable noncontrolling interests		95	1		36
Comprehensive income (loss) attributable to the parent company	\$	(258)	\$ 238	\$	(71)

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)

		2022		2021	
Assets				-	
Current assets					
Cash and cash equivalents	\$	425	\$	268	
Marketable securities				17	
Accounts receivable					
Trade, less allowance for doubtful accounts of \$11 in 2022 and \$7 in 2021		1,374		1,321	
Other		202		220	
Inventories		1,609		1,564	
Other current assets		219		196	
Total current assets		3,829		3,586	
Goodwill		259		482	
Intangibles		201		233	
Deferred tax assets		397		580	
Other noncurrent assets		123		131	
Investments in affiliates		136		174	
Operating lease assets		311		247	
Property, plant and equipment, net		2,193		2,199	
Total assets	\$	7,449	\$	7,632	
Total assets	Ψ	7,112	Ψ	7,032	
Liabilities, redeemable noncontrolling interests and equity					
Current liabilities					
Short-term debt	\$	52	\$	23	
Current portion of long-term debt	ψ	8	Ψ	8	
Accounts payable		1,838		1,571	
Accrued payroll and employee benefits		214		184	
Taxes on income		54		41	
Current portion of operating lease liabilities		36		43	
Other accrued liabilities		277		304	
Total current liabilities		2,479		2,174	
Long-term debt, less debt issuance costs of \$22 in 2022 and \$26 in 2021		2,479		2,174	
Noncurrent operating lease liabilities		2,348		2,380	
Pension and postretirement obligations		298		398	
Other noncurrent liabilities		249		292	
Total liabilities		5,651		5,459	
Commitments and contingencies (Note 15)		105		100	
Redeemable noncontrolling interests		195		198	
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, 143,366,482 and 144,238,660 shares		2		2	
outstanding		2 220		2 127	
Additional paid-in capital		2,229		2,427	
Retained earnings		321		662	
Treasury stock, at cost (zero and 11,661,591 shares)		(1.001)		(184)	
Accumulated other comprehensive loss		(1,001)		(985)	
Total parent company stockholders' equity		1,551		1,922	
Noncontrolling interests		52		53	
Total equity		1,603		1,975	
Total liabilities, redeemable noncontrolling interests and equity	\$	7,449	\$	7,632	

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

Dana Incorporated Consolidated Statement of Cash Flows (In millions)

	2022	2021	2020
Operating activities			
Net income (loss)	\$ (311)	\$ 200	\$ (51)
Depreciation	365	365	345
Amortization	23	24	20
Amortization of deferred financing charges	5	6	8
Redemption premium on debt		21	
Write-off of deferred financing costs		8	8
Earnings of affiliates, net of dividends received	23	(10)	7
Stock compensation expense	19	17	14
Deferred income taxes	153	(1)	(35)
Pension expense, net	(1)	(1)	3
Gain on sale leaseback		(66)	
Impairment of goodwill	191		51
Change in working capital	199	(455)	47
Change in other noncurrent assets and liabilities	9	(3)	(20)
Other, net	(26)		(11)
Net cash provided by operating activities	649	158	386
Investing activities			
Purchases of property, plant and equipment	(440)	(369)	(326)
Proceeds from sale of property, plant and equipment	3	85	11
Acquisition of businesses, net of cash acquired	(1)	(18)	(6)
Investments in affiliates		(23)	(21)
Purchases of marketable securities	(15)		(44)
Proceeds from sales of marketable securities	()	30	5
Proceeds from maturities of marketable securities	30	35	36
Proceeds from sale of equity affiliate		29	21
Proceeds from sale of subsidiaries, net of cash disposed		(4)	
Settlement of terminated fixed-to-fixed cross currency swap		(22)	
Settlements of undesignated derivatives	(8)		(5)
Other, net	5		2
Net cash used in investing activities	(426)	(293)	(327)
Financing activities		(=>=)	(=-/)
Net change in short-term debt	33	(3)	9
Proceeds from long-term debt	2	1,157	508
Repayment of long-term debt	(24)		(480)
Redemption premium on debt	(= .)	(21)	(100)
Deferred financing payments		(18)	(13)
Dividends paid to common stockholders	(58)		(15)
Repurchases of common stock	(25)		()
Distributions to noncontrolling interests	(9)		(11)
Contributions from redeemable noncontrolling interests	51	14	4
Sale of interest to noncontrolling shareholder			9
Deconsolidation of non-wholly owned subsidiary		(6)	(14)
Payments to acquire noncontrolling interests	(4)		(7)
Other, net	(8)		(2)
Net cash used in financing activities	(42)		(12)
Net increase (decrease) in cash, cash equivalents and restricted cash	181	$\frac{(127)}{(262)}$	47
Cash, cash equivalents and restricted cash - beginning of period	287	567	518
Effect of exchange rate changes on cash balances	(26)		2
•			
Cash, cash equivalents and restricted cash - end of period	\$ 442	\$ 287	\$ 567

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

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

Parent Company Stockholders' Accumulated Parent Additional Other Company Non-Stockholders' Preferred Common Paid-In Retained Treasury Comprehensive controlling Total Capital Earnings Stock Stock Stock Loss Equity Interests Equity Balance, December 31, 2019 2,386 622 (150)(987)1,873 95 1,968 Adoption of ASU 2016-13 credit losses, January 1, 2020 (1) (1) (1) Net income (loss) (31)(31)10 (21)(40)Other comprehensive income (loss) (40)17 (23)Common stock dividends and dividend equivalents (\$0.10 per share) (15)(15)(15) Distributions to noncontrolling interests (11)(11)10 10 Purchase of noncontrolling interests (23)(13) Sale of noncontrolling interests Redeemable noncontrolling interests adjustment to redemption value (38)(38)(38) Deconsolidation of non-wholly owned subsidiary (7) 1 (6) (14)(20)12 Stock compensation 12 12 Stock withheld for employees taxes (6) (6)(6) Balance, December 31, 2020 2,408 530 (156)(1,026)1,758 76 1,834 197 Net income 197 14 211 Other comprehensive income (loss) 41 41 (12)29 Common stock dividends and dividend equivalents (\$0.40 per share) 1 (59)(58)(58)Common stock share repurchases (23)(23) (23)Distributions to noncontrolling interests (15)(15)Purchase of noncontrolling interests (2) (2) Sale of noncontrolling interests (1) (1) Redeemable noncontrolling interests adjustment to redemption value (6) (6) (6) Deconsolidation of non-wholly owned subsidiary (8) (8) Other 1 Stock compensation 18 18 18 Stock withheld for employees taxes (5) (5) (5) Balance, December 31, 2021 2 2,427 662 (184)(985)1,922 53 1,975 Net income (loss) (242)15 (242)(227)Other comprehensive loss (16)(16)(5) (21)Common stock dividends and dividend equivalents (\$0.40 per share) (58)(57)(57)Common stock share repurchases (25)(25)(25)(216)216 Retirement of treasury shares Distributions to noncontrolling interests (9)(9)Purchase of noncontrolling interests (2) (2) Redeemable noncontrolling interests adjustment to redemption value (41) (41) (41)Stock compensation 17 17 17 Stock withheld for employees taxes (7) (7) (7) 2,229 321 \$ (1,001) 52 1,603 1,551 Balance, December 31, 2022

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

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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. Certain items previously reported in specific financial statement captions have been reclassified to conform to the current presentation.

During the first quarter of 2022, we identified an error related to certain intercompany inventory transfers that were not appropriately eliminated and recorded an adjustment of \$8 that increased cost of sales. During the fourth quarter of 2022, we identified errors in accounts payable and certain other current liabilities that resulted in an overstatement of those liabilities and recorded an adjustment of \$9 that decreased cost of sales. A portion of both these adjustments relate to prior periods. We concluded that the corrections of these errors are not material to the financial statements for the year ended December 31, 2022 or any prior periods.

In the fourth quarter of 2022, we determined that our short-term investments in certificates of deposit included in marketable securities qualified as cash equivalents. These investments allow us to withdraw our funds at any time without prior notice or significant penalty, therefore these investments function as demand deposits. This change in classification has been reflected as an investing activity cash inflow of \$13 within the proceeds from maturities of marketable securities line item.

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 our 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.

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 twelve 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 depreciated 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, 2022, the machinery and equipment component of property, plant and equipment includes \$28 of our tooling related to long-term supply arrangements. Also at December 31, 2022, 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. A multi-step impairment test is performed on goodwill. In Step 0, we have the option to evaluate various qualitative factors to determine the likelihood of impairment. This qualitative assessment may include, but is not limited to, reviewing factors such as macroeconomic conditions, industry and market considerations, cost factors, entity-specific financial performance and other events, such as changes in the Company's management, strategy and primary customer base. If we determine that the fair value is more likely than not less than the carrying value, then we are required to perform Step 1. If we do not elect to perform Step 0, we can voluntarily proceed directly to Step 1. In Step 1, we estimate the fair value of the reporting units using a model that incorporates 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 segment EBITDA, discount rates, and terminal growth rates. If the estimated fair value, a goodwill impairment charge is recorded for the difference. See Note 3 for more information about goodwill.

Intangible assets — Intangible assets include the value of core technology, trademarks and trade names and customer relationships. Core technology and customer relationships have definite lives while the majority 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. Indefinite-lived intangible assets are tested for impairment annually and more frequently if impairment indicators exist. See Note 3 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 21 for further information about our investment in affiliates.

Tangible asset impairments — We review the carrying value of depreciable long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group 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, notes receivable and short-term borrowings approximate fair value. 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. 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 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. Changes in the fair value of contracts not treated as cash flow hedges or as net investment hedges are recognized in other income (expense), net in the period in which those changes occur.

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, 2022. See Note 14 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.

Government assistance — We account for separate legally enforceable agreements with governments and government agencies where the agreement provides for the government to determine whether Dana will receive assistance and the amount of assistance by applying a contribution accounting model by analogy. The primary forms of government assistance received includes cash grants based on making qualifying capital investments over a specified period of time; cash grants based on creating new jobs, increasing and maintaining qualifying employee headcount over a specified period of time; and cash grants based on investing in specified research and development activities. The agreements include imposed conditions that must be satisfied for us to retain grant proceeds received. Imposed conditions include providing documentation supporting qualified expenditures have been made and may include providing documentation that specified employment levels have been achieved. Imposed conditions related to employment levels typically range from one to five years. Amounts received or receivable from these cash grants are deferred as a liability until such time as we have satisfied all imposed conditions documented in the agreement with the government. Deferred amounts are recorded in other accrued liabilities and other noncurrent liabilities as appropriate. Government assistance received for making qualifying capital investments is realized by reducing the associated fixed assets so long as we have satisfied all imposed conditions by the time the associated fixed assets are placed into service. All other government assistance is realized in other income (expense), net once all imposed conditions have been satisfied. Notes 6 and 18 for additional information.

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 19 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 income (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 accumulated other comprehensive income (loss) (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 with translation gains and losses included in other income (expense), net.

We continue to account for Argentina as a highly inflationary economy and 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.

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 that are prudent and feasible.

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 \$201, \$178 and \$146 in 2022, 2021 and 2020. Beginning in 2020, we significantly increased our research and development activities in support of our electrification initiatives.

Recently adopted accounting pronouncements

On January 1, 2022, we adopted Accounting Standards Update (ASU) 2021-10, *Disclosures by Business Entities about Government Assistance*. This guidance is intended to provide clarity on what information must be disclosed when receiving government assistance. Details include the disclosure of the nature of the transactions, line items affected, and significant terms and conditions. The adoption of this standard did not have a material impact on our consolidated financial statements.

Recently issued accounting pronouncements

In October 2021, the FASB issued ASU 2021-08, *Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. The guidance is intended to provide clarification on how to account for contract assets acquired via business combination, which will generally be at the same value as recognized by the acquiree assuming the acquiree followed US GAAP. The guidance becomes effective January 1, 2023. We do not expect adoption of this guidance to have a material impact on our consolidated financial statements.

In September 2022, the FASB issued ASU 2022-04, *Supplier Finance Programs*. This guidance enhances the transparency of supplier finance programs which includes disclosing information about the key terms of the program, outstanding confirmed amounts as of the end of the period, a rollforward of such amounts during each annual period, and a description of where in the financial statements outstanding amounts are presented. The guidance becomes effective January 1, 2023. We are currently assessing the impact of the guidance on our consolidated financial statements.

Note 2. Acquisitions

Pi Innovo Holdings Limited — On October 20, 2020, we acquired an initial 49% ownership interest in Pi Innovo Holdings Limited (Pi Innovo). Pi Innovo designs, develops and manufactures electronic control units spanning a range of applications and industries. Our initial investment in Pi Innovo was accounted for following the equity method. On March 1, 2021, we acquired the remaining 51% ownership interest in Pi Innovo. The acquisition of the remaining ownership interest provides us with a 100% ownership interest in Pi Innovo. The total purchase consideration of \$35 is comprised of \$18 of cash paid at closing and the \$17 fair value of our previously held equity method investment in Pi Innovo. 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.

Ashwoods Innovations Limited — On February 28, 2019, through our acquisition of Oerlikon Drive Systems, we acquired an initial 62.4% ownership interest in Ashwoods Innovations Limited (Ashwoods). Ashwoods designs and manufactures permanent magnet electric motors for the automotive, material handling and off-highway vehicle markets. Our initial investment in Ashwoods was accounted for following the equity method. On February 5, 2020, we acquired Curtis Instruments, Inc.'s (Curtis) 35.4% ownership interest in Ashwoods. The acquisition of Curtis' interest in Ashwoods, along with our existing ownership interest in Ashwoods, provided us with a 97.8% ownership interest and a controlling financial interest in Ashwoods. We recognized a \$3 gain to other income (expense), net on the required remeasurement of our previously held equity method investment in Ashwoods to fair value. The total purchase consideration of \$22 is comprised of \$8 of cash paid to Curtis at closing, the \$10 fair value of our previously held equity method investment in Ashwoods and \$4 related to the effective settlement of a pre-existing loan payable due from Ashwoods. During March 2020, we acquired the remaining noncontrolling interests in Ashwoods held by employee shareholders. The results of operations of the business are reported within our Off-Highway 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.

Note 3. Goodwill and Other Intangible Assets

Goodwill — Our goodwill is 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 evaluated macro-economic conditions during the third quarter of 2022, including the impact of the Federal Reserve further increasing the risk-free interest rate, as well as the negative impact of sustained higher commodity costs, non-material cost increases and operational inefficiencies attributable to continued global supply chain disruptions. We believe that these conditions were factors in our market capitalization falling below the book value of net assets as of September 30, 2022. Accordingly, we concluded a triggering event had occurred and performed interim goodwill impairment analyses for our Commercial Vehicle and Off-Highway reporting units.

Based on the results of our interim impairment analyses, we concluded that the carrying value exceeded fair value of our Commercial Vehicle reporting unit and we recorded a goodwill impairment charge of \$191, representing a full impairment of goodwill assigned to the Commercial Vehicle reporting unit. Our analysis for the Off-Highway reporting unit indicated that the fair value exceeded the carrying value by a substantial amount and, accordingly, no impairment charge was required. We completed our annual impairment test for the Off-Highway reporting unit and concluded that fair value continues to exceed the carrying value.

The remaining change in the carrying amount of goodwill in 2022 was due to currency fluctuation.

Changes in the carrying amount of goodwill by segment —

	Commercial								
	Light Vehicle			Vehicle	Off-Highway		Technologies		Total
Balance, December 31, 2020	\$		\$	177	\$	302	\$		\$ 479
Acquisitions				22		(11)			11
Currency impact				2		(10)			(8)
Balance, December 31, 2021				201		281			482
Impairment				(191)					(191)
Currency impact				(10)		(22)			(32)
Balance, December 31, 2022	\$		\$		\$	259	\$		\$ 259

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, 2022 in connection with the required annual assessment for trademarks and trade names.

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 GrazianoTM, 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, 2022.

Components of other intangible assets —

			December 31, 2022						December 31, 2021						
	Weighted Average Useful Life (years)	Gro Carr Amo		ing Impairment and Carrying		arrying	Gross Carrying Amount		Accumulated Impairment and Amortization		Car	let rying lount			
Amortizable intangible assets															
Core technology	8	\$	156	\$	(116)	\$	40	\$	161	\$	(110)	\$	51		
Trademarks and trade names	13		29		(13)		16		31		(12)		19		
Customer relationships	8		498		(425)		73		519		(431)		88		
Non-amortizable intangible assets															
Trademarks and trade names			72				72		75				75		
		\$	755	\$	(554)	\$	201	\$	786	\$	(553)	\$	233		

The net carrying amounts of intangible assets, other than goodwill, attributable to each of our operating segments at December 31, 2022 were as follows: Light Vehicle – \$16, Commercial Vehicle – \$66, Off-Highway – \$114 and Power Technologies – \$5.

Amortization expense related to amortizable intangible assets —

	2022		2021	2020
Charged to cost of sales	\$	9	\$ 10	\$ 7
Charged to amortization of intangibles	_	14	 14	13
Total amortization	\$	23	\$ 24	\$ 20

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, 2022 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.

	20	23	2024	2025		2026	5	202	/
Amortization expense	\$	22	\$ 21	\$	19	\$	17	\$	16

Note 4. 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.

Accrued restructuring costs and activity, including noncurrent portion —

		Employee			
	To	ermination	Exit		
		Benefits	Costs	Total	
Balance, December 31, 2019	\$	13	\$ 1	\$ 14	4
Charges to restructuring		30	6	36	6
Adjustments of accruals		(2)		(2	2)
Cash payments		(12)	(7)	(19	9)
Currency impact		1		1	1
Balance, December 31, 2020		30	_	30	0
Charges to restructuring		2	5	7	7
Adjustments of accruals		(7)		(7	7)
Cash payments		(13)	(5)	(18	8)
Currency impact		(1)		(1	1)
Balance, December 31, 2021		11	_	11	1
Charges to restructuring		2	2	2	4
Adjustments of accruals		(5)		(.	5)
Cash payments		(6)	(2)	(8	8)
Balance, December 31, 2022	\$	2	<u> </u>	\$ 2	2

At December 31, 2022, accrued employee termination benefits include costs to reduce approximately 100 employees to be completed over the next year.

Note 5. Inventories

Inventory components at December 31 —

	2	2022	2021	
Raw materials	\$	679		651
Work in process and finished goods		1,023	1,0	,000
Inventory reserves		(93)		(87)
Total	\$	1,609	\$ 1,5	,564

Note 6. Supplemental Balance Sheet and Cash Flow Information

Supplemental balance sheet information at December 31 —

	20	22	2021
Other current assets:			
Prepaid expenses	\$	167 \$	147
Other		52	49
Total	\$	219 \$	196
- V m.			
Other noncurrent assets:			
Customer incentive payments	\$	28 \$	38
Prepaid expenses		3	2
Deferred financing costs		4	6
Pension assets, net of related obligations		9	15
Other		79	70
Total	\$	123 \$	131
Property, plant and equipment, net:			
Land and improvements to land	\$	187 \$	193
Buildings and building fixtures		605	590
Machinery and equipment		4,108	3,872
Finance lease right-of-use assets		57	64
Total cost		4,957	4,719
Less: accumulated depreciation		(2,764)	(2,520)
Net	\$	2,193 \$	2,199
Other accrued liabilities (current):			
Non-income taxes payable	\$	54 \$	54
Accrued interest		29	25
Warranty reserves		35	51
Deferred income			8
Workplace injury costs		5	5
Restructuring costs		2	11
Payable under forward contracts		11	1
Environmental		3	5
Deferred government assistance		3	
Other expense accruals		135	144
Total	<u>\$</u>	277 \$	304
Other noncurrent liabilities:		-0 +	
Income tax liability	\$	58 \$	68
Interest rate swap market valuation		11	51
Deferred income tax liability		30	32
Workplace injury costs		14	15
Warranty reserves		73	56
Deferred government assistance		16	
Other noncurrent liabilities		47	70
Total	\$	249 \$	292

Cash, cash equivalents and restricted cash at —

	December 31, 2022 D		December 31, 2021		December 31, 2020		Decer	nber 31, 2019
Cash and cash equivalents	\$	425	\$	268	\$	559	\$	508
Restricted cash included in other current assets		7		9		5		6
Restricted cash included in other noncurrent assets		10		10		3		4
Total cash, cash equivalents and restricted cash	\$	442	\$	287	\$	567	\$	518

Supplemental cash flow information —			
	2022	2021	2020
Change in working capital:			
Change in accounts receivable	\$ (81)	\$ (189)	\$ (66)
Change in inventories	(99)	(471)	69
Change in accounts payable	343	254	82
Change in accrued payroll and employee benefits	36	3	(22)
Change in accrued income taxes	10	(44)	(9)
Change in other current assets and liabilities	(10)	(8)	(7)
Net	\$ 199	\$ (455)	\$ 47
Cash paid during the period for:			
Interest	\$ 117	\$ 109	\$ 129
Income taxes	132	99	98
Noncash investing and financing activities:			
Purchases of property, plant and equipment held in accounts payable	\$ 74	\$ 91	\$ 50
Stock compensation plans	17	18	12
Noncash dividends declared	1	1	_

Note 7. Leases

Our leases generally have remaining lease terms of one year to twenty years, some of which include options to extend the leases for up to forty 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, 2022 and 2021.

	Classif		2022	2021			
Finance lease right-of-use assets	Property, plant and equi	pment, net		\$	57	\$	64
Finance lease liabilities	Current portion of long-term debt				8		8
Finance lease liabilities	Long-term debt				43		47
Components of lease expense —		20	22		2021	2020	
Operating lease cost		\$	58	\$	53	\$	52
Finance lease cost:							
Amortization of right-of-use assets		\$	9	\$	8	\$	5
Interest on lease liabilities			2		2		2
Total finance lease cost		\$	11	\$	10	\$	7

Supplemental cash flow information related to leases —

	2022	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	\$ 60	\$ 53	\$ 52
Operating cash flows from finance leases	2	2	2
Financing cash flows from finance leases	9	7	4
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	\$ 111	\$ 105	\$ 57
Finance leases	6	3	32

Supplemental balance sheet information related to leases —

	2022	2021
Weighted-average remaining lease term (years):		
Operating leases	10	10
Finance leases	12	13
Weighted-average discount rate:		
Operating leases	6.9%	6.3%
Finance leases	4.5%	4.5%

Maturities —

	Operatin	g Leases	Finance 1	Leases
2023	\$	54	\$	9
2024		51		8
2025		47		7
2026		42		6
2027		37		6
Thereafter		222		35
Total lease payments		453		71
Less: interest		140		19
Present value of lease liabilities	\$	313	\$	52

Operating lease payments presented in the table above exclude minimum lease payments for real estate leases signed in 2022 but not yet commenced. These leases are de minimis and are expected to commence in 2023.

Note 8. Stockholders' Equity

Preferred Stock

We are authorized to issue 50,000,000 shares of Dana preferred stock, par value \$0.01 per share. There were no preferred shares outstanding at December 31, 2022 or 2021.

Common Stock

We are authorized to issue 450,000,000 shares of Dana common stock, par value \$0.01 per share. At December 31, 2022, there were 143,366,482 shares of our common stock issued and outstanding. Treasury shares include those shares withheld at cost to satisfy tax obligations from stock awards issued under our stock compensation plan in addition to shares repurchased through share repurchase programs. At December 31, 2022, we held no shares in treasury.

Our Board of Directors declared a cash dividend of ten cents per share of common stock in all four quarters of 2022. Aggregate 2022 cash dividends paid totaled \$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.

Treasury stock — On December 17, 2022, we retired 13,477,933 shares of treasury stock. The \$216 excess of the cost of the treasury stock over the common stock par value, based on the weighted-average pool price of our treasury shares at the date of retirement, was charged to additional paid-in capital.

Share repurchase program — On February 16, 2021 our Board of Directors approved an extension of our existing common stock share repurchase program through December 31, 2023. Under the existing program, we spent \$25 to repurchase 1,483,742 shares of our common stock during the first quarter of 2022 through open market transactions. Approximately \$102 remained available under the program for future share repurchases as of December 31, 2022.

	Parent Company Stockholders												
	Forei Curre Transla	ncy	Hedging		Defined Benefit Plans	Cor	Other nprehensive Loss						
Balance, December 31, 2019	\$	(714)	\$ (30)	\$	(243)	\$	(987)						
Other comprehensive income (loss):													
Currency translation adjustments		(88)					(88)						
Holding gains and losses			(78)				(78)						
Reclassification of amount to net income (a)			117				117						
Net actuarial losses					(11)		(11)						
Reclassification adjustment for net actuarial losses included in net periodic benefit cost (b)					20		20						
Other comprehensive income (loss)		(88)	39		9		(40)						
Deconsolidation of non-wholly owned subsidiary					1		1						
Balance, December 31, 2020		(802)	9		(233)		(1,026)						
Other comprehensive income (loss):													
Currency translation adjustments		(7)					(7)						
Holding gains and losses			55				55						
Reclassification of amount to net income (a)			(59)				(59)						
Net actuarial gains					52		52						
Reclassification adjustment for net actuarial losses included in net periodic benefit cost (b)					18		18						
Tax expense			(1)		(17)		(18)						
Other comprehensive income (loss)		(7)	(5)		53		41						
Balance, December 31, 2021		(809)	4		(180)		(985)						
Other comprehensive income (loss):					, ,		, ,						
Currency translation adjustments		(88)					(88)						
Holding gains and losses			76				76						
Reclassification of amount to net income (a)			(56)				(56)						
Net actuarial gains					62		62						
Reclassification adjustment for net actuarial losses included in net periodic benefit cost (b)					11		11						
Tax (expense) benefit		2	(3)		(20)		(21)						
Other comprehensive income (loss)		(86)	17		53	_	(16)						
Balance, December 31, 2022	\$	(895)	\$ 21	\$	(127)	\$	(1,001)						

Notes:

Note 9. Redeemable Noncontrolling Interests

Hydro-Québec owns a 45% redeemable noncontrolling interest in Dana TM4 Inc., Dana TM4 Electric Holdings BV and Dana TM4 USA, LLC. The terms of the joint venture agreement provide Hydro-Québec with the right to put all, and not less than all, of its ownership interests in Dana TM4 Inc., Dana TM4 Electric Holdings BV and Dana TM4 USA, LLC to Dana at fair value.

⁽a) 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 14 for additional details.

⁽b) See Note 12 for additional details.

Redeemable noncontrolling interests reflected as of the balance sheet date are the greater of the redeemable noncontrolling interest balances adjusted for comprehensive income (loss) items and distributions or the redemption values. Redeemable noncontrolling interest adjustments of redemption value are recorded in retained earnings. We estimate the fair value of the redemption value using an income based approach based on discounted cash flow projections. 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 EBITDA, discount rates, and terminal growth rates.

Reconciliation of changes in redeemable noncontrolling interests —

	2	2022	2021
Balance, beginning of period	\$	198 \$	180
Capital contribution from redeemable noncontrolling interest		51	14
Adjustment to redemption value		41	6
Other			(1)
Comprehensive income (loss) adjustments:			
Net loss attributable to redeemable noncontrolling interests		(84)	(11)
Other comprehensive income (loss) attributable to redeemable noncontrolling interests		(11)	10
Balance, end of period	\$	195 \$	198

Note 10. Earnings per Share

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

	2022	2021	2020
Net income (loss) available to common stockholders - Numerator basic and diluted	\$ (242)	\$ 197	\$ (31)
Denominator:			
Weighted-average common shares outstanding - Basic	143.6	144.8	144.5
Employee compensation-related shares, including stock options		1.4	
Weighted-average common shares outstanding - Diluted	143.6	146.2	144.5

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, 0.6 million and 1.4 million CSEs from the calculations of diluted earnings per share for the years 2022, 2021 and 2020 as the effect of including them would have been anti-dilutive. In addition, we excluded CSEs that satisfied the definition of potentially dilutive shares of 0.7 million and 0.7 million for 2022 and 2020 because the net loss position made these anti-dilutive.

Note 11. Stock Compensation

2021 Omnibus Incentive Plan

The 2021 Omnibus Incentive Plan (the Plan) authorizes the grant of stock options, stock appreciation rights (SARs), RSUs and performance share units (PSUs) through April 2031. Cash-settled awards do not count against the number of shares available for award under the Plan. At December 31, 2022, there were 5.7 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)

	(Opti	ons		RS	Us		PSUs										
						(Grant-Date		Gr	ant-Date								
	Shares	Exercise Price*		Shares Exercise Price*		Shares Exercise Price*			Shares Exercise Price* Sha				F	air Value*	Shares	Fair Value*		
December 31, 2021	0	.2	\$	16.18	2.4	\$	17.25	0.5	\$	17.71								
Granted					0.9		22.21	0.3		24.69								
Exercised or vested					(1.0)		17.98											
Forfeited or expired								(0.4)		14.77								
December 31, 2022	0	.2		16.19	2.3		18.95	0.4		25.52								

* Weighted-average per share

	2022	2021	2020
Total stock compensation expense	\$ 19	\$ 17	\$ 14
Total grant-date fair value of awards vested	19	15	16
Cash received from exercise of stock options		5	
Cash paid to settle SARs and RSUs	4	2	2
Intrinsic value of stock options and SARs exercised		2	
Intrinsic value of RSUs and PSUs vested	21	14	14

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 \$4 and \$6 for cash-settled awards at December 31, 2022 and 2021. During 2022 we issued 0.8 million and 0.1 million shares of common stock based on vesting of RSUs and PSUs, respectively. At December 31, 2022, 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 1.6 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, 2022, the outstanding awards have no aggregate intrinsic value and a weighted-average remaining contractual life of 0.2 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 for older awards and pro-rata vest for newer awards over three years. PSUs granted to employees vest if specified performance goals are achieved during the respective performance period, generally three years.

Under the 2022 and 2021 stock compensation award programs, the number of PSUs that ultimately vest is contingent on achieving specified financial targets and specified total shareholder return targets relative to peer companies. Under the 2020 stock compensation award program, the number of PSUs that ultimately vest is contingent on achieving a specified free cash flow target and a specified margin target, with an even distribution between the two targets. For the portions of the awards based on financial metrics, 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. For the portion of the PSU award based on shareholder returns, we estimated the fair value at grant date using various assumptions as part of a Monte Carlo simulation. The expected term represents the period from the grant date to the end of the performance period. The risk-free interest rate was based on U.S. Treasury constant maturity rates at the grant date. The dividend yield for the 2022 award was calculated using our historical approach calculated by dividing the expected annual dividend by the average stock price over the prior year and the current yield calculated by dividing the expected annual dividend by the grant date stock price. The estimated volatility was based on observed historical volatility of daily stock returns for the 3-year period preceding the grant date.

	PSUS	
	2022	2021
Expect term (in years)	3.0	3.0
Risk-free interest rate	1.78%	0.18%
Dividend yield	1.67%	2.27%
Expected volatility	63.9%	62.8%

DCLIG

Cash incentive awards — Our 2021 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 primarily based on achieving certain financial performance goals. The financial performance goals of the plan are established annually by the Board of Directors.

Under the 2022 annual incentive program, participants were eligible to receive cash awards based on achieving earnings, cash flow and EV sales performance goals. Under the 2021 and 2020 annual incentive programs, participants were eligible to receive cash awards based on achieving earnings and cash flow and cash flow performance goals, respectively. We accrued \$37, \$8 and \$23 of expense in 2022, 2021 and 2020 for the expected cash payments under these programs.

Note 12. 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.

 $Components\ of\ net\ periodic\ benefit\ cost\ (credit)\ and\ other\ amounts\ recognized\ in\ OCI-$

							Pen	sion E		efits				
			202	22				202	21			202	20	
		U.S.			Non-U.S.		U.S.			Non-U.S.		U.S.		Non-U.S.
Interest cost	\$		16	\$	8	\$		13	\$	5	\$	21	\$	5
Expected return on plan assets			(28)		(2)			(26)		(2)		(35)		(3)
Service cost					7					9				9
Amortization of net actuarial loss			8		5			9		9		11		9
Net periodic benefit cost (credit)			(4)	_	18	_		(4)	_	21		(3)		20
Recognized in OCI:														
Amount due to net actuarial (gains)														
losses			20		(66)			(4)		(23)		(4)		10
Reclassification adjustment for net actuarial losses in net periodic														
benefit cost			(8)		(5)			(9)		(9)		(11)		(9)
Total recognized in OCI			12		(71)			(13)		(32)		(15)		1
Net recognized in benefit cost (credit)					_							_		
and OCI	\$		8	\$	(53)	\$		(17)	\$	(11)	\$	(18)	\$	21
								OPE	В					
			202	22				202	21			202	20	
	-	U.S.			Non-U.S.		U.S.			Non-U.S.	_	U.S.		Non-U.S.
Interest cost	\$			\$	2	\$			\$	2	\$	_	\$	2
Service cost										1				1
Amortization of net actuarial gain					(2)									
Net periodic benefit cost			_							3				3
Recognized in OCI:														
Amount due to net actuarial (gains)														
losses			(1)		(15)			(1)		(24)		1		4
Reclassification adjustment for net actuarial gain in net periodic benefit														
cost					2									
Total recognized in OCI			(1)		(13)			(1)	_	(24)		1		4
Net recognized in benefit cost (credit)				_									-	
and OCI	\$		(1)	\$	(13)	\$		(1)	\$	(21)	\$	1	\$	7
					49									

Our U.S. defined benefit pension plans are frozen and no additional service cost is being accrued. The service cost component for international plans is included in cost of sales and selling, general and administrative expenses. Other components of net periodic benefit cost (credit) are included in other income (expense), net in our consolidated income statement. Actuarial gains and losses resulting from plan remeasurement are recognized in AOCI in the period of remeasurement. 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.

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

	Pension Benefits								OPEB									
	2022				2021				202		2021							
		U.S.	Non-U.S.			U.S.		Non-U.S.		U.S.	Non-U.S.		U.S.		Noı	n-U.S.		
Reconciliation of benefit obligation:				,						,								
Obligation at beginning of period	\$	745	\$	384	\$	810	\$	438	\$	3	\$	69	\$	4	\$	93		
Interest cost		16		8		13		5				2				2		
Service cost				7				9								1		
Actuarial (gain) loss		(155)		(73)		(29)		(25)		(1)		(15)		(1)		(24)		
Benefit payments		(49)		(14)		(49)		(15)				(4)				(4)		
Settlements								(1)										
Translation adjustments				(16)				(27)				(4)	_			1		
Obligation at end of period	\$	557	\$	296	\$	745	\$	384	\$	2	\$	48	\$	3	\$	69		
		202	22	Pension l	Ben	efits 202	21			202	22	OP	EB	20:	21			
		U.S.	N	on-U.S.		U.S.	No	n-U.S.		U.S.	No	n-U.S.		U.S.	Noı	n-U.S.		
Reconciliation of fair value of plan assets:						-												
Fair value at beginning of period	\$	733	\$	65	\$	781	\$	69	\$	_	\$	1	\$	_	\$	_		
Actual return on plan assets		(147)		(5)		1												
Employer contributions				16				17				4				5		
Benefit payments		(49)		(14)		(49)		(15)				(4)				(4)		
Settlements								(1)										
Translation adjustments				(3)			_	(5)							_			
Fair value at end of period	\$	537	\$	59	\$	733	\$	65	\$		\$	1	\$		\$	1		
Funded status at end of period	\$	(20)	\$	(237)	\$	(12)	\$	(319)	\$	(2)	\$	(47)	\$	(3)	\$	(68)		
•																		
						50												

Amounts recognized in the balance sheet —

	Pension Benefits										OPEB								
		202	22			2021				202	22		2021						
	J	J.S.	No	on-U.S.		U.S.	No	n-U.S.		U.S.	No	on-U.S.		U.S.	No	n-U.S.			
Amounts recognized in the consolidated																			
balance sheet:																			
Noncurrent assets	\$	7	\$	2	\$	14	\$	1	\$	_	\$	_	\$	_	\$	_			
Current liabilities				(13)				(14)				(4)				(5)			
Noncurrent liabilities		(27)		(226)		(26)		(306)		(2)		(43)		(3)		(63)			
Net amount recognized	\$	(20)	\$	(237)	\$	(12)	\$	(319)	\$	(2)	\$	(47)	\$	(3)	\$	(68)			

Amounts recognized in AOCI —

		Pension Benefits							OPEB								
		2022				2021				20	22				202	21	
	Ţ	J.S.	Non	-U.S.		U.S.	Noı	n-U.S.	1	U.S.	No	n-U.S.		U.S.		Non	ı-U.S.
Amounts recognized in AOCI:																	
Net actuarial loss (gain)	\$	141	\$	5	\$	129	\$	76	\$	_	\$	(45)	\$		1	\$	(32)
AOCI before tax		141		5		129		76				(45)			1		(32)
Deferred taxes		17		(2)		19		(22)				11					9
Net	\$	158	\$	3	\$	148	\$	54	\$		\$	(34)	\$		1	\$	(23)

The net actuarial loss for U.S. pension plans for 2022 was primarily due to the actual return on assets underperforming the expected asset return, partially offset by an increase in discount rates. The actuarial gain for OPEB for 2022 was primarily due to an increase in the discount rates.

The net actuarial gain for pension for 2021 was primarily due to an increase in discount rates, and for the U.S. plans, partially offset by the actual return on assets underperforming the expected asset return. The actuarial gain for OPEB for 2021 was primarily due to an increase in the discount rates, a decrease in health care trend rates, and other favorable mortality assumption changes.

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

		2022					2021		
		U.S.			Non-U.S.		U.S.		Non-U.S.
Plans with fair value of plan assets in excess of obligations:									
Accumulated benefit obligation		\$	425	\$	14	\$	568	\$	12
Projected benefit obligation			425		14		568		12
Fair value of plan assets			431		16		582		13
Plans with obligations in excess of fair value of plan assets:									
Accumulated benefit obligation		\$	132	\$	259	\$	177	\$	344
Projected benefit obligation			132		282		177		372
Fair value of plan assets			106		43		151		52
	51								

Fair Value Measurements at December 31, 2022

			U.S.								Non-U.S.					
Asset Category	T	otal	Lev	el 1	Le	evel 2	Lev	vel 3	NA	V (a)	Le	vel 1	Le	vel 2	Lev	el 3
Equity securities:																
U.S. all cap (b)	\$	20	\$	20	\$	_	\$	_	\$	_	\$	_	\$	_	\$	
U.S. large cap		19								19						
EAFE composite		11								11						
Emerging markets		9								9						
Fixed income securities:																
Corporate bonds		414				165				249						
U.S. Treasury strips		8				8										
Non-U.S. government securities		16				2								14		
Emerging market debt		7								7						
Alternative investments:																
Insurance contracts (c)		49						6								43
Real estate		14								14						
Other		2												2		
Cash and cash equivalents		27				27										
Total	\$	596	\$	20	\$	202	\$	6	\$	309	\$		\$	16	\$	43

Fair Value Measurements at December 31, 2021

			Fair Value Measurements at December 31, 2021													
						U.	S.						Nor	ı-U.S.		
Asset Category	T	otal	Le	Level 1		Level 2		Level 3		NAV (a)		Level 1		Level 2		vel 3
Equity securities:																
U.S. all cap (b)	\$	31	\$	31	\$	_	\$	_	\$	_	\$	_	\$	_	\$	
U.S. large cap		30								30						
EAFE composite		17								17						
Emerging markets		10								10						
Fixed income securities:																
Corporate bonds		556				200				356						
U.S. Treasury strips		24				24										
Non-U.S. government securities		15				2								13		
Emerging market debt		10								10						
Alternative investments:																
Insurance contracts (c)		57						6								51
Real estate		14								14						
Other		1												1		
Cash and cash equivalents		33				33										
Total	\$	798	\$	31	\$	259	\$	6	\$	437	\$	_	\$	14	\$	51

Notes:

⁽a) 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.

⁽b) 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.

⁽c) This category comprises contracts placed with insurance companies where the underlying assets are invested in fixed interest securities.

	202	22			20	021		
	U.	S.	Non	-U.S.	U	J.S.	Nor	n-U.S.
	Insur	ance	Insu	rance	Insu	irance	Insu	urance
Reconciliation of Level 3 Assets	Contr	racts	Con	tracts	Con	tracts	Cor	ntracts
Fair value at beginning of period	\$	6	\$	51	\$	6	\$	52
Actual gains (losses) relating to assets still held at the reporting date				(5)				2
Currency impact				(3)				(3)
Fair value at end of period	\$	6	\$	43	\$	6	\$	51

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, 2022, the U.S. plans had targets of 18% for the Growth Portfolio (U.S. and non-U.S. equities, high-yield fixed income, real estate, emerging market debt and cash), 80% 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, 2022 by the U.S. plans were invested 17% in the Growth Portfolio, 80% 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:

	2022	2	2021		2020			
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.		
Pension benefit obligations:								
Discount rate	5.47%	4.74%	2.83%	1.97%	2.43%	1.40%		
Net periodic benefit cost:								
Discount rate	2.29%	2.20%	1.72%	1.79%	2.79%	2.10%		
Rate of compensation increase	N/A	3.11%	N/A	2.97%	N/A	3.36%		
Expected return on plan assets	4.00%	3.64%	3.50%	3.57%	5.00%	4.45%		

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.

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 6.00% expected return on asset assumption for 2023 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:

	2022	2	2021		2020			
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.		
OPEB benefit obligations:								
Discount rate	5.54%	5.44%	2.99%	3.08%	2.67%	2.55%		
Net periodic benefit cost:								
Discount rate	2.84%	3.34%	2.57%	2.62%	3.19%	3.15%		
Initial health care cost trend rate	N/A	2.48%	N/A	2.27%	N/A	4.64%		
Ultimate health care cost trend rate	N/A	4.09%	N/A	4.20%	N/A	5.13%		
Year ultimate reached	N/A	2032	N/A	2032	N/A	2023		

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.

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:

	Pension	OPEB			
Year	 U.S.	Non-U.S.	U.S.	Non-U.S.	
2023	\$ 50	\$ 16	\$ —	\$ 4	
2024	49	16		4	
2025	48	16		4	
2026	48	20		4	
2027	47	19		4	
2028 to 2032	215	114	1	17	
Total	\$ 457	\$ 201	\$ 1	\$ 37	

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. There are no projected contributions to be made during 2023 for our U.S. plans and projected contributions of \$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 May 22, 2026. The trustees of the SPT have provided us with the latest data available for the plan year ended December 31, 2022. 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.

	Employer	PI	PA							
	Identification	Zone	Status	Funding Plan	 (Contribut	ions by Dana	a		
Pension	Number/	·		Pending/					_	Surcharge
Fund	Plan Number	2022	2021	Implemented	2022	2	2021		2020	Imposed
SPT	23-6648508 / 499	Green	Green	No	\$ 18	\$	16	\$	14	No

Note 13. Financing Agreements

Long-term debt at December 31 —

	Interest Rate	2022	2021
Senior Notes due April 15, 2025	5.750% *	\$ 400	\$ 400
Senior Notes due November 15, 2027	5.375%	400	400
Senior Notes due June 15, 2028	5.625%	400	400
Senior Euro Notes due July 15, 2029	3.000%	348	370
Senior Notes due September 1, 2030	4.250%	400	400
Senior Notes due February 15, 2032	4.500%	350	350
Other indebtedness		80	100
Debt issuance costs		(22)	(26)
		2,356	2,394
Less: Current portion of long-term debt		8	8
Long-term debt, less debt issuance costs		\$ 2,348	\$ 2,386

^{*} 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 14 for additional information.

Interest on the senior notes is payable semi-annually. Other indebtedness includes a \$25 note payable to the former shareholders of SME, borrowings from various financial institutions and finance lease obligations.

Scheduled principal payments on long-term debt, excluding finance leases at December 31, 2022 —

	2023		2024	2025	2026		2027
Maturities	\$	- \$	27	\$ 400	\$	2	400

Senior notes activity — On May 13, 2021, we redeemed \$254 of our December 2024 Notes pursuant to a tender offer at a weighted average price equal to 102.000% plus accrued and unpaid interest. On May 17, 2021, we called the remaining \$171 of our December 2024 Notes at a price equal to 101.833% plus accrued and unpaid interest. The \$8 loss on extinguishment of debt recorded in May 2021 includes the redemption premium of \$8 and the write-off of \$3 of previously deferred financing costs associated with the December 2024 Notes. These charges were partially offset by the recognition of \$3 related to an unamortized fair value adjustment associated with a fixed-to-floating interest rate swap that was terminated in 2015.

On May 13, 2021, we completed the sale of \$400 in senior unsecured notes (the September 2030 Notes) at 4.25%. The September 2030 Notes rank equally with Dana's other unsecured senior notes. Interest on the notes is payable on March 1 and September 1 of each year, beginning on September 1, 2021. The September 2030 Notes will mature on September 1, 2030. Net proceeds of the offering totaled \$395. Financing costs of \$5 were recorded as deferred costs and are being amortized to interest expense over the life of the notes. Proceeds from the offering will be used to finance or refinance, in whole or in part, recently completed or future eligible green projects related to clean transportation, renewable energy, sustainable water and wastewater management, and green buildings.

On May 28, 2021, Dana Financing Luxembourg S.à r.l. (Dana Financing), a wholly-owned subsidiary of Dana, completed the sale of \in 325 (\$396 as of May 28, 2021) in senior unsecured notes (July 2029 Notes) at 3.000%. The July 2029 Notes are fully and unconditionally guaranteed by Dana. The July 2029 Notes rank equally with Dana's other unsecured senior notes. Interest on the notes is payable on January 15 and July 15 of each year, beginning on January 15, 2022. The July 2029 Notes will mature on July 15, 2029. Net proceeds of the offering totaled \in 320 (\$391 as of May 28, 2021). Financing costs of \in 5 (\$6 as of May 28, 2021) 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 all of our June 2026 Notes. On June 10, 2021 we redeemed all of our June 2026 Notes at a price equal to 103.25% plus accrued and unpaid interest. The \$16 loss on extinguishment of debt includes the \$12 redemption premium and the \$4 write-off of previously deferred financing costs associated with the June 2026 Notes.

On November 24, 2021, we completed the sale of \$350 in senior unsecured notes (the February 2032 Notes) at 4.5%. The February 2032 Notes rank equally with Dana's other unsecured senior notes. Interest on the notes is payable on February 15 and August 15 of each year, beginning on August 15, 2022. The February 2032 Notes will mature on February 15, 2032. Net proceeds of the offering totaled \$345. Financing costs of \$5 were recorded as deferred costs and are being amortized to interest expense over the life of the notes. Proceeds from the offering, along with cash on hand, were used to fully pay down the Term B Facility. See credit agreement discussion below.

In June 2020, we completed the sale of \$400 in senior unsecured notes (June 2028 Notes) at 5.625%. The June 2028 Notes rank equally with Dana's other unsecured senior notes. Interest on the notes is payable on December 15 and June 15 of each year, beginning on December 15, 2020. The June 2028 Notes will mature on June 15, 2028. Net proceeds of the offering totaled \$395. Financing costs of \$5 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 pay down outstanding borrowings under our Revolving Facility and for general corporate purposes. Also, we completed the sale of an additional \$100 of 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 November 15, 2020. The November 2027 Notes will mature on November 15, 2027. Net proceeds of the offering totaled \$99. Financing costs of \$1 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 for general corporate purposes.

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 year set forth below:

		Redemption Price											
	April	November	June	July	September	February							
Year	2025 Notes	2027 Notes	2028 Notes	2029 Notes	2030 Notes	2032 Notes							
2022	101.438%	102.688%											
2023	100.000%	101.344%	102.813%										
2024	100.000%	100.000%	101.406%	101.500%									
2025		100.000%	100.000%	100.750%									
2026		100.000%	100.000%	100.000%	102.125%								
2027			100.000%	100.000%	101.417%	102.250%							
2028				100.000%	100.708%	101.500%							
2029					100.000%	100.750%							
2030						100.000%							
2031						100.000%							

At any time prior to June 15, 2023, we may redeem up to 35% of the aggregate principal amount of the June 2028 Notes in an amount not to exceed the amount of proceeds of one or more equity offerings, at a price equal to 105.625% 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 June 2028 Notes remains outstanding after the redemption. Prior to June 15, 2023, we may redeem some or all of the June 2028 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 July 15, 2024, we may redeem up to 40% of the aggregate principal amount of the July 2029 Notes in an amount not to exceed the amount of proceeds of one or more equity offerings, at a price equal to 103.000% of the principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date, provided that at least 50% of the aggregate principal amount of the July 2029 Notes remain outstanding after the redemption. Prior to July 15, 2024, we may also redeem some or all of the July 2029 Notes at a redemption price equal to 100% 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 May 1, 2024, we may redeem up to 40% of the aggregate principal amount of the September 2030 Notes in an amount not to exceed the amount of proceeds of one or more equity offerings, at a price equal to 104.250% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, provided that at least 50% of the aggregate principal amount of the September 2030 Notes remains outstanding after the redemption. Prior to May 1, 2026, we may redeem some or all of the September 2030 Notes at a redemption price equal to 100% 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 February 15, 2025, we may redeem up to 40% of the aggregate principal amount of the February 2032 Notes in an amount not to exceed the amount of proceeds of one or more equity offerings, at a price equal to 104.500% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, provided that at least 50% of the aggregate principal amount of the February 2032 Notes remains outstanding after the redemption. Prior to February 15, 2027, we may redeem some or all of the February 2032 Notes at a redemption price equal to 100% 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 — During 2020, we fully paid down the \$474 outstanding balance on our Term A Facility. We wrote off \$3 of previously deferred financing costs associated with the Term A Facility. During 2021, we fully paid down the \$349 outstanding balance on our Term B Facility. We wrote off \$5 of previously deferred financing costs associated with the Term B Facility. On March 25, 2021, we amended our credit and guaranty agreement, increasing the Revolving Facility to \$1,150 and extending the maturity to March 25, 2026. We recorded deferred fees of \$2 related to the amendment. The deferred fees are being amortized over the life of the Revolving Facility. Deferred financing costs on our Revolving Facility are included in other noncurrent assets.

The Revolving Facility is 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 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 and guaranty agreement) plus a margin as set forth below:

	Marg	in
Total Net Leverage Ratio	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%

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, 2022, we had \$25 of outstanding borrowings under the Revolving Facility and had utilized \$16 for letters of credit. We had availability at December 31, 2022 under the Revolving Facility of \$1,109 after deducting the letters of credit.

Bridge facility — On April 16, 2020, we entered into a \$500 bridge facility (the Bridge Facility). We recorded deferred fees of \$5 related to the Bridge Facility. The deferred fees were being amortized over the life of the Bridge Facility. The Bridge Facility was to mature on April 15, 2021. On June 19, 2020, in connection with the issuance of our June 2028 Notes, we terminated the Bridge Facility and wrote off the \$5 of deferred fees associated with the Bridge Facility.

Debt covenants — At December 31, 2022, we were in compliance with the covenants of our financing agreements. Under the 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 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 14. 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:

			Fair '	Value
Category	Balance Sheet Location	Fair Value Level	December 31, 2022	December 31, 2021
Certificates of deposit	Marketable securities	2	\$ —	\$ 17
Currency forward contracts				
Cash flow hedges	Accounts receivable - Other	2	26	7
Cash flow hedges	Other accrued liabilities	2	4	1
Undesignated	Accounts receivable - Other	2	2	2
Undesignated	Other accrued liabilities	2	7	
Currency swaps				
Cash flow hedges	Other noncurrent assets	2	17	
Cash flow hedges	Other noncurrent liabilities	2		34
Undesignated	Other noncurrent liabilities	2	11	17

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:

			20	22		20			021	
		Carr	ying		Fair		Carrying		Fair	
	Fair Value Level	Va	lue		Value		Value		Value	
Long term debt	2	\$	2,304	\$	2,010	\$	2,338	\$	2,412	

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 fifteen 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, 2022:

Underlying Financial Instrument						Der	ivative Finar	ncial Instrument		
					No	otional	,	Traded		
Description	Type	Face	Amount	Rate	Aı	mount	A	Amount	Inflow Rate	Outflow Rate
April 2025 Notes	Payable	\$	400	5.75%	\$	300	€	278	5.75%	3.85%
Luxembourg Intercompany Notes	Receivable	€	278	3.70%	€	278	\$	300	5.38%	3.70%
Undesignated 2026 Swap					\$	188	€	169	6.50%	5.14%
Undesignated Offset 2026 Swap					€	169	\$	188	3.13%	6.50%
				50						

The designated 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 13 for additional information about the April 2025 Notes. To the extent the swaps are no longer effective, changes in their fair values will be recorded in earnings.

We had previously entered into fixed-to-fixed cross currency swaps as a hedge against our June 2026 Notes. In June 2021, we elected to redeem all of the June 2026 Notes and de-designated the fixed-to-fixed cross currency swaps. See Note 13 for additional information about the extinguishment of the June 2026 Notes. As the forecasted payments subject to the hedge will no longer occur in the forecasted periods, we reclassified \$9 of previously deferred losses from AOCI into other income (expense), net. We settled \$187 of the \$375 notional value resulting in a net cash outflow of \$22. The remaining \$188 continues to remain outstanding and we have entered into an offsetting swap to hedge against future fair value adjustments which will be included in earnings. The fair value of the remaining \$188 will be settled with the counterparty over the life of the swap through the difference in the euro denominated inflow and outflow rates which are settled on June 15 and December 15 each year through June 2026.

The total notional amount of outstanding foreign currency forward contracts, involving the exchange of various currencies, was \$608 at December 31, 2022 and \$449 at December 31, 2021. The total notional amount of outstanding foreign currency swaps, including the fixed-to-fixed cross-currency swaps, was \$967 at December 31, 2022 and \$1,096 at December 31, 2021.

The following currency derivatives were outstanding at December 31, 2022:

		Notional A	ent)			
Functional Currency	Traded Currency	 Designated	Undesignated		Total	Maturity
U.S. dollar	Mexican peso, Thai baht	\$ 146	\$ 16	\$	162	Dec-2023
	U.S. dollar, Swiss franc, Chinese renminbi, British pound, Hungarian forint, Indian rupee, Japanese yen, Mexican peso, Swedish krona, South					
Euro	African rand	95	128		223	Sep-2027
British pound	U.S. dollar, euro	4			4	Sep-2023
South African rand	U.S. dollar, euro, Thai baht		11		11	Feb-2023
Canadian dollar	U.S. dollar		8		8	Jan-2023
Brazilian real	U.S. dollar, euro	65	14		79	Dec-2023
Indian rupee	U.S. dollar, euro, British pound		110		110	Sep-2023
Chinese renminbi	U.S. dollar, Canadian dollar		11		11	Jan-2023
Total forward contracts		310	298		608	
U.S. dollar	euro	298	181		479	Nov-2027
Euro	U.S. dollar	 300	 188		488	Jun-2026
Total currency swaps		 598	 369		967	
Total currency derivatives		\$ 908	\$ 667	\$	1,575	

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 income (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 income (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								
						xpected to be nto income in				
	December	31, 2022	Decembe	er 31, 2021	one yea	r or less				
Forward Contracts	\$	11	\$	(1)	\$	11				
Cross-Currency Swaps		11		2						
Total	\$	22	\$	1	\$	11				
	59									

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:

	2022	2021	2020
Derivatives Designated as Cash Flow Hedges			
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			
Net sales	\$ 10,156	\$ 8,945	\$ 7,106
Cost of sales	9,393	8,108	6,485
Other income (expense), net	22	32	22
(Gain) or loss on cash flow hedging relationships			
Foreign currency forwards			
Amount of (gain) loss reclassified from AOCI into income			
Net sales			1
Cost of sales	(7)	(9)	18
Other income (expense), net	(6)	(5)	
Cross-currency swaps			
Amount of (gain) loss reclassified from AOCI into income			
Other income (expense), net	(43)	(45)	99

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.

	2022		2021	2020	
Derivatives Not Designated as Hedging Instruments					
(Gain) or loss recognized in income					
Foreign currency forward contracts					
Cost of sales	\$	— \$	1	\$	_
Other income (expense), net	\$	(13) \$	_	\$	(6)

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.

Note 15. Commitments and Contingencies

Product liabilities — Accrued product liability costs were de minimis and \$2 at December 31, 2022 and 2021. Amounts recognized as recoverable from third parties were de minimis and \$13 at December 31, 2022 and 2021. 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 \$8 and \$10 at December 31, 2022 and 2021. 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 16. 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 —

	2022	2	021	2020
Balance, beginning of period	\$ 107	\$	98 \$	101
Amounts accrued for current period sales	44		38	35
Adjustments of prior estimates	6		11	1
Settlements of warranty claims	(46))	(28)	(42)
Divestitures			(10)	
Currency impact	(3))	(2)	3
Balance, end of period	\$ 108	\$	107 \$	98

Note 17. Income Taxes

Income tax expense —

	2022		2021	2020
Current				
U.S. federal and state	\$	19	\$ (31)	\$ 14
Non-U.S.		112	104	79
Total current		131	73	93
Deferred				
U.S. federal and state		160	54	(23)
Non-U.S.		(7)	(55)	(12)
Total deferred		153	(1)	(35)
Total expense	\$	284	\$ 72	\$ 58

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 —

	2022	20)21	2020
U.S. operations	\$ (343)	\$	(170)	\$ (128)
Non-U.S. operations	 312		414	115
Earnings (loss) before income taxes	\$ (31)	\$	244	\$ (13)

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 2008.

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.

GILTI Policy Elections — The SEC staff has indicated that a company should make and disclose certain policy elections related to accounting for global intangible low-taxed income (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. Recent macroeconomic factors have resulted in losses in the United States. A valuation allowance has been provided for deferred tax assets where GILTI is not a source of income; however, the GILTI tax law ordering approach provides positive evidence for certain other deferred tax assets without a valuation allowance.

Foreign income repatriation — 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 net benefit of \$1 in 2022, net expense of nil in 2021 and net expense of \$6 in 2020, 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 \$6, \$8 and \$9 during 2022, 2021 and 2020 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 \$6 at December 31, 2022.

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 \$1,023 at the end of 2022. 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.

Effective tax rate reconciliation —

	2022		2021		2020		
-	\$	%	\$	%	\$	%	
U.S. federal income tax rate	(7)	21	51	21	(3)	21	
Adjustments resulting from:							
State and local income taxes, net of federal							
benefit	(6)	19			6	(46)	
Non-U.S. income / expense	(2)	7	15	6	(5)	39	
Credits and tax incentives	(27)	87	1		(55)	423	
U.S. foreign derived intangible income			(1)		(24)	185	
U.S. tax and withholding tax on non-US							
earnings	42	(135)	14	6	20	(154)	
Intercompany sale of certain operating							
assets	(1)	3	(1)		27	(207)	
Settlement and return adjustments	(7)	23	5	2	3	(23)	
Enacted change in tax rates	(4)	13	(5)	(2)	(2)	15	
Mexican non-deductible cost of goods sold					17	(130)	
Goodwill impairment	47	(151)			8	(61)	
Miscellaneous items	(6)	19	(7)	(3)	6	(46)	
Valuation allowance adjustments	255	(822)			60	(462)	
Effective income tax rate	284	(916)	72	30	58	(446)	

During 2022, we recognized tax expense of \$240 to record valuation allowance in the U.S., which includes \$189 on U.S. federal credits and attributes and \$51 related to U.S. state attributes. In addition, we recorded a tax benefit of \$32 to adjust U.S. tax credits. A pre-tax goodwill impairment charge of \$191 with an associated income tax benefit of \$2 was also recorded.

During 2021, we recognized tax expense of \$46 to record valuation allowance in the U.S. due to reduced income projections. We also recognized tax benefit of \$46 for the release of valuation allowances in several foreign jurisdictions based on recent history of profitability and increased income projections. The contrast of these two positions is representative of the jurisdictional mix of results and relative attributes. We also recognized tax expense of \$18 related to the expiration of federal tax credits.

During 2020, we recognized tax expense of \$60 for additional valuation allowances in foreign jurisdictions due to reduced income projections. We also recognized a benefit of \$26 for the release of valuation allowance in Australia, based on recent history of profitability and increased income projections. For the year, we also recognized tax benefits of \$37 related to tax actions that adjusted federal tax credits. A pre-tax goodwill impairment charge of \$51 with an associated income tax benefit of \$1 was recorded. In conjunction with the completion of the intercompany sale of certain assets to a non-U.S. affiliate, tax expense of \$12 was recorded, including the corresponding foreign derived intangible income benefit.

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

	2	022	2021
Net operating loss carryforwards	\$	181	\$ 187
Postretirement benefits, including pensions		49	71
Research and development costs		208	169
Expense accruals		49	77
Other tax credits recoverable		241	218
Capital loss carryforwards		51	56
Inventory reserves		32	25
Postemployment and other benefits		4	4
Intangibles			1
Leasing activities		69	55
Other		71	26
Total		955	889
Valuation allowances		(512)	(258)
Deferred tax assets		443	631
Unremitted earnings		(9)	(10)
Intangibles		(1)	
Depreciation		(66)	(74)
Deferred tax liabilities	<u> </u>	(76)	(84)
Net deferred tax assets	\$	367	\$ 547

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, 2022. 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.

	eferred Tax Asset	Valuation Allowance	Carryforward Period	Earliest Year of Expiration
Net operating losses				
U.S. state	\$ 55	\$ (55)	Various	2023
Brazil	11	(5)	Unlimited	
France	6		Unlimited	
Australia	20		Unlimited	
Italy	19	(18)	Unlimited	
Germany	4	(4)	Unlimited	
Sweden	1		Unlimited	
South Africa	2	(2)	Unlimited	
U.K.	15	(6)	Unlimited	
Canada	43	(41)	20	2026
India	1		8	2028
China	4	(4)	5	2023
Total	\$ 181	\$ (135)		

In addition to the NOL carryforwards listed in the table above, we have deferred tax assets related to capital loss carryforwards of \$51 which are fully offset with valuation allowances at December 31, 2022. We also have deferred tax assets of \$241 related to other credit carryforwards which are largely offset with \$236 of valuation allowances at December 31, 2022. The capital losses can generally be carried forward indefinitely while the other credits are generally available for 10 to 20 years.

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 \$7 and \$6 was accrued on the uncertain tax positions at December 31, 2022 and 2021, with no net impact to tax expense in 2021.

Reconciliation of gross unrecognized tax benefits —

	20	22	2021	2020
Balance, beginning of period	\$	126	\$ 104	\$ 119
Decrease related to expiration of statute of limitations		(6)	(5)	(5)
Decrease related to prior years tax positions		(43)	(2)	(1)
Increase related to prior years tax positions		7	16	3
Increase related to current year tax positions		18	13	9
Decrease related to settlements				(21)
Balance, end of period	\$	102	\$ 126	\$ 104

We anticipate that the change in our gross unrecognized tax benefits will not be significant in the next twelve months as a result of examinations in various jurisdictions. The settlement of these matters will not impact the effective tax rate. Gross unrecognized tax benefits of \$78 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 18. Other Income (Expense), Net

	2022	2021	2020	
Non-service cost components of pension and OPEB costs	\$ (7)	\$ (10)	\$	(10)
Government assistance	8			
Foreign exchange gain	4	2		8
Strategic transaction expenses	(8)	(13))	(20)
Gain (loss) on investment in Hyliion		(20)		33
Loss on disposal group held for sale		(7))	
Loss on de-designation of fixed-to-fixed cross currency swaps		(9))	
Gain on sale leaseback		66		
Other, net	25	23		11
Other income (expense), net	\$ 22	\$ 32	\$	22

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 2022 were primarily attributable to investigating potential acquisitions and business ventures and other strategic initiatives. Strategic transaction expenses in 2021 were primarily attributable to our pursuit of the acquisition of a portion of the thermal-management business of Modine Manufacturing Company and certain other strategic initiatives. Strategic transaction expenses in 2020 were primarily attributable to the acquisition of ODS and Nordresa and certain other strategic initiatives.

We held convertible notes receivable from our investment in Hyliion Inc. On October 1, 2020, Hyliion Inc. completed its merger with Tortoise Acquisition Corp. The business combination resulted in the combined company being renamed Hyliion Holdings Corp. (Hyliion), with its common stock being listed on the New York Stock Exchange under the ticker symbol HYLN. Effective with the completed merger, our notes receivable were converted into 2,988,229 common shares of HYLN. Our investment in Hyliion was included in noncurrent marketable securities and carried at fair value with changes in fair value included in net income. During the third quarter of 2021, we sold all of our Hyliion shares.

In conjunction with our acquisition of ODS, we acquired a controlling financial interest in a joint venture in China. We were required to divest our interest in this joint venture as it violates competitive restrictions of another of our China joint venture shareholder agreements. During the first quarter of 2021, we recorded an impairment charge of \$7, as we determined the carrying value of the disposal group exceeded its fair value less costs to sell. We completed the disposal of this business in April 2021.

We had previously entered into fixed-to-fixed cross currency swaps as a hedge against our June 2026 Notes. In June 2021, we redeemed all of the June 2026 Notes and de-designated the fixed-to-fixed cross currency swaps. See Note 14 for additional information.

During December 2021, we completed a sale-leaseback transaction on three of our U.S. manufacturing facilities. We received proceeds of \$77 from the sale of the properties, which had carrying values totaling \$11, resulting in a \$66 gain on the sale transaction. The initial term of the leaseback is 20 years and has eight 5-year renewal options. The renewal options are not reasonably assured of being executed and were not included in the initial measurement of the right-of-use asset and lease liability. The leases on these facilities are classified as operating leases with annual lease expense of \$6 and total committed lease payments of \$119 over the initial 20-year lease term.

Note 19. 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.

We continually seek new business opportunities and at times provide incentives to our customers for new program awards. We evaluate the underlying economics of each payment made to our customers to determine the proper accounting by understanding the nature of the payment, the rights and obligations in the contract, and other relevant facts and circumstances. Upfront payments to our customers are capitalized if we determine that the payments are incremental and incurred only if the new business is obtained and we expect to recover these amounts from the customer over the term of the new business program. We recognize a reduction to revenue as products that the upfront payments are related to are transferred to the customer, based on the total amount of products expected to be sold over the term of the program. We evaluate the amounts capitalized each period for recoverability and expense any amounts that are no longer expected to be recovered. We had \$7 and \$8 recorded in other current assets and \$28 and \$38 recorded in other noncurrent assets at December 31, 2022 and December 31, 2021.

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 16 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 \$48 and \$34 at December 31, 2022 and December 31, 2021. Contract liabilities are included in other accrued liabilities on our consolidated balance sheet.

During the second quarter of 2021, we realigned certain of our Indian operations previously reported in our Commercial Vehicle operating segment to be reported within our Off-Highway operating segment and we realigned certain of our Brazilian operations previously reported in our Off-Highway operating segment to be reported within our Commercial Vehicle operating segment. Prior period amounts have been recast to conform with our current operating segment reporting structure.

Disaggregation of revenue —

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

		2022		2021		2020
Light Vehicle						
North America	\$	2,976	\$	2,698	\$	2,228
Europe		403		424		346
South America		217		167		108
Asia Pacific		494		484		356
Total	<u>\$</u>	4,090	\$	3,773	\$	3,038
Commercial Vehicle						
North America	\$	987	\$	752	\$	693
Europe	•	274	-	259	*	192
South America		524		389		221
Asia Pacific		194		132		79
Total	\$	1,979	\$	1,532	\$	1,185
Off-Highway						
North America	\$	361	\$	290	\$	252
Europe	Ψ	1,939	Ψ	1,680	Ψ	1,260
South America		17		14		11
Asia Pacific		629		609		443
Total	\$	2,946	\$	2,593	\$	1,966
Power Technologies						
North America	\$	599	\$	490	\$	429
Europe		443		473		411
South America		30		20		18
Asia Pacific		69		64		59
Total	\$	1,141	\$	1,047	\$	917
Total						
North America	\$	4,923	\$	4,230	\$	3,602
Europe		3,059		2,836	· · · · · · · · · · · · · · · · · · ·	2,209
South America		788		590		358
Asia Pacific		1,386		1,289		937
Total	\$	10,156	\$	8,945	\$	7,106
Total					-	

Note 20. 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.

During the second quarter of 2021, we realigned certain of our Indian operations previously reported in our Commercial Vehicle operating segment to be reported within our Off-Highway operating segment and we realigned certain of our Brazilian operations previously reported in our Off-Highway operating segment to be reported within our Commercial Vehicle operating segment. Prior period amounts have been recast to conform with our current operating segment reporting structure.

Segment information —

	External	Inter- Segment	Segment	Capital			Net
2022	Sales	Sales	EBITDA	Spend	De	epreciation	Assets
Light Vehicle	\$ 4,090	\$ 166	\$ 158	\$ 201	\$	175	\$ 1,331
Commercial Vehicle	1,979	110	43	67		32	708
Off-Highway	2,946	64	404	73		101	1,278
Power Technologies	1,141	28	94	64		32	389
Eliminations and other		(368)		35		25	104
Total	\$ 10,156	\$ 	\$ 699	\$ 440	\$	365	\$ 3,810
2021							
Light Vehicle	\$ 3,773	\$ 166	\$ 274	\$ 154	\$	175	\$ 1,492
Commercial Vehicle	1,532	100	48	53		31	941
Off-Highway	2,593	67	353	75		102	1,342
Power Technologies	1,047	23	123	39		36	389
Eliminations and other		 (356)		 48		21	 161
Total	\$ 8,945	\$ 	\$ 798	\$ 369	\$	365	\$ 4,325
2020							
Light Vehicle	\$ 3,038	\$ 104	\$ 239	\$ 131	\$	167	\$ 1,432
Commercial Vehicle	1,185	70	40	39		32	796
Off-Highway	1,966	48	230	69		93	1,360
Power Technologies	917	19	94	38		32	360
Eliminations and other		(241)		49		21	146
Total	\$ 7,106	\$ 	\$ 603	\$ 326	\$	345	\$ 4,094

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 (loss) —

	2022	2021	2020
Segment EBITDA	\$ 699	\$ 798	\$ 603
Corporate expense and other items, net	1	(3)	(10)
Depreciation	(365)	(365)	(345)
Amortization	(23)	(24)	(20)
Non-service cost components of pension and OPEB costs	(7)	(10)	(10)
Restructuring charges, net	1		(34)
Stock compensation expense	(19)	(17)	(14)
Strategic transaction expenses	(8)	(13)	(20)
Amounts attributable to previously divested/closed operations	(2)	(2)	(1)
Gain (loss) on investment in Hyliion		(20)	33
Loss on disposal group held for sale		(7)	
Loss on de-designation of fixed-to-fixed cross currency swaps		(9)	
Gain on sale leaseback		66	
Impairment of goodwill	(191)		(51)
Other items		1	(7)
Earnings before interest and income taxes	86	395	124
Loss on extinguishment of debt		(29)	(8)
Interest income	11	9	9
Interest expense	128	131	138
Earnings (loss) before income taxes	(31)	244	(13)
Income tax expense	284	72	58
Equity in earnings of affiliates	 4	28	20
Net income (loss)	\$ (311)	\$ 200	\$ (51)

Reconciliation of segment net assets to consolidated total assets —

	2022	2021	
Segment net assets	\$	3,810 \$	4,325
Accounts payable and other current liabilities		2,383	2,099
Other current and long-term assets		1,256	1,208
Consolidated total assets	\$	7,449 \$	7,632

Geographic information — Of our 2022 consolidated net sales, the U.S., Italy, Brazil and India account for 46%, 15%, 6%, and 6%, respectively. No other country accounted for more than 5% of our consolidated net sales during 2022. 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					
		2022		2021		2020	2022		2021		2020	
North America												
United States	\$	4,668	\$	4,035	\$	3,404	\$ 994	\$	981	\$	957	
Other North America		255		195		198	151		114		106	
Total		4,923		4,230		3,602	 1,145		1,095		1,063	
Europe												
Italy		1,535		1,356		993	211		225		252	
Other Europe		1,524		1,480		1,216	400		401		442	
Total		3,059		2,836		2,209	 611		626		694	
South America												
Brazil		606		451		264	88		80		87	
Other South America		182		139		94	21		16		10	
Total		788		590		358	 109		96		97	
Asia Pacific												
India		554		458		276	174		200		198	
Other Asia Pacific		832		831		661	154		182		199	
Total		1,386		1,289		937	 328		382		397	
Total	\$	10,156	\$	8,945	\$	7,106	\$ 2,193	\$	2,199	\$	2,251	

Sales to major customers — Ford and Stellantis N.V. were the only individual customers to whom sales have exceeded 10% of our consolidated sales in the past three years. Sales to Ford were \$1,978 (19%) in 2022, \$1,729 (19%) in 2021 and \$1,456 (20%) in 2020. Sales to Stellantis N.V. (via a directed supply relationship) were \$1,166 (11%) in 2022, \$1,068 (12%) in 2021 and \$871 (12%) in 2020.

Note 21. Equity Affiliates

We have a number of investments in entities that engage in the manufacture and supply of vehicular parts (primarily axles, axle housing and driveshafts).

Dividends received from equity affiliates were \$32, \$18 and \$27 in 2022, 2021 and 2020.

Equity method investments exceeding \$5 at December 31, 2022 —

	Ownership		
	Percentage	Inve	estment
Dongfeng Dana Axle Co., Ltd. (DDAC)	50%	\$	70
ROC-Spicer, Ltd. (ROC-Spicer)	50%		21
Axles India Limited (AIL)	48%		11
Tai Ya Investment (HK) Co., Limited (Tai Ya)	50%		5
All others as a group			5
Investments in equity affiliates			112
Investments in affiliates carried at cost			24
Investments in affiliates		\$	136

Our equity method investment in ROC-Spicer and Tai Ya are included in the net assets of our Light Vehicle operating segment. Our equity method investments in DDAC and AIL are included in the net assets of our Commercial Vehicle operating segment.

The carrying value of our equity method investments at December 31, 2022 was \$5 more than our share of the affiliates' book values. The basis differences relate to our DDAC and ROC-Spicer investments and are primarily attributable to goodwill and property, plant and equipment.

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

 $Amounts\ deducted\ from\ assets\ in\ the\ balance\ sheets\ --$

		alance at		Amounts charged		A.11	г	Adjustments arising from change in currency		1 1	
	_	ginning of period	((credited) to income		Allowance utilized		exchange rates and other items		Balance at end of period	
Accounts Receivable - Allowance for Doubtful Accounts		period		meome		umzeu	un	d other items		or period	
2022	\$	7	\$	4	\$	_	\$	_	\$	11	
2021	\$	7	\$	_	\$	_	\$	_	\$	7	
2020	\$	9	\$	_	\$	(1)	\$	(1)	\$	7	
Inventory Reserves											
2022	\$	87	\$	23	\$	(13)	\$	(4)	\$	93	
2021	\$	82	\$	16	\$	(7)	\$	(4)	\$	87	
2020	\$	64	\$	30	\$	(14)	\$	2	\$	82	
Deferred Tax Assets - Valuation Allowance											
2022	\$	258	\$	255	\$	_	\$	()	\$	512	
2021	\$	259	\$	_	\$	_	\$	(1)	\$	258	
2020	\$	190	\$	60	\$	_	\$	9	\$	259	
			69								

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. Based on this evaluation, management has concluded that, as of December 31, 2022, 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, 2022, 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, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

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 26, 2023, 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," "Nonqualified Deferred Compensation at Fiscal Year-End" 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 26, 2023, which sections are hereby incorporated herein by reference.

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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 26, 2023, which section is hereby incorporated herein by reference.

Equity Compensation Plan Information

The following table contains information at December 31, 2022 about shares of stock which may be issued under our equity compensation plans, all of which have been approved by our shareholders.

	Number of Securities to be Issued Upon Exercise of Outstanding Options,	Weighted Average Exercise Price of Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities
(Shares in millions) Plan Category	Warrants and Rights(1)	Rights(2)	Reflected in Column (a))
Equity compensation plans approved by security holders	2.6	\$ 16.19	5.7
Equity compensation plans not approved by security holders			
Total	2.6	\$ 16.19	5.7

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, 2022.
- (2) Calculated without taking into account the 2.6 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 26, 2023, 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 26, 2023, 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 (PCAOB ID 238)	<u>29</u>
Consolidated Statement of Operations	<u>31</u>
Consolidated Statement of Comprehensive Income	<u>32</u>
Consolidated Balance Sheet	<u>33</u>
Consolidated Statement of Cash Flows	<u>34</u>
Consolidated Statement of Stockholders' Equity	<u>35</u>
Notes to the Consolidated Financial Statements	<u>36</u>
2. Financial Statement Schedule:	
Valuation and Qualifying Accounts and Reserves (Schedule II)	<u>69</u>
All other schedules are omitted because they are not applicable or the required info	rmation is shown in the financial
statements or notes thereto.	
3. Exhibits	
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No.	Description		
2.1	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		
	<u>herein by reference.</u>		
3.1	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.		
3.2	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.		
4.1	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.		
4.2	Indenture, dated as of January 28, 2011 among Dana and Computershare Trust Company, N.A. as successor to 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.		
4.3	Fourth Supplemental Indenture, dated as November 20, 2019, with respect to the Indenture, dated as of January 28, 2011,		
	between Dana Holding Corporation and Computershare Trust Company, N.A. as successor to 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.		
4.4	Indenture, dated as of May 27, 2016, among Dana Luxembourg Financing S.à. r.l., Dana Holding Corporation and		
	Computershare Trust Company, N.A. as successor to Wells Fargo Bank, National Association, as trustee. Filed as Exhibit 4.1 to		
1.5	Registrant's Current Report on Form 8-K dated May 27, 2016, and incorporated herein by reference.		
4.5	Indenture, dated as of April 4, 2017, among Dana Luxembourg Financing S.à. r.l., Dana Incorporated and Computershare Trust Company, N.A. as successor to 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.		
4.6	Sixth Supplemental Indenture, dated as of June 19, 2020 with respect to the Indenture, dated January 28, 2011, between Dana		
4.0	Incorporated and Computershare Trust Company, N.A. as successor to Wells Fargo Bank, National Association, as trustee. Filed		
	as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated June 20, 2020, and incorporated herein by reference.		
4.7	Seventh Supplemental Indenture, dated as of May 13, 2021 with respect to the Indenture, dated January 28, 2011, between Dana		
7.7	Incorporated and Computershare Trust Company, N.A. as successor to Wells Fargo Bank, National Association, as trustee. Filed		
	as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated May 13, 2021, and incorporated herein by reference.		
4.8	Indenture, dated as of May 28, 2021, among Dana Luxembourg Financing S.à. r.l., the Company, Computershare Trust		
	Company, N.A. as successor to Wells Fargo Bank, National Association, as trustee and Elavon Financial Services DAC, as		
	paying agent, registrar and transfer agent. Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated May 28, 2021,		
	and incorporated here in by reference.		
4.9	Ninth Supplemental Indenture, dated as of November 24, 2021 with respect to the Indenture, dated January 28, 2011, between		
	Dana Incorporated and Computershare Trust Company, N.A. as successor to Wells Fargo Bank, National Association, as trustee.		
	Filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated November 24, 2021, and incorporated herein by		
	<u>reference.</u>		
4.10	Description of Dana Incorporated Common Stock. Filed as Exhibit 4.9 to the Registrant's Annual Report on Form 10-K for the		
	year ended December 31, 2019, and incorporated herein by reference.		
10.1*	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.		
10.2*	Form of Proprietary Interest Protection and Non-Solicitation Agreement. Filed as Exhibit 10.3 to the Registrant's Quarterly		
10.24	Report on Form 10-Q for the quarter ended June 30, 2011, and incorporated herein by reference.		
10.3*	Dana Incorporated Supplemental Executive Retirement Plan. Filed as Exhibit 10.4 to Registrant's Annual Report on Form 10-K		
10.4*	for the fiscal year ended December 31, 2012, and incorporated herein by reference.		
10.4*	Dana Incorporated 2021 Omnibus Incentive Plan. Filed as an annex to the Dana Incorporated Proxy Statement dated March 11, 2021, and incorporated herein by reference.		
10.5*	Form of Indemnification Agreement. Filed as Exhibit 10.4 to Registrant's Current Report on Form 8-K dated February 6, 2008,		
10.5	and incorporated herein by reference.		
10.6*	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors. Filed as Exhibit 10.23 to Registrant's Annual		
10.0	Report on Form 10-K for the fiscal year ended December 31, 2007, and incorporated herein by reference.		
10.7*	Form of Option Agreement. Filed as Exhibit 10.15 to Registrant's Annual Report on Form 10-K for the fiscal year ended		
10./	December 31, 2012, and incorporated herein by reference.		
10.8*	Form of Restricted Stock Unit Agreement, Filed as Exhibit 10.16 to Registrant's Annual Report on Form 10-K for the fiscal year		
10.0	ended December 31, 2012, and incorporated herein by reference.		
10.9*	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		

- 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. Amended and Restated Change in Control Severance Plan, effective as of April 30, 2018. Filed as Exhibit 10.1 to Registrant's 10.12* Current Report on Form 8-K dated April 30, 2018, and incorporated herein by reference. Revolving Credit and Guaranty Agreement, dated as of June 9, 2016, among Dana Incorporated, as borrower, the guarantors 10.13 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. Amendment No. 4 to Credit and Guaranty Agreement and Amendment No. 2 to Security Agreement, dated as of April 16, 2020, 10.18 among Dana Incorporated, Dana International Luxembourg S.à.r.l., the guarantors party thereto, Citibank, N.A. as administrative agent, and the lenders party thereto. Filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, and incorporated herein by reference. 10.19 Amendment No. 5 to Credit and Guaranty Agreement and Amendment No. 3 to Security Agreement, dated as of March 25, 2021, among Dana Incorporated, Dana International Luxembourg S.à. r.l., the guarantors party thereto, Citibank, N.A. as administrative agent, and the lenders party thereto. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed March 29, 2021, and incorporated herein by reference. 10.20 Director Nomination and Appointment Agreement, dated as of January 7, 2022, by and among the Icahn Group and Dana Incorporated. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 7, 2022, 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. Section 1350 Certification of Periodic Report (pursuant to Section 906 of the Sarbanes-Oxley Act of 2002). Filed with this 32 101 The following materials from Dana Incorporated's Annual Report on Form 10-K for the year ended December 31, 2022, 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
 - 104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).
 - * Management contract or compensatory plan or arrangement.

Filed with this Report.

Cash Flows, (v) the Consolidated Statement of Shareholders' Equity and (vi) Notes to the Consolidated Financial Statements.

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 21, 2023 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 21st day of February 2022 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/ Timothy R. Kraus Timothy R. Kraus	Senior 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/ Ernesto M. Hernández* Ernesto M. Hernandez	Director
/s/ Gary Hu* Gary Hu	Director
/s/ Brett M. Icahn* Brett M. Icahn	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/ 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	

DANA INCORPORATED Consolidated Subsidiaries as of December 31, 2022*

Name of Company Jurisdiction of Incorporation or Organization

Brevini India Private Limited India

Dana Anand Private Limited India

Dana Australia (Holdings) Pty. Ltd. Australia

Dana Australia Pty. Ltd. Australia

Dana Automocion, S.A. Spain

Dana Automotive Aftermarket, Inc. Delaware

Dana Automotive Systems Group, LLC Ohio

Dana (Beijing) Electric Motor Co., Ltd. China

Dana Belgium NV Belgium

Dana Brazil Commercial Vehicle LLC Delaware

Dana Brazil Holdings I LLC Virginia

Dana Canada Corporation Canada

Dana Canada Electric Holdings ULC Canada

Dana Canada Holding Company Canada

Dana Canada Investment ULC Canada

Dana Canada LP Canada

Dana Cayman Holdings Limited Cayman Islands

Dana (Changshu) E-Propulsion Co., Ltd. China

Dana (Chongqing) Driveline Technology Co. Ltd. China

Dana Cologne Technology Center GmbH Germany

Dana Comercializadora, S. de R.L. de C.V. Mexico

Dana Commercial Vehicle Manufacturing, LLC

Dana Commercial Vehicle Products, LLC Ohio

Dana de México Corporacion, S. de R.L. de C.V.

Dana de México Holdings S. de R.L. de C.V. Mexico

Dana (Deutschland) Grundstuckverwaltungs GmbH Germany

Dana Distribution Holdings, Inc. Delaware

Dana Driveshaft Manufacturing, LLC Ohio

Dana Driveshaft Products, LLC Ohio

Dana Equipamentos Ltda. Brazil

Dana Europe GmbH Switzerland

Dana European Holdings Luxembourg S.à r.l. Luxembourg

Dana Financing Luxembourg S.à r.l. Luxembourg

Dana Fluid Power Distribution S.r.l. Italy

Dana Fluid Power Veneto S.r.l. Italy

Dana Global Luxembourg S.à r.l. Luxembourg

Dana Global Manufacturing S.à r.l. Switzerland

Dana Global Products, Inc. Michigan

Dana GmbH Germany

Dana Graziano S.r.l Italy

Dana Graziano (Suzhou) Drive Systems Co., Ltd. China

Dana Heavy Axle Mexico S.A. de C.V. Mexico

Dana Heavy Vehicle Systems Group, LLC Ohio

Dana Holding GmbH Germany

Dana Holdings SRL Argentina

Dana Hong Kong Holding Limited Hong Kong

Dana Hungary kft Hungary

Name of Company Jurisdiction of Incorporation or Organization

Dana India Private Limited India

Dana India Technical Centre Private Limited India

Dana Industrias Ltda. Brazil

Dana International Luxembourg S.à r.l. Luxembourg

Dana Investment GmbH Germany

Dana Italia, S.r.l. Italy

Dana Japan, Ltd. Japan

Dana Korea Co. Ltd. Korea

Dana Laval Technology Center ULC Canada

Dana Light Axle Manufacturing, LLC Ohio

Dana Light Axle Products, LLC Ohio

Dana Limited Ohio

Dana Lindley Technology Centre Limited United Kingdom

Dana Lithuania UAB Lithuania

Dana Manufacturing Switzerland GmbH Switzerland

Dana Motion Systems Deutschland GmbH Germany

Dana Motion Systems Italia S.r.l. Italy

Dana Off Highway Products, LLC Ohio

Dana Off-Highway Components, LLC Ohio

Dana Off-Highway (Yancheng) Drive Systems Co., Ltd. China

Dana Power Transmission France France

Dana SAC Australia Pty Ltd Australia

Dana SAC Benelux B.V. Netherlands

Dana SAC Canada Limited Canada

Dana SAC Finland Oy Finland

Dana SAC France France

Dana SAC Germany GmbH Germany

Dana SAC Holding B.V. Netherlands

Dana SAC Ireland Limited Ireland

Dana SAC Korea Co., Ltd. Korea

Dana SAC New Zealand Limited New Zealand

Dana SAC Norway AS Norway

Dana SAC S.E. Asia Pte. Ltd. Singapore

Dana SAC South Africa (PTY) Ltd South Africa

Dana SAC South America Industria E Comercio De Transmissoes Ltda Brazil

Dana SAC Spain S.A. Spain

Dana SAC Turkey Reduktor Sanayi Ve Ticaret Limited Sirketi Turkey

Dana SAC UK Limited United Kingdom

Dana SAC USA Inc. Ohio

Dana San Luis S.A. Argentina

Dana SAS France

Dana Sealing Manufacturing, LLC Ohio

Dana Sealing Products, LLC Ohio

Dana (Shandong) Electric Motor Co., Ltd. China

Dana Spicer Axle South Africa (Pty) Ltd. South Africa

Dana Spicer Europe Limited United Kingdom

Dana Spicer (Shanghai) Trading Co., Ltd. China

Dana Spicer (Thailand) Limited Thailand

Dana System Integrator Holdings LLC Delaware

Dana Thermal Products, LLC Ohio

Dana TMB, LLC Delaware

Dana TM4 Deutschland GmbH Germany

Dana TM4 Electric Holdings BV Belgium

Dana TM4 Inc. Canada

Dana TM4 India Private Limited India

Dana TM4 Italia S.r.l. Italy

Dana TM4 Sweden AB Sweden

Dana TM4 UK United Kingdom

Dana TM4 USA, LLC Delaware

Dana UK Automotive Systems Limited United Kingdom

Dana UK Axles Limited United Kingdom

Dana UK Driveshaft Limited United Kingdom

Dana World Trade Corporation Delaware

Dana (Wuxi) Technology Co. Ltd. China

Dana (Yancheng) Power Technology Co., Ltd. China

Name of Company Jurisdiction of Incorporation or Organization

Elveveien 38 AS (Norway) Norway

Fairfield Atlas Ltd. India

Fairfield Manufacturing Company, Inc. Delaware

Fujian Spicer Drivetrain System Co., Ltd. China

Graziano Transmissioni India Pvt. Ltd. India

Industria de Ejes y Transmissiones S.A. Colombia

Kiinteisto Oy Espoon Luoteisrinne 7 Finland

Pi Innovo LLC Delaware

Reinz-Dichtungs-GmbH Germany

SF Dana Mexico, S. de R.L. de C.V. Mexico

Shanghai Brevini Gearboxes Co. Ltd. China

Spicer Axle Australia Pty Ltd. Australia

Spicer Ayra Cardan, S.A. Spain Spicer Ejes Pesados S.A. Argentina

Spicer France S.A.S. France

Spicer Gelenkwellenbau GmbH Germany

Spicer Heavy Axle & Brake, Inc. Michigan

Spicer Nordiska Kardan AB Sweden

Tecnologia de Mocion Controlada S. de R.L. de C.V. Mexico

T-H Licensing, Inc. Delaware

Thermal Products France SAS France

Transejes Ecuador CIA. Ltda. Ecuador

Transejes Transmissiones Homocineticas de Colombia S.A. Colombia

Victor Reinz India Private Limited India

Victor Reinz Valve Seals, L.L.C. Indiana

Warren Manufacturing LLC Delaware

Wrenford Insurance Company Limited Bermuda

Subsidiaries not shown by name in the above list, if considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-181101, 333-219611 and 333-258303) of Dana Incorporated of our report dated February 21, 2023 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Toledo, Ohio February 21, 2023

POWER OF ATTORNEY

Each of the undersigned directors and/or officers of Dana Incorporated, a corporation organized under the laws of the State of Delaware (the "Corporation"), hereby constitutes and appoints Douglas H. Liedberg and Joseph H. Heckendorn, his or her true and lawful attorney-in-fact and agent with full power for and on their behalf to do any and all acts and things and execute any and all instruments which the attorney-in-fact and agent may deem necessary or advisable in order to enable Dana Incorporated to comply with the Securities Exchange Act of 1934, as amended, and any requirements of the Securities and Exchange Commission, in connection with the Annual Report of Dana Incorporated on Form 10-K for the year ended December 31, 2022 and any and all amendments thereto, and to file the same with the Securities and Exchange Commission on behalf of Dana Incorporated under the Securities Exchange Act of 1934, as amended. Each of the undersigned ratifies and confirms all that any of the attorneys-in-fact and agents shall do or cause to be done by virtue hereof. Any one of the attorneys-in-fact and agents shall have, and may exercise, all the powers conferred by this instrument.

This Power of Attorney shall be effective as of February 21, 2023, and shall end automatically as to each undersigned upon the termination of their service as a director and/or officer of Dana Incorporated.

/s/ Ernesto M. Hernández/s/ R. Bruce McDonaldErnesto M. HernándezR. Bruce McDonald

/s/ Gary Hu
Gary Hu
Diarmuid B, O'Connell
Diarmuid B, O'Connell

/s/ Brett M. Icahn
Brett M. Icahn
Keith E. Wandell
Keith E. Wandell

/s/ Virginia A. Kamsky
Virginia A. Kamsky
James K. Kamsickas
James K. Kamsickas

/s/ Bridget E. Karlin/s/ Timothy R. KrausBridget E. KarlinTimothy R. Kraus

/s/ Michael J. Mack, Jr./s/ James D. KellettMichael J. Mack, Jr.James D. Kellett

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 21, 2023

/s/ James K. Kamsickas

James K. Kamsickas

Chairman, President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

- I, Timothy R. Kraus, 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 21, 2023

/s/ Timothy R. Kraus

Timothy R. Kraus

Senior 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, 2022, 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 21, 2023

/s/ James K. Kamsickas

James K. Kamsickas
Chairman, President and Chief Executive Officer

/s/ Timothy R. Kraus

Timothy R. Kraus

Senior Vice President and Chief Financial Officer