

STONERIDGE INC
Form 10-K
March 02, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 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, 2016

Commission file number: 001-13337

STONERIDGE, INC.

(Exact name of registrant as specified in its charter)

Ohio	34-1598949
<i>(State or other jurisdiction of incorporation or organization)</i>	<i>(I.R.S. Employer Identification No.)</i>

39675 MacKenzie Drive Suite 400, Novi, Michigan	48377
<i>(Address of principal executive offices)</i>	<i>(Zip Code)</i>

(248) 489-9300
Registrant's telephone number, including area code

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

Title of each class	Name of each exchange on which registered
Common Shares, without par value	New York Stock Exchange

Securities registered pursuant to section 12(g) of the Act: **None**

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

☐ Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post such files).

☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

☐

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

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐ Smaller reporting company ☐
(Do not check if a smaller reporting company)

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

☐ Yes ☒ No

As of June 30, 2016, the aggregate market value of the registrant's Common Shares held by non-affiliates of the registrant was approximately \$395.7 million. The closing price of the Common Shares on June 30, 2016 as reported on the New York Stock Exchange was \$14.94 per share. As of June 30, 2016, the number of Common Shares outstanding was 27,842,883.

The number of Common Shares outstanding as of February 24, 2017 was 27,870,944.

DOCUMENTS INCORPORATED BY REFERENCE

Definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 9, 2017, into Part III, Items 10, 11, 12, 13 and 14.

INDEX

	Page
<u>PART I</u>	
Item 1. <u>Business</u>	1
<u>Executive Officers of the Company</u>	6
Item 1A. <u>Risk Factors</u>	7
Item 1B. <u>Unresolved Staff Comments</u>	14
Item 2. <u>Properties</u>	15
Item 3. <u>Legal Proceedings</u>	16
Item 4. <u>Mine Safety Disclosure</u>	16
<u>PART II</u>	
Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	16
Item 6. <u>Selected Financial Data</u>	18
Item 7. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	20
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	36
Item 8. <u>Financial Statements and Supplementary Data</u>	37
Item 9. <u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	79
Item 9A. <u>Controls and Procedures</u>	79
Item 9B. <u>Other Information</u>	81
<u>PART III</u>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	81
Item 11. <u>Executive Compensation</u>	81
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	81
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	82
Item 14. <u>Principal Accounting Fees and Services</u>	82
<u>PART IV</u>	
Item 15. <u>Exhibits, Financial Statement Schedules</u>	82
<u>Signatures</u>	83

Forward-Looking Statements

Portions of this report on Form 10-K contain “forward-looking statements” under the Private Securities Litigation Reform Act of 1995. These statements appear in a number of places in this report and may include statements regarding the intent, belief or current expectations of the Company, with respect to, among other things, our (i) future product and facility expansion, (ii) acquisition strategy, (iii) investments and new product development, (iv) growth opportunities related to awarded business and (v) operational expectations. Forward-looking statements may be identified by the words “will,” “may,” “should,” “designed to,” “believes,” “plans,” “projects,” “intends,” “expects,” “estimates,” “anticipates,” “continue,” and similar words and expressions. The forward-looking statements are subject to risks and uncertainties that could cause actual events or results to differ materially from those expressed in or implied by the statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, among other factors:

- the reduced purchases, loss or bankruptcy of a major customer;
- the costs and timing of facility closures, business realignment, or similar actions;
- a significant change in automotive, commercial, motorcycle, off-highway or agricultural vehicle production;
- competitive market conditions and resulting effects on sales and pricing;
- the impact on changes in foreign currency exchange rates on sales, costs and results, particularly the Brazilian real, euro, Argentinian peso, Mexican peso and Swedish krona;
- our ability to achieve cost reductions that offset or exceed customer-mandated selling price reductions;
- a significant change in general economic conditions in any of the various countries in which we operate;
- labor disruptions at our facilities or at any of our significant customers or suppliers;
- the ability of our suppliers to supply us with parts and components at competitive prices on a timely basis;
- the amount of our indebtedness and the restrictive covenants contained in the agreements governing our indebtedness, including our revolving credit facility;
- customer acceptance of new products;
- capital availability or costs, including changes in interest rates or market perceptions;
- the failure to achieve the successful integration of any acquired company or business; and
- the items described in Part I, Item 1A (“Risk Factors”).

In addition, the forward-looking statements contained herein represent our estimates only as of the date of this filing and should not be relied upon as representing our estimates as of any subsequent date. While we may elect to update these forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, whether to reflect actual results, changes in assumptions, changes in other factors affecting such forward-looking statements or otherwise.

PART I

Item 1. Business.

Overview

Founded in 1965, Stoneridge, Inc. (the “Company”) is a global designer and manufacturer of highly engineered electrical and electronic components, modules and systems for the automotive, commercial, motorcycle, off-highway and agricultural vehicle markets. Our products and systems are critical elements in the management of mechanical and electrical systems to improve overall vehicle performance, convenience and monitoring in areas such as emissions control, fuel efficiency, safety, security and infotainment. Our extensive footprint encompasses 25 locations in 12 countries and enables us to supply global and regional automotive, commercial, motorcycle, off-highway and agricultural vehicle markets.

Our custom-engineered products and systems are used to activate equipment and accessories, monitor and display vehicle performance and control, distribute electrical power and signals and provide vehicle security and convenience. Our product offerings consist of (i) sensors, (ii) application-specific actuators, switches and valves (iii) vehicle and driver information systems, (iv) vehicle management electronics, (v) power and switch distribution modules and telematics, (vi) security alarms and vehicle tracking devices and monitoring services and (vii) convenience accessories. We supply the majority of our products, predominantly on a sole-source basis, to many of the world’s leading commercial vehicle and automotive original equipment manufacturers (“OEMs”), agricultural manufacturers and select non-vehicle OEMs, as well as certain commercial vehicle and automotive tier one suppliers. Our customers are increasingly utilizing electronic technology to comply with more stringent regulations (particularly emissions and safety) and to meet end-user demand for improved vehicle performance and greater convenience. As a result, per-vehicle electronic content has been increasing. Our technology and our partnership-oriented approach to product design and development enables us to develop next-generation products.

Segments and Products

We conduct our business in three reportable business segments which are the same as our operating segments: Control Devices, Electronics and PST.

Control Devices. Our Control Devices segment designs and manufactures products that monitor, measure or activate specific functions within a vehicle. This segment includes product lines such as sensors, switches, valves and actuators. Sensor products are employed in major vehicle systems such as the emissions, safety, powertrain, braking, climate control, steering and suspension systems. Switches transmit signals that activate specific functions. Our switch technology is principally used in two capacities, user-activated and hidden. User-activated switches are used by a vehicle's operator or passengers to manually activate, rear defrosters and other accessories. Hidden switches are not typically visible to vehicle operators or passengers and are engaged to activate or deactivate selected functions as part of normal vehicle operations, such as brake lights. In addition, our Control Devices segment designs and manufactures actuator products that enable OEMs to deploy power functions in a vehicle and can be designed to integrate switching and control functions including our shift by wire product. We sell these products principally to the automotive market. To a lesser extent, we sell these products to the commercial vehicle and agricultural markets.

Electronics. Our Electronics segment designs and manufactures electronic instrument clusters, electronic control units and driver information systems. These products collect, store and display vehicle information such as speed, pressure, maintenance data, trip information, operator performance, temperature, distance traveled and driver messages related to vehicle performance. In addition, power distribution modules and systems regulate, coordinate, monitor and direct the operation of the electrical system within a vehicle. These products use state-of-the-art hardware, software and multiplexing technology and are sold principally to the commercial vehicle market or through both the OEM and aftermarket channels.

PST. Our PST segment, in which we have a 74% controlling interest, primarily serves the South American market and specializes in the design, manufacture and sale of in-vehicle audio and video devices, electronic vehicle security alarms, convenience accessories, vehicle tracking devices and monitoring services primarily for the automotive and motorcycle markets. This segment includes product lines such as alarms, convenience applications, vehicle monitoring and tracking devices and infotainment systems. These products improve the performance, safety and convenience features of our customers' vehicles. PST sells its products through the aftermarket distribution channel, to factory authorized dealer installers, also referred to as original equipment services, direct to OEMs and through mass merchandisers.

Segment	Product Category	2016	2015	2014
Control Devices	Sensors, switches, valves and actuators	59 %	52 %	47 %
Electronics	Electronic instrument clusters, electronic control units and driver information systems	29	33	32
PST	Security alarms, vehicle tracking devices and monitoring services and convenience accessories	12	15	21

Our products and systems are sold to numerous OEM and tier one supplier customers, as well as aftermarket distributors and mass merchandisers, for use on many different vehicle platforms. We supply multiple parts to many of our principal OEM and tier one customers under requirements contracts for a particular vehicle model. These contracts range in duration from one year to the production life of the model, which commonly extends for three to seven years.

The following table sets forth for the periods indicated, the percentage of net sales derived from our principal end markets for the years ended December 31:

Principal End Markets	2016	2015	2014
Automotive	50 %	42 %	37 %
Commercial vehicle	33	37	36
Aftermarket distributors and mass merchandisers	12	15	21
Agricultural and other	5	6	6

For further information related to our reportable segments and financial information about geographic areas, see Note 13 to the consolidated financial statements.

Sale of Wiring Business

We sold the assets and liabilities of our Wiring business on August 1, 2014. As a result, the Wiring business has been classified as discontinued operations for all periods presented in the Company's financial statements, and therefore has been excluded from continuing operations, segment results and other information herein for all periods presented. The Wiring business designed and manufactured wiring harness products and assembled instruments panels for sale principally to the commercial, agricultural and off-highway vehicle markets.

Production Materials

The principal production materials used in the Company's manufacturing process are molded plastic components and resins, copper, precious metals and certain electrical components such as printed circuit boards, semiconductors, microprocessors, memory devices, resistors, capacitors, fuses, relays and infotainment devices. We purchase production materials pursuant to both annual contract and spot purchasing methods. Such materials are available from multiple sources, but we generally establish collaborative relationships with a qualified supplier for each of our key production materials in order to lower costs and enhance service and quality. As global demand for our production materials increases, we may have difficulties obtaining adequate production materials from our suppliers to satisfy our customers. Any extended period of time for which we cannot obtain adequate production material or which we experience an increase in the price of production material would materially affect our results of operations and financial condition.

Patents, Trademarks and Intellectual Property

We maintain and have pending various U.S. and foreign patents, trademarks and other rights to intellectual property relating to the reportable segments of our business, which we believe are appropriate to protect the Company's interests in existing products, new inventions, manufacturing processes and product developments. We do not believe any single patent is material to our business, nor would the expiration or invalidity of any patent have a material adverse effect on our business or ability to compete.

Industry Cyclicalities and Seasonality

The markets for products in each of our reportable segments have been cyclical. Because these products are used principally in the production of vehicles for the automotive, commercial, motorcycle, off-highway and agricultural vehicle markets, revenues and therefore results of operations, are significantly dependent on the general state of the economy and other factors, like the impact of environmental regulations on our customers, which affect these markets. A significant decline in automotive, commercial, motorcycle, off-highway and agricultural vehicle production of our principal customers could adversely impact the Company. Our Electronics and Control Devices segments are typically not affected by seasonality, however the demand for our PST segment consumer products is typically higher in the second half of the year, the fourth quarter in particular.

Customers

We have several customers which account for a significant percentage of our sales. The loss of any significant portion of our sales to these customers, or the loss of a significant customer, would have a material adverse impact on our financial condition and results of operations. We supply numerous different products to each of our principal customers. Contracts with several of our customers provide for supplying their requirements for a particular model, rather than for manufacturing a specific quantity of products. Such contracts range from one year to the life of the model, which is generally three to seven years. These contracts are subject to potential renegotiation from time to time, which may affect product pricing and generally may be terminated by our customers at any time. Therefore, the loss of a contract for a major model or a significant decrease in demand for certain key models or group of related models sold by any of our major customers would have a material adverse impact on the Company. We may also enter into contracts to supply products, the introduction of which may then be delayed or cancelled. We also compete to supply products for successor models, and are therefore subject to the risk that the customer will not select the Company to produce products on any such model, which could have a material adverse impact on our financial condition and results of operations.

Due to the competitive nature of the markets we serve, we face pricing pressures from our customers in the ordinary course of business. In response to these pricing pressures we have been able to effectively manage our production costs by the combination of lowering certain costs and limiting the increase of others, the net impact of which has not been material. However, if we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our results of operations would be adversely affected.

The following table presents our principal customers, as a percentage of net sales:

Years ended December 31	2016	2015	2014
Ford Motor Company	17 %	14 %	11 %
General Motors Company	7	5	5
Scania Group	6	7	8
Daimler	6	6	6
Volvo	6	6	5
Other	58	62	65

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, but instead estimated remaining projected volume under these programs over the following five years. Production scheduling and delivery for these orders could be changed or canceled by the customer on relatively short notice. Backlog was \$3.0 billion and \$2.7 billion at December 31, 2016 and 2015, respectively.

Competition

The markets for our products in our reportable segments are highly competitive. We compete based on technological innovation, price, quality, performance, service and delivery. We compete for new business both at the beginning of the development of new models and upon the redesign of existing models for OEM customers. New model development generally begins two to five years before the marketing of such models to the public. Once a supplier has been selected to provide parts for a new program, an OEM customer will usually continue to purchase those parts from the selected supplier for the life of the program, although not necessarily for any model redesigns. We compete for aftermarket and mass merchandiser sales based on price, product functionality, quality and service.

Our diversity in products creates a wide range of competitors, which vary depending on both market and geographic location. We compete based on strong customer relations and a fast and flexible organization that develops technically effective solutions at or below target price. We compete against the following companies:

Control Devices. Our primary competitors include Bosch, Continental AG, Delphi Automotive PLC, Denso Corporation, Electricfil, Hella KGaA Hueck & Co., Methode Electronics, Inc., NTK Technologies, Inc., TE Connectivity Ltd. and Sensata.

Electronics. Our primary competitors include Actia Group, Bosch, Continental AG, Delphi Automotive PLC, Dongfeng Electronics Technology Co., Ltd., Hella KGaA Hueck & Co., Magneti Marelli S.p.A. and Yazaki Corporation.

PST. Our primary competitors include Autotrac, Clarion, Continental AG, Delphi Automotive PLC, FKS, Ituran, Kostal and Hinor, Lennox, M. Magneti Marelli S.p.A., Maxtrack, MultiLaser, Olympus, Pioneer Corporation, Quantum, Sascar, Suntech, Taramps and Tury.

Product Development

Our research and development efforts for our reportable segments are largely product design and development oriented and consist primarily of applying known technologies to customer requests. We work closely with our customers to solve customer requests using innovative approaches. The majority of our development expenses are related to customer-sponsored programs where we are involved in designing custom-engineered solutions for specific applications or for next generation technology. To further our vehicle platform penetration, we have also developed collaborative relationships with the design and engineering departments of key customers. These collaborative efforts have resulted in the development of new and complimentary products and the enhancement of existing products.

While our engineering and product development departments are organized by market, our segments interact and collaborate on new products. The product development operations are complimented by technology groups in Canton, Massachusetts; Lexington, Ohio; Stockholm, Sweden; Pune, India; Manaus, Brazil; São Paulo, Brazil; and Shanghai, China.

We use efficient and quality oriented work processes to address our customers' high standards. Our product development technical resources include a full complement of computer-aided design and engineering ("CAD/CAE") software systems, including (i) virtual three-dimensional modeling, (ii) functional simulation and analysis capabilities and (iii) data links for rapid prototyping. These systems enable us to expedite product design and the manufacturing process to shorten the development time and ultimately time to market.

We have further strengthened our electrical engineering competencies through investment in equipment such as (i) automotive electro-magnetic compliance test chambers, (ii) programmable automotive and commercial vehicle transient generators, (iii) circuit simulators and (iv) other environmental test equipment. Additional investment in 3-D printing product machining equipment has allowed us to fabricate new product samples in a fraction of the time required historically. Our product development and validation efforts are supported by full service, on-site test labs at most manufacturing facilities, thus enabling cross-functional engineering teams to optimize the product, process and system performance before tooling initiation.

We have invested, and will continue to invest heavily in technology to develop new products for our customers. Product development costs incurred in connection with the development of new products and manufacturing methods, to the extent not recoverable from the customer, are expensed as incurred. Such costs amounted to approximately \$40.2 million, \$38.8 million and \$41.6 million for 2016, 2015 and 2014, respectively, or 5.8%, 6.0% and 6.3% of net sales for these periods.

We will continue to prioritize investment spending toward the design and development of new products over sustaining existing product programs for specific customers, which allows us to sell our products to multiple customers. The typical product development process takes three to five years to show tangible results. As part of our effort to evaluate our investment spending, we review our current product portfolio and adjust our spending to either accelerate or eliminate our investment in these products based on our position in the market and the potential of the market and product.

Environmental and Other Regulations

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things, emissions to air, discharge to water and the generation, handling, storage, transportation, treatment and disposal of waste and other materials. We believe that our business, operations and facilities have been and are being operated in compliance, in all material respects, with applicable environmental and health and safety laws and regulations, many of which provide for substantial fines and criminal sanctions for violations.

Employees

As of December 31, 2016, we had approximately 4,200 employees, approximately 69% of whom were located outside the United States. Although we have no collective bargaining agreements covering U.S. employees, a significant number of employees located in Brazil, Estonia, Mexico, Sweden, and the United Kingdom either (i) are represented by a union and are covered by a collective bargaining agreement, or (ii) are covered by works council or other

employment arrangements required by law. We believe that relations with our employees are good.

Joint Ventures

We form joint ventures in various global markets in order to achieve several strategic objectives including (i) diversifying our business by expanding in high-growth regions, (ii) employing complementary design processes, growth technologies and intellectual capital, and (iii) realizing cost savings from combined sourcing.

We have a 49% noncontrolling equity interest in Minda Stoneridge Instruments Ltd. (“Minda”) for the years ending December 31, 2016, 2015, and 2014. Based in India, Minda manufactures electromechanical/electronic instrumentation equipment and sensors primarily for the automotive, motorcycle and commercial vehicle markets. We leverage our investment in Minda by sharing our knowledge and expertise in electrical components and systems and expanding Minda’s product offering through the joint development of our products designed for the market in India.

Executive Officers of the Company

Each executive officer of the Company serves the Board of Directors at its pleasure. The Board of Directors appoints corporate officers annually. The following table sets forth the names, ages, and positions of the executive officers of the Company:

Name	Age	Position
Jonathan B. DeGaynor	50	President, Chief Executive Officer and Director
Robert R. Krakowiak	46	Chief Financial Officer and Treasurer
George E. Strickler	69	Executive Vice President
Anthony L. Moore	53	Vice President of Operations
Thomas A. Beaver	63	Vice President of the Company and President of Global Sales
Michael D. Sloan	60	Vice President of the Company and President of the Control Devices Division
Peter Kruk	48	President of the Electronics Division
Sergio de Cerqueira Leite	53	Director President of PST Eletrônica Ltda.
Alisa A. Nagle	49	Chief Human Resources Officer
Robert J. Hartman Jr.	50	Chief Accounting Officer

Jonathan B. DeGaynor, President, Chief Executive Officer and Director. Mr. DeGaynor was appointed as President and Chief Executive Officer in March 2015. He has served as a director since May 2015. Prior to joining Stoneridge, Mr. DeGaynor served as the Vice President of Strategic Planning and Innovation of Guardian Industries Corp., (“Guardian”), from October 2014 until March 2015. Mr. DeGaynor served as Vice President of Business Development, Managing Director Asia for SRG Global, Inc., a Guardian company from 2008 through September 2014. Mr. DeGaynor served as Chief Operating Officer, International for Autocam Corporation from 2005 to 2008. Prior to that, Mr. DeGaynor held positions of increasing responsibility with Delphi Corporation from 1993 to 2005.

Robert R. Krakowiak, Chief Financial Officer and Treasurer. Mr. Krakowiak was appointed as Chief Financial Officer and Treasurer in August 2016. Prior to joining Stoneridge, Mr. Krakowiak, served as Vice President, Treasurer and Investor Relations at Visteon Corporation from 2012 until August 2016. Prior to that, Mr. Krakowiak held the following positions at Owens Corning: from 2009 until 2012, Vice President of Finance (Composite Solutions Business); from 2008 until 2009, Vice President—Corporate Financial Planning and Analysis; from 2006 until 2008, Vice President and Controller (Roofing and Asphalt); and from 2005 until 2006, Assistant Treasurer.

George E. Strickler, Executive Vice President. In August 2016, Mr. Strickler relinquished his position of Chief Financial Officer and Treasurer but remained Executive Vice President supporting the Company’s growth initiatives. Mr. Strickler served as Executive Vice President and Chief Financial Officer from January 2006 to August 2016. Mr. Strickler was appointed Treasurer of the Company in February 2007. Prior to his employment with the Company, Mr. Strickler served as Executive Vice President and Chief Financial Officer for Republic Engineered Products, Inc.

(“Republic”), from February 2004 to January 2006. Mr. Strickler also currently serves as Chairman of the Board of TCP International Holdings Ltd., a manufacturer and distributor of energy efficient lighting technologies.

Anthony L. Moore, Vice President of Operations. Mr. Moore was appointed as Vice President of Operations in May 2016. Prior to joining Stoneridge, he served as Global Vice President of Integrated Supply Chain and Operations at Ingersoll Rand, Compressed Air Systems from October 2015. Prior to that, Mr. Moore served as Chief Product Development and Supply Chain Officer at Remington Outdoor Company from May 2012 to September 2015. Before that, Mr. Moore was employed at Cooper Industries, Inc. where he held several leadership positions in the areas of supply chain, operations, and engineering from 2008.

Thomas A. Beaver, Vice President of the Company and President of Global Sales. Mr. Beaver has served as Vice President of the Company and President of Global Sales since May 2012. Prior to that, Mr. Beaver served as Vice President of the Company and Vice President of Global Sales and Systems Engineering from January 2005 to May 2012. From January 2000 to January 2005, Mr. Beaver served as Vice President of Stoneridge Sales and Marketing.

Michael D. Sloan, Vice President of the Company and President of the Control Devices Division. Mr. Sloan has served as President of the Control Devices Division since July 2009 and Vice President of the Company since December 2009. Prior to that, Mr. Sloan served as Vice President and General Manager of Stoneridge Hi-Stat from February 2004 to July 2009.

Peter Kruk, President of the Electronics Division. Mr. Kruk has served as President of the Electronics Division since August 2012. Mr. Kruk joined the Company in October 2009 as the Managing Director of Stoneridge Electronics – Europe. Prior to that, he served as President of HEXPOL Wheels and Managing Director of Stellana AB from 2007 to 2009.

Sergio de Cerqueira Leite, Director President of PST Eletrônica Ltda. Mr. Leite is a founding partner of PST. He has held the Director President position since 1997.

Alisa A. Nagle, Chief Human Resources Officer. Ms. Nagle has served as Chief Human Resources Officer since joining the Company in November 2015. From 2007 until her employment with the Company, Ms. Nagle served as Vice President of Human Resources – Global Aftermarket and Original Equipment Groups and Global Central Functions at Johnson Controls, Inc.

Robert J Hartman Jr., Chief Accounting Officer. Mr. Hartman was appointed as Chief Accounting Officer and to the role of principal accounting officer in July 2016. Prior to that, Mr. Hartman served as Corporate Controller of the Company since 2006 and prior to that as Stoneridge’s Director of Internal Audit from 2003.

Available Information

We make available, free of charge through our website (www.stoneridge.com), our Annual Report on Form 10-K (“Annual Report”), Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, all amendments to those reports, and other filings with the U.S. Securities and Exchange Commission (“SEC”), as soon as reasonably practicable after they are filed with the SEC. Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Code of Ethics for Senior Financial Officers, Whistleblower Policy and Procedures and the charters of the Board of Director’s Audit, Compensation and Nominating and Corporate Governance Committees are posted on our website as well. Copies of these documents will be available to any shareholder upon request. Requests should be directed in writing to Investor Relations at Stoneridge, Inc., 39675 MacKenzie Drive, Suite 400, Novi, Michigan 48377.

The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including the Company. The public may also read and copy any materials we file with the SEC at the SEC’s Public Reference Room at 100 F. Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Item 1A. Risk Factors.

Our business is cyclical and a downturn in the automotive, commercial, motorcycle, off-highway and agricultural vehicle markets as well as overall economic conditions could reduce the sales and profitability of our business.

The demand for products in our Control Devices and Electronics segments are largely dependent on the domestic and foreign production of automotive, commercial, motorcycle, off-highway and agricultural vehicles. The markets for our products have been cyclical, because new vehicle demand is dependent on, among other things, consumer spending and is tied closely to the overall strength of the economy. Because the majority of our products are used principally in the production of vehicles for the automotive, commercial, motorcycle, off-highway and agricultural vehicle markets, our net sales, and therefore our results of operations, are significantly dependent on the general state of the economy and other factors which affect these markets. A decline in commercial, automotive, agricultural, motorcycle and off-highway vehicle production, or a material decline in market share by our significant customers, could adversely affect our results of operations and financial condition.

In 2016, approximately 88% of our net sales were derived from automotive, commercial, motorcycle, off-highway and agricultural vehicle markets while approximately 12% were derived from aftermarket distributors, mass merchandisers and monitoring services markets.

We have foreign currency translation and transaction risks that may materially adversely affect our operating results, financial condition and liquidity.

The financial position and results of operations of our international subsidiaries are initially recorded in various foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. The strengthening of the U.S. dollar against these foreign currencies ordinarily has a negative effect on our reported sales and operating margin (and conversely, the weakening of the U.S. dollar against these foreign currencies has a positive impact). The volatility of currency exchange rates may materially adversely affect our operating results, including foreign currency forward contracts. To mitigate a portion of our exposure to fluctuations in foreign currency exchange rates we use derivative financial instruments, including foreign currency contracts, to reduce the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory purchases and other foreign currency exposures.

We are subject to risks related to our international operations.

Approximately 38% of our net sales in 2016 were derived from sales outside of North America. At December 31, 2016, significant concentrations of net assets outside of North America included \$55.7 million in South America and \$79.0 million in Europe and Other. Non-current assets outside of North America accounted for approximately 51% of our non-current assets as of December 31, 2016. International sales and operations are subject to significant risks, including, among others:

- political and economic instability;
- restrictive trade policies;
- economic conditions in local markets;
- currency exchange controls;
- labor unrest;
- difficulty in obtaining distribution support and potentially adverse tax consequences; and

the imposition of product tariffs and the burden of complying with a wide variety of international and U.S. export laws

We may not realize sales represented by awarded business.

We base our growth projections, in part, on business awards made by our customers. These business awards generally renew annually during a program life cycle. Failure of actual production orders from our customers to approximate these business awards could have a material adverse effect on our business, financial condition or results of operations.

The prices that we can charge some of our customers are predetermined and we bear the risk of costs in excess of our estimates, in addition to the risk of adverse effects resulting from general customer demands for cost reductions and quality improvements.

Our supply agreements with some of our customers require us to provide our products at predetermined prices. In some cases, these prices decline over the course of the contract and may require us to meet certain productivity and cost reduction targets. In addition, our customers may require us to share productivity savings in excess of our cost reduction targets. The costs that we incur in fulfilling these contracts may vary substantially from our initial estimates. Unanticipated cost increases or the inability to meet certain cost reduction targets may occur as a result of several factors, including increases in the costs of labor, components or materials. In some cases, we are permitted to pass on to our customers the cost increases associated with specific materials. However, cost overruns that we cannot pass on to our customers could adversely affect our business, financial condition or results of operations.

OEM customers have exerted and continue to exert considerable pressure on component suppliers to reduce costs, improve quality and provide additional design and engineering capabilities and continue to demand and receive price reductions and measurable increases in quality through their use of competitive selection processes, rating programs and various other arrangements. We may be unable to generate sufficient production cost savings in the future to offset required price reductions. Additionally, OEMs have generally required component suppliers to provide more design engineering input at earlier stages of the product development process, the costs of which have, in some cases, been absorbed by the suppliers. Future price reductions, increased quality standards and additional engineering capabilities required by OEMs may reduce our profitability and have a material adverse effect on our business, financial condition or results of operations.

Our business is very competitive and increased competition could reduce our sales and profitability.

The markets for our products are highly competitive. We compete based on technological innovation, price, quality, performance, service and delivery. Many of our competitors are more diversified and have greater financial and other resources than we do. In addition, with respect to certain products, some of our competitors are divisions of our OEM customers. We cannot assure that our business will not be adversely affected by competition or that we will be able to maintain our profitability if the competitive environment changes.

The loss or insolvency of any of our principal customers would adversely affect our future results.

We are dependent on several principal customers for a significant percentage of our net sales. In 2016, our top five customers were Ford Motor Company, General Motors, Scania Group, Daimler and Volvo which comprised 17%, 7%, 6%, 6% and 6% of our net sales, respectively. In 2016, our top ten customers accounted for 55% of our net sales. The loss of any significant portion of our sales to these customers would have a material adverse effect on our results of operations and financial condition. The contracts we have entered into with many of our customers provide for supplying the customers' requirements for a particular model, rather than for manufacturing a specific quantity of products. Such contracts range from one year to the life of the model. These contracts are subject to renegotiation, which may affect product pricing and generally may be terminated by our customers at any time. Therefore, the loss of a contract for a major model or a significant decrease in demand for certain key models or any group of related models sold by any of our major customers could have a material adverse effect on our results of operations and financial condition by reducing cash flows and our ability to spread costs over a larger revenue base. We also compete to supply products for successor models and are subject to the risk that the customer will not select us to produce products on any such model, which could have a material adverse impact on our business, financial condition or results of operations. In addition, we have significant receivable balances related to these customers and other major customers that would be at risk in the event of their bankruptcy.

The discontinuation of, loss of business or lack of commercial success, with respect to a particular vehicle model for which the Company is a significant supplier could reduce the Company's sales and harm its profitability.

Although the Company has purchase orders from many of its customers, these purchase orders generally provide for the supply of a customer's annual requirements for a particular vehicle model and assembly plant, or in some cases, for the supply of a customer's requirements for the life of a particular vehicle model, rather than for the purchase of a specific quantity of products. In addition, it is possible that customers could elect to manufacture components internally that are currently produced by outside suppliers, such as the Company. The discontinuation of, the loss of business with respect to or a lack of commercial success of a particular vehicle model for which the Company is a significant supplier, could reduce the Company's sales and harm the Company's profitability.

We are dependent on the availability and price of raw materials and other supplies.

We require substantial amounts of raw materials and other supplies, and substantially all such materials we require are purchased from outside sources. The availability and prices of raw materials and other supplies may be subject to curtailment or change due to, among other things, new laws or regulations, suppliers' allocations to other purchasers and interruptions in production by suppliers, weather emergencies, natural disasters, commercial disputes, acts of terrorism or war, changes in exchange rates and worldwide price levels. If demand for raw materials increases, we may have difficulties obtaining adequate raw materials and other supplies from our suppliers to satisfy our customers. At times, we have experienced difficulty obtaining adequate supplies of semiconductors and memory chips for our Control Devices, Electronics and PST segments. In addition, there have been challenges at times in obtaining timely supply of nylon and resins for our Control Devices segment and audio component parts for our PST segment. If we cannot obtain adequate raw materials and other supplies, or if we experience an increase in the price of raw materials and other supplies, our business, financial condition or results of operations could be materially adversely affected.

We use a variety of commodities, including copper, zinc, resins and certain other commodities. Increasing commodity costs could have a negative impact on our results. We have sought at times to alleviate the effect of increasing costs by selectively hedging a portion of our exposure. The inability to effectively hedge them may have a material adverse effect on our business, financial condition or results of operations.

We rely on independent dealers and distributors to sell certain products in the aftermarket sales channel and a disruption to this channel would harm our business.

Because we sell certain products such as security accessories and driver information products to independent dealers and distributors, we are subject to many risks, including risks related to their inventory levels and support for our products. If dealers and distributors do not maintain sufficient inventory levels to meet customer demand, our sales could be negatively impacted.

Our dealer network also sells products offered by our competitors. If our competitors offer our dealers more favorable terms, those dealers may de-emphasize or decline to carry our products. In the future, we may not be able to retain or attract a sufficient number of qualified dealers and distributors. If we are unable to maintain successful relationships with dealers and distributors, or to expand our distribution channels, our business will suffer.

We must implement and sustain a competitive technological advantage in producing our products to compete effectively.

Our products are subject to changing technology, which could place us at a competitive disadvantage relative to alternative products introduced by competitors. Our success will depend on our ability to continue to meet customers' changing specifications with respect to technological innovation, price, quality, performance, service and delivery by implementing and sustaining competitive technological advances. Our business may, therefore, require significant recurring additional capital expenditures and investment in product development and manufacturing and management information systems. We cannot assure that we will be able to achieve the technological advances or introduce new products that may be necessary to remain competitive. Our inability to continuously improve existing products, to develop new products and to achieve technological advances could have a material adverse effect on our business, financial condition or results of operations.

PST's Global Positioning Systems ("GPS") products depend upon satellites maintained by the United States Department of Defense. If a significant number of these satellites become inoperable, unavailable or are not replaced, or if the policies of the United States government for the use of the GPS without charge are changed, our business will suffer.

The GPS is a satellite-based navigation and positioning system consisting of a constellation of orbiting satellites. The satellites and their ground control and monitoring stations are maintained and operated by the United States Department of Defense. The Department of Defense does not currently charge users for access to the satellite signals. These satellites and their ground support systems are complex electronic systems subject to electronic and mechanical failures and possible sabotage.

If a significant number of satellites were to become inoperable, unavailable or are not replaced, it would impair the current utility of our GPS products and the growth of market opportunities. In addition, there can be no assurance that the U.S. government will remain committed to the operation and maintenance of GPS satellites over a long period, or that the policies of the U.S. government that provide for the use of the GPS without charge and without accuracy degradation will remain unchanged. Because of the increasing commercial applications of the GPS, other U.S. government agencies may become involved in the administration or the regulation of the use of GPS signals. Any of the foregoing factors could affect the willingness of buyers of our products to select GPS-based products instead of products based on competing technologies, which could adversely affect our operational revenues, financial condition and results of operation.

We may incur material product liability costs.

We may be subject to product liability claims in the event that the failure of any of our products results in personal injury or death and we cannot assure that we will not experience material product liability losses in the future. We cannot assure that our product liability insurance will be adequate for liabilities ultimately incurred or that it will continue to be available on terms acceptable to us. In addition, if any of our products prove to be defective, we may be required to participate in government-imposed or customer OEM-instituted recalls involving such products. A successful claim brought against us that exceeds available insurance coverage or a requirement to participate in any product recall could have a material adverse effect on our business, financial condition or results of operations.

Increased or unexpected product warranty claims could adversely affect us.

We typically provide our customers a warranty covering workmanship, and in some cases materials, on products we manufacture. Our warranty generally provides that products will be free from defects and adhere to customer specifications. If a product fails to comply with the warranty, we may be obligated or compelled, at our expense, to correct any defect by repairing or replacing the defective product. We maintain warranty reserves in an amount based on historical trends of units sold and payment amounts, combined with our current understanding of the status of existing claims. To estimate the warranty reserves, we must forecast the resolution of existing claims, as well as expected future claims on products previously sold. The amounts estimated to be due and payable could differ materially from what we may ultimately be required to pay. An increase in the rate of warranty claims or the occurrence of unexpected warranty claims could have a material adverse effect on our customer relations, our financial condition or results of operations. Our customers are increasingly seeking to hold suppliers responsible for product warranties, which could negatively impact our exposure to these costs.

If we fail to protect our intellectual property rights or maintain our rights to use licensed intellectual property or are found liable for infringing the rights of others, our business could be adversely affected.

Our intellectual property, including our patents, trademarks, copyrights, trade secrets and license agreements, are important in the operation of our businesses, and we rely on the patent, trademark, copyright and trade secret laws of the United States and other countries, as well as nondisclosure agreements, to protect our intellectual property rights. We may not, however, be able to prevent third parties from infringing, misappropriating or otherwise violating our intellectual property, breaching any nondisclosure agreements with us, or independently developing technology that is similar or superior to ours and not covered by our intellectual property. Any of the foregoing could reduce any competitive advantage we have developed, cause us to lose sales or otherwise harm our business. We cannot assure that any intellectual property will provide us with any competitive advantage or will not be challenged, rejected, cancelled, invalidated or declared unenforceable. In the case of pending patent applications, we may not be successful in securing issued patents, or securing patents that provide us with a competitive advantage for our businesses. In addition, our competitors may design products around our patents that avoid infringement and violation of our intellectual property rights.

We cannot be certain that we have rights to use all intellectual property used in the conduct of our businesses or that we have complied with the terms of agreements by which we acquire such rights, which could expose us to infringement, misappropriation or other claims alleging violations of third party intellectual property rights. Third parties have asserted and may assert or prosecute infringement claims against us in connection with the services and products that we offer, and we may or may not be able to successfully defend these claims. Litigation, either to enforce our intellectual property rights or to defend against claims regarding intellectual property rights of others, could result in substantial costs and a diversion of our resources. Any such claims and resulting litigation could require us to enter into licensing agreements (if available on acceptable terms or at all), pay damages and cease making or selling certain products and could result in a loss of our intellectual property protection. Moreover, we may

need to redesign some of our products to avoid future infringement liability. We also may be required to indemnify customers or other third parties at significant expense in connection with such claims and actions. Any of the foregoing could have a material adverse effect on our business, financial condition or results of operations.

Our debt obligations could limit our flexibility in managing our business and expose us to risks.

As of December 31, 2016, there was \$67.0 million in borrowings outstanding on our revolving credit facility (the “Credit Facility”). In addition, we are permitted under our Credit Facility to incur additional debt, subject to specified limitations. Our leverage and the terms of our indebtedness may have important consequences including the following:

- we may have difficulty satisfying our obligations with respect to our indebtedness, and if we fail to comply with these requirements, an event of default could result;

- we may be required to dedicate a substantial portion of our cash flow from operations to required payments on indebtedness, thereby reducing the availability of cash flow for working capital, capital expenditures and other general corporate activities;

- covenants relating to our debt may limit our ability to obtain additional financing for working capital, capital expenditures and other general corporate activities;

- covenants relating to our debt may limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;

- we may be placed at a competitive disadvantage against any less leveraged competitors

These and other consequences of our leverage and the terms of our indebtedness could have a material adverse effect on our business, financial condition or results of operations.

Covenants in our Credit Facility may limit our ability to pursue our business strategies.

Our Credit Facility limits our ability to, among other things:

- incur additional debt and guarantees;

pay dividends and repurchase our shares;

make other restricted payments, including investments;

create liens;

sell or otherwise dispose of assets, including capital shares of subsidiaries;

enter into agreements that restrict dividends from subsidiaries;

consolidate, merge or sell or otherwise dispose of all or substantially all of our assets; and

substantially change the nature of our business.

The agreement governing our Credit Facility requires us to maintain a maximum leverage ratio of 3.00 to 1.00, and a minimum interest coverage ratio of 3.50 to 1.00 and places a maximum annual limit on capital expenditures. Our ability to comply with these covenants as well as the negative covenants under the terms of our indebtedness, may be affected by events beyond our control.

A breach of any of the negative covenants under our indebtedness or our inability to comply with the leverage and interest ratio requirements in the Credit Facility could result in a default. If a default occurs, the lenders under the Credit Facility could elect to declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable and terminate any commitments they have to provide further borrowings, and the Credit Facility lenders could pursue foreclosure and other remedies against us and our assets.

We have limited or no redundancy for certain of our manufacturing facilities, and therefore damage or disruption to those facilities could interrupt our operations, increase our costs of doing business and impair our ability to deliver our products on a timely basis.

If certain of our existing production facilities become incapable of manufacturing products for any reason, we may be unable to meet production requirements, we may lose revenue and we may not be able to maintain our relationships with our customers. Without operation of certain existing production facilities, we may be limited in our ability to deliver products until we restore the manufacturing capability at the particular facility, find an alternative manufacturing facility or arrange an alternative source of supply. Although we carry business interruption insurance to cover lost revenue and profits in an amount we consider adequate, this insurance does not cover all possible situations and may be insufficient. Also, our business interruption insurance would not compensate us for the loss of opportunity and potential adverse impact on relations with our existing customers resulting from our inability to produce products for them.

A failure of our information technology (IT) networks and systems, or the inability to successfully implement upgrades to our enterprise resource planning (ERP) systems, could adversely impact our business and operations.

We rely upon information technology networks and systems to process, transmit and store electronic information, and to manage or support a variety of business processes and/or activities. The secure operation of these information technology networks and systems and the proper processing and maintenance of this information are critical to our business operations. Despite the implementation of security measures, our IT systems are at risk to damages from computer viruses, unauthorized access, cyber-attack and other similar disruptions. The occurrence of any of these events could compromise our networks, and the information stored there could be accessed, publicly disclosed or lost.

Any such access, disclosure, loss of information or disruption of our operations 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. We may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Also, we continually expand and update our IT networks and systems in response to the changing needs of our business and periodically upgrade our ERP systems. Should our networks or systems not be implemented successfully, or if the systems do not perform in a satisfactory manner once implementation is complete, our business and operations could be disrupted and our results of operations could be adversely affected, including our ability to report accurate and timely financial results.

Compliance with environmental and other governmental regulations could be costly and require us to make significant expenditures.

Our operations are subject to various federal, state, local and foreign laws and regulations governing, among other things:

- the discharge of pollutants into the air and water;
- the generation, handling, storage, transportation, treatment, and disposal of waste and other materials;
- the cleanup of contaminated properties; and
- the health and safety of our employees.

Our business, operations and facilities are subject to environmental and health and safety laws and regulations, many of which provide for substantial fines for violations. The operation of our manufacturing facilities entails risks and we cannot assure you that we will not incur material costs or liabilities in connection with these operations. In addition, potentially significant expenditures could be required in order to comply with evolving environmental, health and safety laws, regulations or requirements that may be adopted or imposed in the future. Changes in environmental, health and safety laws, regulations and requirements or other governmental regulations could increase our cost of doing business or adversely affect the demand for our products.

Our annual effective tax rate could be volatile and materially change as a result of changes in the mix of earnings and other factors including changes in the recognition and/or release of valuation allowances against deferred tax assets.

Our overall effective tax rate is computed by dividing our total tax expense (benefit) by our total earnings (loss) before tax. However, tax expense and benefits are not recognized on a global basis, but rather on a jurisdictional or legal entity basis. Losses in certain jurisdictions may not provide a current financial statement tax benefit as a result of the need to maintain a valuation allowance against the associated deferred tax asset. Also, management periodically evaluates the realizability of our deferred tax assets which may result in the recognition and/or release of valuation allowances. As a result, changes in the mix of earnings between jurisdictions and changes in the recognition and/or release of valuation allowances, among other factors, could have a significant effect on our overall effective tax rate.

The impact of potential changes in tax and trade policies in the United States and the potential corresponding actions by other countries in which we do business could adversely affect our financial performance.

The U.S. government has recently proposed comprehensive tax and trade reform. These proposals are designed to encourage increased production in the United States and include a border tax on imports, an increase in customs duties and the renegotiation of U.S. trade agreements. Reflective of the automotive industry, our vehicle parts manufacturing facilities in the United States and Mexico are highly dependent on trade within the North American Free Trade Agreement (“NAFTA”) region. Our facility in Mexico represents a critical component of our supply chain and that of our customers. We have significant imports into the United States, and the imposition of a border tax or an increase in customs duties with respect to these imports could negatively impact our financial performance. If such taxes or customs duties are implemented, it also may cause our trading partners to take actions with respect to U.S. imports or U.S. investment activities in their respective countries. Any potential changes in tax and trade policies in the United States and the potential corresponding actions by other countries in which we do business could adversely affect our financial performance.

We may not be able to successfully integrate acquisitions into our business or may otherwise be unable to benefit from pursuing acquisitions.

Failure to successfully identify, complete and/or integrate acquisitions could have a material adverse effect on us. A portion of our growth in sales and earnings has been generated from acquisitions and subsequent improvements in the performance of the businesses acquired. We expect to continue a strategy of selectively identifying and acquiring businesses with complementary products. We cannot assure you that any business acquired by us will be successfully integrated with our operations or prove to be profitable. We could incur substantial indebtedness in connection with our acquisition strategy, which could significantly increase our interest expense.

We anticipate that acquisitions could occur in foreign markets in which we do not currently operate. As a result, the process of integrating acquired operations into our existing operations may result in unforeseen operating difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of existing operations. Any failure to successfully integrate such acquisitions could have a material adverse effect on our business, financial condition or results of operations.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

At December 31, 2016, the Company and its joint venture currently owned or leased 10 manufacturing facilities, which together contain approximately 1.0 million square feet of manufacturing space. Of these manufacturing facilities, four are used by our Control Devices reportable segment, three are used by our Electronics reportable segment, one is used by our PST reportable segment and two are used by our joint venture, Minda. The following table provides information regarding our facilities:

Location	Owned/ Leased	Use	Square Footage
Control Devices			
Lexington, Ohio	Owned	Manufacturing/Division Office	219,612
Juarez, Mexico ^(A)	Owned	Manufacturing	189,327
Canton, Massachusetts	Owned	Manufacturing	132,560
Suzhou, China ^(A)	Leased	Manufacturing	77,253
El Paso, Texas ^(A)	Leased	Warehouse	57,000
Lexington, Ohio	Leased	Warehouse	15,000
Lexington, Ohio	Leased	Warehouse	2,700
Electronics			
Tallinn, Estonia ^(B)	Leased	Manufacturing	85,911
Orebro, Sweden	Leased	Manufacturing	77,472
Stockholm, Sweden	Leased	Engineering Office/Division Office	39,600
Dundee, Scotland	Leased	Manufacturing/Sales Office/Engineering Office	34,605
Bayonne, France	Leased	Sales Office/Warehouse	9,655
Lomersheim, Germany	Leased	Sales Office/Warehouse	5,597
Shanghai, China ^(B)	Leased	Sales Office	5,034
Madrid, Spain	Leased	Sales Office/Warehouse	1,545
PST			
Manaus, Brazil	Owned	Manufacturing	102,247
São Paulo, Brazil	Owned	Engineering Office/Division Office	45,467
São Paulo, Brazil	Leased	Sales Office	9,246
Buenos Aires, Argentina	Leased	Sales Office	5,798
Corporate and Other			
Novi, Michigan	Leased	Headquarters	37,713
Warren, Ohio	Leased	Data Center	3,020
Stuttgart, Germany	Leased	Sales Office/Engineering Office	1,000
Seoul, South Korea	Leased	Sales Office	330
Joint Venture			
Pune, India	Owned	Manufacturing/Engineering Office/Sales Office	80,000

Chennai, India	Leased Manufacturing	25,629
----------------	----------------------	--------

(A) This facility is also used in the Electronics reportable segment.

(B) This facility is also used in the Control Devices reportable segment.

Item 3. Legal Proceedings.

We are involved in certain legal actions and claims primarily arising in the ordinary course of business. Although it is not possible to predict with certainty the outcome of these matters, we do not believe that any of the litigation in which we are currently engaged, either individually or in the aggregate, will have a material adverse effect on our business, consolidated financial position or results of operations. We are subject to a tax assessment in Brazil related to value added taxes on vehicle tracking and monitoring services for which the likelihood of loss is not probable although it may take years to resolve. In addition, we are subject to litigation regarding patent infringement. See additional details of these matters in Note 10 to the consolidated financial statements.

Item 4. Mine Safety Disclosure.

Not Applicable.

PART II

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

Our shares are listed on the New York Stock Exchange ("NYSE") under the symbol "SRI." As of February 24, 2017, we had 27,870,944 Common Shares, without par value, outstanding which were owned by approximately 200 registered holders, including Common Shares held in the names of brokers and banks (so-called "street name" holdings) who are record holders with approximately 2,600 beneficial owners.

Since the Company's initial public offering in 1997, we have not paid or declared dividends, which are restricted under the Credit Facility. We may only pay cash dividends on our Common Shares of up to \$7.0 million annually if immediately prior to and immediately after the payment is made, no event of default under our Credit Facility shall have occurred. We currently intend to use cash flows from our earnings for acquisitions, working capital, capital expenditures, general corporate purposes and reduction in outstanding indebtedness. Accordingly, we do not expect to pay cash dividends for the foreseeable future.

High and low sales prices for our Common Shares for each quarter ended during 2016 and 2015 are as follows:

Quarter Ended	High	Low
2016		
March 31	\$15.17	\$10.51
June 30	\$16.99	\$13.57
September 30	\$19.20	\$14.84
December 31	\$18.62	\$13.42
2015		
March 31	\$13.26	\$10.83
June 30	\$13.23	\$11.18
September 30	\$13.12	\$10.18
December 31	\$15.74	\$11.70

There were no repurchases of Common Shares made by us during the years ended December 31, 2016 or 2015, other than the repurchase of Common Shares of 126,539 and 241,537, respectively, to satisfy employee tax withholdings associated with the vesting of restricted Common Shares.

Performance Graph

Set forth below is a line graph comparing the cumulative total return of a hypothetical investment in our Common Shares with the cumulative total return of hypothetical investments in the Morningstar Auto Parts Industry Group Index and the NYSE Composite Index based on the respective market price of each investment as of December 31, 2011, 2012, 2013, 2014, 2015, and 2016 assuming in each case an initial investment of \$100 on December 31, 2011, and reinvestment of dividends.

	2011	2012	2013	2014	2015	2016
Stoneridge, Inc.	\$100	\$61	\$151	\$153	\$176	\$210
Morningstar Auto Parts Index	\$100	\$118	\$184	\$204	\$191	\$202
NYSE Composite Index	\$100	\$116	\$147	\$157	\$151	\$169

For information on “Related Stockholder Matters” required by Item 201(d) of Regulation S-K, refer to Item 12 of this report.

Item 6. Selected Financial Data.

The following table sets forth selected historical financial data and should be read in conjunction with the consolidated financial statements and notes related thereto and other financial information included elsewhere herein. The selected historical data was derived from our consolidated financial statements.

Years ended December 31	2016	2015	2014	2013	2012
	(in thousands, except per share data)				
Statement of Operations Data:					
Net sales:					
Control Devices	\$408,132	\$333,010	\$306,658	\$291,145	\$267,860
Electronics	205,256	216,544	214,141	189,809	164,196
PST	82,589	95,258	139,780	178,532	180,410
Total net sales	\$695,977	\$644,812	\$660,579	\$659,486	\$612,466
Gross profit	\$195,439	\$176,978	\$190,874	\$205,955	\$185,267
Operating income (loss)					
Control Devices	\$61,815	\$44,690	\$35,387	\$32,331	\$20,945
Electronics	14,798	13,784	17,444	20,732	15,851
PST ^(C)	(3,462)	(7,542)	(59,587)	7,211	583
Unallocated Corporate ^(F)	(29,069)	(23,117)	(19,067)	(17,871)	(17,474)
Total operating income (loss)	\$44,082	\$27,815	\$(25,823)	\$42,403	\$19,905
Equity in earnings of investees	\$1,233	\$608	\$815	\$476	\$760
Income (loss) before income taxes from continuing operations	\$39,185	\$20,230	\$(53,060)	\$23,326	\$(3,810)
Income (loss) from continuing operations ^{(A) (B) (C) (D)}	\$75,574	\$20,777	\$(51,204)	\$20,529	\$(3,777)
Income (loss) from discontinued operations ^(E)	-	(210)	(9,387)	(4,021)	7,525
Net income (loss)	75,574	20,567	(60,591)	16,508	3,748
Net income (loss) attributable to noncontrolling interest ^{(A)(B)(C)(D)}	(1,887)	(2,207)	(13,483)	1,377	(1,613)
Net income (loss) attributable to Stoneridge, Inc.	\$77,461	\$22,774	\$(47,108)	\$15,131	\$5,361
Basic earnings (loss) per share from continuing operations attributable to Stoneridge, Inc.	\$2.79	\$0.84	\$(1.40)	\$0.72	\$(0.08)
	\$2.74	\$0.82	\$(1.40)	\$0.70	\$(0.08)

Edgar Filing: STONERIDGE INC - Form 10-K

Diluted earnings (loss) per share from continuing operations attributable to Stoneridge, Inc.

Basic earnings (loss) per share attributable to discontinued operations	\$-	\$(0.01) \$(0.35) \$(0.15) \$0.28
---	-----	---------	-----------	-----------	----------

Diluted earnings (loss) per share attributable to discontinued operations	\$-	\$(0.01) \$(0.35) \$(0.14) \$0.28
---	-----	---------	-----------	-----------	----------

Basic earnings (loss) per share attributable to Stoneridge, Inc.	\$2.79	\$0.83	\$(1.75) \$0.57	\$0.20
--	--------	--------	---------	----------	--------

Diluted earnings (loss) per share attributable to Stoneridge, Inc.	\$2.74	\$0.81	\$(1.75) \$0.56	\$0.20
--	--------	--------	---------	----------	--------

Other Continuing Operations Data:

Design and development	\$40,212	\$38,792	\$41,609	\$40,372	\$38,945
Capital expenditures	\$24,476	\$28,735	\$23,516	\$21,576	\$22,909
Depreciation and amortization ^(G)	\$23,258	\$22,274	\$27,105	\$29,286	\$29,405

Balance Sheet Data (as of December 31):

Working capital ^(C)	\$128,184	\$123,859	\$125,197	\$215,880	\$157,585
Total assets ^(C)	\$394,529	\$364,252	\$398,751	\$588,322	\$592,691
Long-term debt, net of current portion	\$75,060	\$104,458	\$110,651	\$185,045	\$181,311
Shareholders' equity ^(D)	\$192,077	\$106,429	\$113,806	\$188,534	\$193,834

- (A) The Company recorded the release of a valuation allowance associated with its U.S. federal, certain state and foreign deferred tax assets of \$49.6 million for the year ended December 31, 2016.
- (B) The Company recorded a full valuation allowance on PST's net deferred tax assets of \$1,237 for the year ended December 31, 2015 of which \$322 was attributable to noncontrolling interest.
- (C) The Company recorded a goodwill impairment of \$51,458 related to PST during the year ended December 31, 2014 of which \$11,304 was attributable to noncontrolling interest.
- (D) The Company recorded a loss on extinguishment of debt of \$10,607 related to the redemption of the 9.5% senior notes during the year ended December 31, 2014.
- (E) The Company sold its Wiring business during the year ended December 31, 2014. As such, for all periods presented the Company reported this business as discontinued operations in the Company's consolidated financial statements.
- (F) Unallocated corporate expenses include, among other items, accounting, finance, legal, information technology costs as well as share-based compensation.
- (G) These amounts represent depreciation and amortization on fixed and certain finite-lived intangible assets.

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

The following discussion and analysis should be read in conjunction with the consolidated financial statements and notes related thereto and other financial information included elsewhere herein.

Segments

We are organized by products produced and markets served. Under this structure, our operations have been reported using the following segments:

Control Devices. This segment includes results of operations that manufacture sensors, switches, valves and actuators.

Electronics. This segment includes results of operations from the production of electronic instrument clusters, electronic control units and driver information systems.

PST. This segment includes results of operations that design and manufacture electronic vehicle alarms, convenience accessories, vehicle tracking devices and monitoring services and in-vehicle audio and video devices.

We sold substantially all of the assets and liabilities of our Wiring business on August 1, 2014. As a result, the Wiring business has been classified as discontinued operations for all periods presented in the Company's financial statements herein, and therefore has been excluded from both continuing operations, segment results and other information for all periods presented. The Wiring business designed and manufactured wiring harness products and assembled instruments panels for sale principally to the commercial, agricultural and off-highway vehicle markets.

Overview

The Company had income from continuing operations attributable to Stoneridge, Inc. of \$77.5 million, or \$2.74 per diluted share for the year ended December 31, 2016.

Income from continuing operations attributable to Stoneridge, Inc. in 2016 increased by \$54.5 million, or \$1.92 per diluted share, from income from of \$23.0 million, or \$0.82 per diluted share, for the year ended December 31, 2015 primarily due to the release of the valuation allowance on our U.S. federal, certain state and foreign deferred tax assets of \$49.6 million, or \$1.75 per diluted share attributable to Stoneridge Inc.

Excluding the release of the tax valuation allowance, our income from continuing operations increased during 2016 by \$4.9 million, or \$0.17 per diluted share, primarily due to a gross profit increase of \$18.5 million primarily due to higher sales in our Control Devices segment and improved gross margin due to lower material costs in our Electronics and PST segments, which was partially offset by higher U.S. income tax expense as a result of the valuation allowance release.

Net sales in 2016 increased by \$51.2 million, or 7.9%, primarily due to higher sales at our Control Devices segment which were partially offset by lower sales in our Electronics and PST segments compared to 2015. Our Control Devices segment sales increased primarily due to new product sales and growth in our North American automotive market. Electronics segment net sales decreased due to lower sales volume of our North America commercial vehicle products and an unfavorable foreign currency translation, which were partially offset by an increase in European commercial vehicle product volume. PST sales decreased due to lower product sales volume as a result of continued weakness in the Brazilian economy and automotive market and an unfavorable foreign currency translation.

At December 31, 2016 and 2015, we had cash and cash equivalents of \$50.4 million and \$54.4 million, respectively. Cash and cash equivalents decreased during 2016 primarily due to higher working capital, capital expenditures and repayment of debt, which was partially offset by net income. At December 31, 2016 and 2015 we had \$67.0 million and \$100.0 million, respectively in borrowings outstanding on our \$300.0 million Credit Facility.

Outlook

We expect to have sales growth in our North American automotive vehicle market in 2017 related to recent product launches by our Control Devices segment despite that the North American automotive vehicle market production is expected to decrease by \$0.2 million units to 17.6 million units in 2017.

The North American commercial vehicle market declined in 2016 and we expect it to decline slightly in 2017. We expect the European commercial vehicle market in 2017 to remain at approximately the same level with 2016.

Our PST segment revenues and operating performance continue to be adversely impacted by weakness of the Brazilian economy and automotive market and was negatively impacted by unfavorable foreign currency translation. In January 2017, the International Monetary Fund (IMF) forecasted the Brazil gross domestic product to grow 0.2% in 2017 and 1.5% in 2018. Based on the weakness in PST's sales and operating performance during 2016 and modest forecasted growth of the Brazilian economy in 2017, PST's sales and earnings growth expectations continue to be moderated for 2017. As there is significant uncertainty regarding the timing and magnitude of a recovery in the Brazilian economy and automotive market, PST continues to evaluate the need to further realign its cost structure to mitigate the effect on earnings of possible continued weakened product demand and unfavorable foreign currency exchange rates.

We regularly evaluate the performance of our businesses and their cost structures, including personnel, and make necessary changes thereto in order to optimize our results. We also evaluate the required skill sets of our personnel and periodically make strategic changes. As a consequence of these actions, we incur severance related costs which we refer to as business realignment charges.

As the Company no longer has a valuation allowance against its U.S. federal, certain state and foreign deferred tax assets, its effective tax rate is expected to increase in 2017. However, actual cash taxes paid as a percentage of income in 2017 are expected to be consistent with 2016.

A significant portion of our sales are outside of the United States. These sales are generated by our non-U.S. based operations, and therefore, movements in foreign currency exchange rates can have a significant effect on our results of operations, which are presented in U.S. dollars. A significant portion of our raw materials purchased by our Electronics and PST segments are denominated in U.S. dollars, and therefore movements in foreign currency exchange rates can also have a significant effect on our results of operations. While the U.S. dollar strengthened significantly against the Swedish krona, euro and Brazilian real in 2015 increasing our material costs and reducing our reported results, and the U.S. dollar weakened against these currencies in 2016 favorably impacting our material costs

and reported results.

Because of the competitive nature of the markets we serve, we face pricing pressures from our customers in the ordinary course of business. In response to these pricing pressures we have been able to effectively manage our production costs by the combination of lowering certain costs and limiting the increase of others, the net impact of which to date has not been material. However, if we are unable to effectively manage production costs in the future to mitigate future pricing pressures, our results of operations would be adversely affected.

In March 2016, we announced the relocation of our corporate headquarters from Warren, Ohio to Novi, Michigan, which occurred primarily during the fourth quarter of 2016. The new headquarters has expanded our presence in the Detroit metropolitan area and improved access to key customers, decision makers and influencers in the automotive and commercial vehicle markets that we serve. In connection with the relocation, the Company is eligible for a Michigan Business Development Program grant of up to \$1.4 million based upon the number of new jobs created in Michigan, along with talent services and training support from Oakland County Michigan Works!.

On January 31, 2017, Stoneridge B.V., an indirect wholly-owned subsidiary of Stoneridge, Inc., entered into an agreement to acquire Wide-Angle Management B.V. and Exploitatiemaatschappij Berghaaf B.V. (“Orlaco”). The aggregate consideration for the Orlaco acquisition was €74.9 million (\$79.7 million), which included customary estimated adjustments to the purchase price. The Company paid €67.4 million (\$71.7 million) in cash, and €7.5 million (\$8.0 million) to hold in an escrow account to secure the payment obligations of the seller under the terms of the purchase agreement. The purchase price is subject to certain customary adjustments set forth in the purchase agreement. The Company expects to transfer the escrow amount promptly following the completion of the escrow period. The Company may also be required pay up to an additional €7.5 million in cash as earnout consideration if certain performance targets are achieved during the first two years. In order to fund for the Orlaco acquisition, the Company borrowed \$81.0 million under its Credit Facility.

Year Ended December 31, 2016 Compared To Year Ended December 31, 2015

Consolidated statements of operations as a percentage of net sales are presented in the following table (in thousands):

Years ended December 31	2016		2015		Dollar increase / (decrease)
Net sales	\$695,977	100.0%	\$644,812	100.0%	\$51,165
Costs and expenses:					
Cost of goods sold	500,538	71.9	467,834	72.6	32,704
Selling, general and administrative	111,145	16.0	110,371	17.1	774
Design and development	40,212	5.8	38,792	6.0	1,420
Operating income	44,082	6.3	27,815	4.3	16,267
Interest expense, net	6,277	0.9	6,365	1.0	(88)
Equity in earnings of investee	(1,233)	(0.2)	(608)	(0.1)	(625)
Other expense (income), net	(147)	-	1,828	0.3	(1,975)
Income before income taxes from continuing operations	39,185	5.6	20,230	3.1	18,955
Income tax benefit from continuing operations	(36,389)	(5.2)	(547)	(0.1)	(35,842)
Income from continuing operations	75,574	10.8	20,777	3.2	54,797
Loss from discontinued operations	-	-	(210)	-	210
Net income	75,574	10.8	20,567	3.2	55,007
Net loss attributable to noncontrolling interest	(1,887)	(0.3)	(2,207)	(0.3)	320
Net income attributable to Stoneridge, Inc.	\$77,461	11.1 %	\$22,774	3.5 %	\$54,687

Net Sales. Net sales for our reportable segments, excluding inter-segment sales are summarized in the following table (in thousands):

					Dollar	Percent			
					increase /	increase /			
Years ended December 31		2016		2015	(decrease)	(decrease)			
Control Devices	\$408,132	58.6	%	\$333,010	51.6	%	\$75,122	22.6	%
Electronics	205,256	29.5		216,544	33.6		(11,288)	(5.2)%
PST	82,589	11.9		95,258	14.8		(12,669)	(13.3)%
Total net sales	\$695,977	100.0	%	\$644,812	100.1	%	\$51,165	7.9	%

Our Control Devices segment net sales increased primarily as a result of new product sales and growth in the North American automotive market of \$77.7 million and new program sales and increased volumes in our China automotive market of \$4.5 million, which were partially offset by a decrease in the agricultural and other markets and the North American commercial vehicle market of \$4.8 million and \$2.3 million, respectively.

Our Electronics segment net sales decreased primarily as a result of a decrease in sales volume in our North American commercial vehicle products of \$11.9 million, an unfavorable foreign currency translation of \$4.8 million, and a decrease in sales of our European off-highway vehicle products of \$0.8 million, which were partially offset by an increase in sales of European commercial vehicle products of \$7.2 million.

Our PST segment net sales decreased primarily due to lower product volume resulting from continued weakness in the Brazilian economy and automotive market and an unfavorable foreign currency translation which reduced sales by \$4.0 million, or 4.2%, which were partially offset by an increase in monitoring service sales volume.

Net sales by geographic location are summarized in the following table (in thousands):

						Dollar	Percent		
						increase /	increase /		
Years ended December 31		2016		2015		(decrease)	(decrease)		
North America	\$428,046	61.5	%	\$369,032	57.2	%	\$ 59,014	16.0	%
South America	82,589	11.9		95,258	14.8		(12,669)	(13.3)%
Europe and Other	185,342	26.6		180,522	28.0		4,820	2.7	%
Total net sales	\$695,977	100.0	%	\$644,812	100.0	%	\$ 51,165	7.9	%

The increase in North American net sales was primarily attributable to increased sales of our North American Control Devices automotive products of \$77.7 million, which was partially offset by decreased volume in the North American commercial vehicle market of \$11.9 million and decreased sales in the agricultural and various other markets of \$4.8 million. The decrease in net sales in South America was primarily due to lower product sales volume as a result of continued weakness in the Brazilian economy and automotive market as well as the impact of an unfavorable foreign currency translation. The increase in net sales in Europe and Other was primarily due to an increase in sales volume of our European commercial vehicle products of \$7.2 million and new program sales and increased sales volume in our Chinese automotive market of \$4.5 million, which were partially offset by an unfavorable foreign currency translation of \$4.8 million.

Cost of Goods Sold and Gross Margin. Cost of goods sold increased by 7.0% primarily related to an increase in sales in our Control Devices segment. Our gross margin improved by 0.7% to 28.1% in 2016 compared to 27.4% in 2015. Our material cost as a percentage of net sales increased by 0.1% to 51.5% in 2016 compared to 51.4% in 2015 while aggregated labor and overhead costs as a percentage of sales decreased by 0.8% due to increased sales and a change in product mix in our Control Devices segment. The lower material costs in our Electronics and PST segments due to a favorable change in foreign currency exchange rates were more than offset by higher direct material costs as a percentage of sales in our Control Devices segment resulting from a change in mix of products sold.

Our Control Devices segment gross margin decreased despite increased sales volume due to higher warranty related costs and an unfavorable change in mix of products sold.

Our Electronics segment gross margin increased primarily due to lower material costs resulting from a favorable movement in foreign currency exchange rates.

Our PST segment gross margin improved as a result of lower material costs resulting from a favorable movement in foreign currency exchange rates, which was substantially offset by lower sales volume and a \$0.2 million increase in business realignment charges. PST business realignment charges were \$0.4 million and \$0.2 million for 2016 and 2015, respectively.

Selling, General and Administrative (“SG&A”). SG&A expenses increased by \$0.8 million compared to 2015 as lower costs in our PST, Control Devices and Electronics segments were more than offset by higher costs in our unallocated corporate segment. SG&A costs in our unallocated corporate segment increased as a result of headquarter relocation costs of \$1.8 million, higher wages, incentive-based compensation, higher consulting, professional, and legal fees of which a significant portion related to mergers and acquisitions (“M&A”) activity, which were partially offset by lower business realignment charges of \$0.3 million. SG&A costs in our PST and Electronics segments decreased due to foreign currency translation resulting from movement in foreign currency exchange rates. PST SG&A costs also decreased due to lower employee costs as a result of business realignment actions, lower selling related expenses and professional fees and movement in foreign currency exchange rates, which were partially offset by a \$0.6 million increase in business realignment costs. SG&A business realignment charges were \$1.1 million and \$0.5 million for 2016 and 2015, respectively.

Design and Development (“D&D”). D&D costs increased by \$1.4 million primarily due to an \$0.8 million increase in business realignment costs in our Electronics segment and an increase in product development costs in our Control Devices and Electronics segments. The increase in D&D costs in our Control Devices and Electronics segments were partially offset by lower employee costs as a result of business realignment actions, lower product design costs and movement in foreign currency exchange rates in our PST segment. D&D business realignment charges were \$1.1 million and \$0.3 million in 2016 and 2015, respectively.

Operating Income (Loss). Operating income (loss) is summarized in the following table by reportable segment (in thousands):

Years ended December 31	2016	2015	Dollar increase / (decrease)	Percent increase / (decrease)	
Control Devices	\$61,815	\$44,690	\$ 17,125	38.3	%
Electronics	14,798	13,784	1,014	7.4	%
PST	(3,462)	(7,542)	4,080	54.1	%
Unallocated corporate	(29,069)	(23,117)	(5,952)	(25.7)%
Operating income	\$44,082	\$27,815	\$ 16,267	58.5	%

Our Control Devices segment operating income increased primarily as a result of an increase in sales volume and lower SG&A costs, which were partially offset by higher warranty and D&D costs.

Our Electronics segment operating income increased despite lower sales volume due to a higher gross profit as material costs decreased as a result of a favorable change in foreign currency exchange rates and lower SG&A costs, which were partially offset by higher D&D costs primarily related to business realignment.

PST's operating performance improved due to lower material costs resulting from a favorable change in foreign currency exchange rates compared to the prior year, lower SG&A and D&D employee costs as a result of the business realignment actions and movement in foreign currency exchange rates, which were partially offset by higher business realignment charges of \$1.0 million.

Our unallocated corporate operating loss increased primarily as a result of higher wages, incentive-based compensation, headquarter relocation costs of \$1.8 million and higher consulting, professional, and legal fees of which a significant portion related to M&A activity. These were partially offset by lower share-based compensation expense as 2015 included \$2.2 million of expense for the acceleration of the vesting associated with the retirement of our former President and CEO while 2016 had \$0.5 million of expense related to the modification of the retirement notice provisions of certain awards.

Operating income (loss) by geographic location are summarized in the following table (in thousands):

Years ended December 31	2016	2015	Dollar increase / (decrease)	Percent increase / (decrease)	
North America	\$34,220	\$24,620	\$9,600	39.0	%
South America	(3,462)	(7,542)	4,080	(54.1)	%
Europe and Other	13,324	10,737	2,587	24.1	%
Operating income	\$44,082	\$27,815	\$16,267	58.5	%

Our North American operating results improved primarily due to increased sales in the North American automotive market which was partially offset by higher SG&A expenses in our unallocated corporate segment and higher warranty and D&D costs in our Control Devices segment. The improved performance in South America was primarily due to lower SG&A and D&D costs resulting from business realignment actions, which were partially offset by lower gross profit resulting a result of lower product sales volume and a \$1.0 million increase in business realignment charges. Our results in Europe and Other improved as higher D&D costs primarily related to higher business realignment charges were more than offset by higher gross profit from lower material costs and SG&A expenses.

Interest Expense, net. Interest expense, net decreased by \$0.1 million compared to the prior year primarily due to a lower average debt balance outstanding at Corporate and PST, which was offset by a higher weighted-average interest rate related to PST.

Equity in Earnings of Investee. Equity earnings for Minda increased primarily due to lower income tax expense as well as higher sales and operating income, which were partially offset by an unfavorable change in foreign currency

translation.

Other Expense (Income), net. We record certain foreign currency transaction and forward currency hedge contract gains and losses as a component of other expense (income), net in the consolidated statement of operations. Other expense (income), net improved by \$1.9 million due to an increase in net gains.

Income Tax Expense (Benefit) from continuing operations. We recognized an income tax benefit of \$(36.4) million and \$(0.5) million from continuing operations for federal, state and foreign income tax for 2016 and 2015, respectively. The effective tax rate decreased to (92.8)% in 2016 from (2.7)% in 2015. The increase in tax benefit and decrease in the effective rate for the year ended December 31, 2016 compared to the same period for 2015 was predominantly due to the impact of releasing the U.S. federal, certain state and foreign valuation allowances that were previously recorded against certain of our deferred tax assets.

Year Ended December 31, 2015 Compared To Year Ended December 31, 2014

Consolidated statements of operations as a percentage of net sales are presented in the following table (in thousands):

Years ended December 31	2015		2014		Dollar increase / (decrease)
Net sales	\$644,812	100.0 %	\$660,579	100.0 %	\$(15,767)
Costs and expenses:					
Cost of goods sold	467,834	72.6	469,705	71.1	(1,871)
Selling, general and administrative	110,371	17.1	123,630	18.7	(13,259)
Design and development	38,792	6.0	41,609	6.3	(2,817)
Goodwill impairment	-	-	51,458	7.8	(51,458)
Operating income (loss)	27,815	4.3	(25,823)	(3.9)	53,638
Interest expense, net	6,365	1.0	16,880	2.6	(10,515)
Equity in earnings of investee	(608)	(0.1)	(815)	(0.1)	207
Loss on early extinguishment of debt	-	-	10,607	1.6	(10,607)
Other expense, net	1,828	0.3	565	0.1	1,263
Income (loss) before income taxes from continuing operations	20,230	3.1	(53,060)	(8.1)	73,290
Income tax benefit from continuing operations	(547)	(0.1)	(1,856)	(0.3)	1,309
Income (loss) from continuing operations	20,777	3.2	(51,204)	(7.8)	71,981
Discontinued operations:					
Loss from discontinued operations, net of tax	-	-	(811)	(0.1)	811
Loss on disposal, net of tax	(210)	-	(8,576)	(1.3)	8,366
Loss from discontinued operations	(210)	-	(9,387)	(1.4)	9,177
Net income (loss)	20,567	3.2	(60,591)	(9.2)	81,158
Net loss attributable to noncontrolling interest	(2,207)	(0.3)	(13,483)	(2.0)	11,276
Net income (loss) attributable to Stoneridge, Inc.	\$22,774	3.5 %	\$(47,108)	(7.2)%	\$69,882

Net Sales. Net sales for our reportable segments, excluding inter-segment sales are summarized in the following table (in thousands):

Years ended December 31	2015		2014		Dollar increase / (decrease)	Percent increase / (decrease)
Control Devices	\$333,010	51.6 %	\$306,658	46.4 %	\$26,352	8.6 %
Electronics	216,544	33.6	214,141	32.4	2,403	1.1 %
PST	95,258	14.8	139,780	21.2	(44,522)	(31.9)%
Total net sales	\$644,812	100.0 %	\$660,579	100.0 %	\$(15,767)	(2.4)%

Our Control Devices segment net sales increased primarily due to new product sales and growth in the North American automotive market and new program sales in our China automotive market of \$22.8 million and \$4.1 million, respectively, as well as slightly higher volume in our commercial vehicle market during 2015. These were offset by a decrease in agricultural sales volume of \$1.0 million.

Our Electronics segment net sales increased primarily due to an increase in sales volume of our European commercial vehicle products of \$16.9 million as well as an increase in sales of our North American commercial vehicle products of \$16.6 million (from higher volume related to an increase in post-disposition sales to the Wiring business acquired by Motherson of \$15.0 million), which were substantially offset by an unfavorable foreign currency translation of \$28.8 million, or 13.5%, and European commercial vehicle contractual price reductions of \$2.4 million.

Our PST segment net sales decreased primarily due to an unfavorable foreign currency translation which reduced sales by \$38.1 million, or 27.3%, and lower product volume. Also, PST's audio/car alarm sales volume declined due to further weakening of the Brazilian economy and automotive market while monitoring service sales volume increased.

Net sales by geographic location are summarized in the following table (in thousands):

Years ended December 31	2015		2014		Dollar increase / (decrease)	Percent increase / (decrease)
North America	\$369,032	57.2 %	\$330,516	50.0 %	\$ 38,516	11.7 %
South America	95,258	14.8	139,780	21.2	(44,522)	(31.9)%
Europe and Other	180,522	28.0	190,283	28.8	(9,761)	(5.1)%
Total net sales	\$644,812	100.0%	\$660,579	100.0%	\$ (15,767)	(2.4)%

The increase in North American net sales was primarily attributable to increased sales in our North American Control Devices' automotive and Electronics' commercial vehicle markets of \$22.8 million and \$16.6 million, respectively, which were partially offset by decreased agricultural volume of \$1.0 million. The decrease in net sales in South America was primarily due to the impact of an unfavorable foreign currency translation and was also negatively impacted by lower product sales volume as a result of the weakened economic conditions in Brazil. Our decrease in net sales in Europe and Other was primarily due to an unfavorable foreign currency translation, which was substantially offset by increased sales of European commercial vehicle and Chinese automotive market products of \$16.9 million and \$4.1 million, respectively.

Cost of Goods Sold and Gross Margin. Cost of goods sold decreased by 0.4% primarily due to foreign currency translation resulting from changes in exchange rates between the functional currency of our Electronics and PST

segments compared to the U.S. dollar. Offsetting the decline from foreign currency translation, cost of goods was negatively impacted by higher material costs resulting from significantly more unfavorable changes in foreign exchange rates compared to the prior year. Our material cost as a percentage of net sales increased to 51.2% for 2015 compared to 49.2% for 2014. As a result, our gross margin decreased by 1.5% to 27.4% for 2015 compared to 28.9% for 2014. The higher material costs were due to unfavorable movement in foreign currency exchange rates in our Electronics segment, which were partially offset by lower material costs in our Control Devices segment. The Company purchases the majority of its materials under contracts denominated in U.S. dollars. As such, the strengthening of the U.S. dollar against the Swedish krona, euro and Brazilian real throughout 2015 increased the material costs in our Electronics and PST segments.

Our Control Devices segment gross margin increased due to increased sales volume, lower material costs, a favorable mix of products sold and product redesign, which were partially offset by higher warranty costs principally related to one product and higher profit sharing.

Our Electronics segment gross margin decreased primarily due to higher material costs resulting from an unfavorable movement in foreign currency exchange rates, the impact of which was moderated by our foreign currency hedges.

Our PST segment gross margin remained flat as higher material costs resulting from an unfavorable change in foreign currency exchange rates were offset by a favorable sales mix, prices increases, product redesign, new supplier sourcing and lower business realignment charges. PST business realignment charges decreased to \$0.2 million for 2015 from \$0.9 million for 2014.

Selling, General and Administrative. SG&A expenses decreased by \$13.3 million compared to 2014 as lower costs in our PST and Electronics segments were partially offset by higher costs in our unallocated corporate and Control Devices segments. SG&A costs in our PST and Electronics segments decreased primarily due to foreign currency translation resulting from movement in foreign currency exchange rates. SG&A costs in our unallocated corporate segment increased due to higher incentive-based compensation, higher recruitment, business realignment charges of \$0.3 million and higher share-based compensation of \$2.2 million in connection with the accelerated vesting associated with the retirement of our former President and CEO in June 2015, which were partially offset by lower professional fees. SG&A costs in our Control Devices segment increased primarily due to higher legal fees related to product litigation and an increase in incentive-based compensation. SG&A business realignment charges related to our Electronics, PST and unallocated corporate segments were \$0.5 million for 2015 compared to \$0.5 million related to PST for 2014.

Design and Development. D&D costs decreased by \$2.8 million primarily due to foreign currency translation resulting from movement in foreign currency exchange rates in our PST and Electronics segments which was offset by a slight increase in product development costs in our Control Devices segment. D&D business realignment charges related to our Electronics and PST segments were \$0.3 million for 2015 compared to \$0.2 million related to PST for 2014.

Goodwill Impairment. A goodwill impairment of \$51.5 million was recorded for the year ended December 31, 2014 related to our PST segment. The impairment was due to the weakening of both the Brazilian economy and automotive market resulting in lower projected revenue and earnings growth. This non-cash impairment is more fully described in Note 2 to our consolidated financial statements.

Operating Income (Loss). Operating income (loss) is summarized in the following table by reportable segment (in thousands):

Years ended December 31	2015	2014	Dollar increase / (decrease)	Percent increase / (decrease)	
Control Devices	\$44,690	\$35,387	\$ 9,303	26.3	%
Electronics	13,784	17,444	(3,660)	(21.0)%
PST	(7,542)	(59,587)	52,045	87.3	%
Unallocated corporate	(23,117)	(19,067)	(4,050)	(21.2)%

Operating income (loss)	\$27,815	\$(25,823)	\$ 53,638	NM
-------------------------	----------	------------	-----------	----

NM – not meaningful

Our Control Devices segment operating income increased primarily due to an increase in sales volume, lower material costs, a favorable mix of products sold and product redesign, which were partially offset by higher warranty, SG&A and D&D costs.

Our Electronics segment operating income decreased due to a lower gross profit as material costs increased as a result of an unfavorable change in foreign currency exchange rates and \$0.3 million of business realignment charges incurred in the current year, which were partially offset by lower SG&A and D&D costs resulting from movement in foreign currency exchange rates.

Our PST segment operating performance improved as 2014 results included a goodwill impairment charge of \$51.5 million that was recorded in 2014. Excluding the goodwill impairment, PST's operating performance improved by \$0.5 million due to lower business realignment charges of \$1.2 million, which were \$0.4 million and \$1.6 million for 2015 and 2014, respectively, as price increases, significant material cost reductions achieved from product redesign and new supplier sourcing were more than offset by significantly higher material costs resulting from more unfavorable changes in foreign currency exchange rates compared to the prior year.

Our unallocated corporate operating loss increased primarily due to higher share-based compensation primarily as a result of the acceleration of the vesting associated with the June 2015 retirement of our President and CEO of \$2.2 million, higher incentive-based compensation, higher recruitment costs and business realignment charges of \$0.3 million during 2015, which were partially offset by lower professional fees.

Operating income (loss) by geographic location are summarized in the following table (in thousands):

Years ended December 31	2015	2014	Dollar increase / (decrease)	Percent increase / (decrease)	
North America	\$24,620	\$22,779	\$ 1,841	8.1	%
South America	(7,542)	(59,587)	52,045	(87.3)%
Europe and Other	10,737	10,985	(248)	(2.3)%
Operating income (loss)	\$27,815	\$(25,823)	\$ 53,638	NM	

Our North American operating results increased due to higher sales in the North American automotive and commercial vehicle markets, lower material costs and a favorable change in product mix, which was substantially offset by higher incentive-based and share-based compensation expense. The improved performance in South America was primarily due to the goodwill impairment charge of \$51.5 million taken in 2014. Our results in Europe and Other declined slightly as higher material costs and an unfavorable movement in foreign currency exchange rates related to our Electronics segment were offset by higher sales and gross profit in our China automotive market.

Interest Expense, net. Interest expense, net decreased by \$10.5 million compared to the prior year primarily due to a lower average debt balance outstanding and a lower weighted-average interest rate. We redeemed our \$175.0 million 9.5% senior notes in September and October 2014 using borrowings of \$100.0 million on our Credit Facility (which bore annual interest for 2015 of approximately 3.0%), proceeds from the sale of the Wiring business and existing cash.

Equity in Earnings of Investee. Equity earnings for Minda decreased to \$0.6 million in 2015 from \$0.8 million in 2014. While sales increased slightly over the prior year, the increase was more than offset by higher operating and financing costs and was negatively impacted by an unfavorable change in foreign currency translation.

Loss on Early Extinguishment of Debt. The Company recognized debt extinguishment loss of \$10.6 million during 2014 due to the redemption of our senior notes and modification of our Credit Facility. The specific components of the debt extinguishment loss are described in Note 4 to our consolidated financial statements.

Other Expense, net. We record certain foreign currency transaction and forward currency hedge contract gains and losses as a component of other expense, net in the consolidated statement of operations. Other expense, net increased by \$1.3 million to \$1.8 million for 2015 from \$0.6 million for 2014 due to increased volatility in certain foreign exchange rates in the current period. Also, the unfavorable foreign currency losses in 2014 were partially offset by a gain of \$0.4 million on the termination of the interest rate swap.

Income Tax Benefit from continuing operations. We recognized an income tax benefit of \$(0.5) million and \$(1.9) million for federal, state and foreign income taxes for 2015 and 2014, respectively. We continue to assert that it is more likely than not that our U.S. and certain foreign deferred tax assets will not be realized, and as such we provide a valuation allowance offsetting those deferred tax assets. The decrease in tax benefit for the year ended December 31, 2015 compared to the same period for 2014 was predominantly due to the impact of recording a valuation allowance against PST's deferred tax assets. The increase in the effective tax rate to (2.7)% in 2015 from (3.5)% in 2014 was primarily due to providing a valuation allowance in 2015 with respect to the deferred tax assets of PST. The impact on the effective rate due to the PST valuation allowance was offset by the impact of the improvement in the performance of our U.S. operations, which do not attract tax due to the full valuation allowance, and the prior year impact of the nondeductible goodwill impairment in 2014 that did not impact the effective tax rate for 2015.

Liquidity and Capital Resources***Summary of Cash Flows for the years ended December 31, 2016 and 2015 (in thousands):***

Years ended December 31, (in thousands)	2016	2015	Dollar increase / (decrease)
Net cash provided by (used for):			
Operating activities	\$65,277	\$54,805	\$ 10,472
Investing activities	(23,824)	(30,370)	6,546
Financing activities	(43,371)	(11,019)	(32,352)
Effect of exchange rate changes on cash and cash equivalents	(2,054)	(2,076)	22
Net change in cash and cash equivalents	\$(3,972)	\$11,340	\$(15,312)

Cash provided by operating activities, which includes cash flows from the Wiring discontinued operations in 2015, increased primarily due to an increase in net income which was partially offset by higher working capital. Our receivable terms and collections rates have remained consistent between periods presented.

Net cash used for investing activities decreased due to lower capital expenditures in the current period. Also, there were payments related to the sale of the Wiring business of \$1.2 million in 2015, which did not recur in 2016.

Net cash used for financing activities increased primarily due to unplanned partial repayment of our Credit Facility of \$33.0 million.

Summary of Cash Flows for the years ended December 31, 2015 and 2014 (in thousands):

Years ended December 31, (in thousands)	2015	2014	Dollar increase / (decrease)
Net cash provided by (used for):			
Operating activities	\$54,805	\$19,815	\$ 34,990
Investing activities	(30,370)	45,720	(76,090)
Financing activities	(11,019)	(82,058)	71,039
Effect of exchange rate changes on cash and cash equivalents	(2,076)	(3,281)	1,205

Net change in cash and cash equivalents	\$ 11,340	\$(19,804)	\$ 31,144
---	-----------	------------	-----------

Cash provided by operating activities, which includes cash flows from the Wiring discontinued operations, increased primarily due to lower working capital required as a result of the sale of the Wiring business in August 2014 of \$28.5 million and an increase in net income excluding the impacts of the non-cash PST goodwill impairment, loss on extinguishment of debt and the loss on sale of the Wiring business in 2014 of \$10.5 million. Our receivable terms and collections rates have remained consistent between periods presented.

Net cash used for investing activities increased due to higher capital expenditures of \$4.0 million primarily to support the launch of new products as well as a repayment of excess proceeds received from Motherson of \$1.2 million based on the resolution of the working capital and other adjustments associated with the sale of the Wiring business. Also, \$71.4 million in cash was received from the sale of the Wiring business in 2014.

Net cash used for financing activities decreased primarily due to the fact that in 2015 we had net debt repayments of \$8.0 million and repurchases of Common Shares to satisfy tax withholdings of \$2.9 million while in 2014 we repurchased \$175.0 million of our outstanding senior notes including a redemption premium totaling \$183.0 million partially by borrowing \$100.0 million on our Credit Facility.

Summary of Future Cash Flows

The following table summarizes our future cash outflows resulting from financial contracts and commitments, as of December 31, 2016 (in thousands):

	Total	Less than 1 year	2-3 years	4-5 years	After 5 years
Credit Facility	\$67,000	\$ -	\$ -	\$ 67,000	\$ -
Debt	16,686	8,626	6,907	1,153	-
Operating leases	23,378	5,042	7,278	4,882	6,176
Total contractual obligations	\$107,064	\$ 13,668	\$ 14,185	\$ 73,035	\$ 6,176

Management will continue to focus on efficiently managing its weighted-average cost of capital and believes that cash flows from operations and the availability of funds from our Credit Facility provides sufficient liquidity to meet our future growth and operating needs.

As outlined in Note 4 to our consolidated financial statements, our Credit Facility permits borrowing up to a maximum level of \$300.0 million which includes an accordion feature which allows the Company to increase the availability by up to \$80.0 million upon the satisfaction of certain conditions. This variable rate facility provides the flexibility to refinance other outstanding debt or finance acquisitions through September 2021. The Credit Facility contains certain financial covenants that require the Company to maintain less than a maximum leverage ratio and more than a minimum interest coverage ratio. The Credit Facility also contains affirmative and negative covenants and events of default that are customary for credit arrangements of this type including covenants which place restrictions and/or limitations on the Company's ability to borrow money, make capital expenditures and pay dividends. The Credit Facility had an outstanding balance of \$67.0 million at December 31, 2016. The Company has outstanding letters of credit of \$3.4 million. The Company was in compliance with all covenants at December 31, 2016. The covenants included in our Credit Facility to date have not and are not expected to limit our financing flexibility.

PST maintains several short-term obligations and long-term loans used for working capital purposes. At December 31, 2016, there was \$16.5 million outstanding on the PST term loans. The PST loans at December 31, 2016 mature as follows: \$8.5 million in 2017, \$4.3 million in 2018, \$2.6 million in 2019, \$0.6 million in 2020, and \$0.5 million in 2021.

The Company's wholly owned subsidiary located in Stockholm, Sweden, has an overdraft credit line which allows overdrafts on the subsidiary's bank account up to a maximum level of 20.0 million Swedish krona, or \$2.2 million, at December 31, 2016. At December 31, 2016, there were no overdrafts on the bank account.

At December 31, 2016, we had cash and cash equivalents of approximately \$50.4 million, of which \$15.9 million was held in the United States and \$34.5 million was held in foreign locations. While certain cash and cash equivalents held in foreign locations can be repatriated through the repayment of intercompany loans without creating additional income tax expense, the remainder is considered to be indefinitely invested. The decrease from \$54.4 million at December 31, 2015 was primarily due to the repayments of the Credit Facility, capital expenditures and the repurchase of common shares to satisfy employee tax withholding obligations which was offset by cash flows from operations.

Commitments and Contingencies

See Note 10 to the consolidated financial statements for disclosures of the Company's commitments and contingencies.

Seasonality

Our Control Devices and Electronics segments are not typically materially affected by seasonality, however the demand for our PST segment consumer products is typically higher in the second half of the year, the fourth quarter in particular.

Inflation and International Presence

By operating internationally, we are affected by foreign currency exchange rates and the economic conditions of certain countries. Furthermore, given the current economic climate and recent fluctuations in certain commodity prices, we believe that an increase in such items could significantly affect our profitability. See Note 9 to the consolidated financial statements for additional details on the Company's commodity price and foreign currency exchange rate risks.

Off-balance Sheet Arrangements

At December 31, 2016, we do not have any off-balance sheet arrangements that have, or are, in the opinion of management, reasonably likely to have, a current or future material effect on our financial condition or results of operations.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate estimates and assumptions used in our consolidated financial statements. We base our estimates on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from these estimates.

Our critical accounting policies, those most important to the financial presentation and those that are the most complex, subjective or require significant judgment, are as follows.

Revenue Recognition and Sales Commitments. We recognize revenues from the sale of products, net of actual and estimated returns of products sold based on historical authorized returns, at the point of passage of title, which is either

at the time of shipment or upon customer receipt based on the terms of the sale. We often enter into agreements with our customers at the beginning of a given vehicle's expected production life. Once such agreements are entered into, it is our obligation to fulfill the customers' purchasing requirements for the entire production life of the vehicle. These agreements are subject to potential renegotiation from time to time, which may affect product pricing. In certain limited instances, we may be committed under existing agreements to supply products to our customers at selling prices which are not sufficient to cover the direct cost to produce such products. In such situations, we recognize losses immediately. These agreements generally may also be terminated by our customers at any time.

On an ongoing basis, we receive blanket purchase orders from our customers, which include pricing terms. Purchase orders do not always specify quantities. We recognize revenue based on the pricing terms included in our purchase orders as our products are shipped to our customers. In certain instances, we may be asked to provide our customers with annual cost reductions as part of certain agreements. In addition, we have ongoing adjustments to our pricing arrangements with our customers based on the related content, the cost of our products and other commercial factors. Such pricing adjustments are recognized as they are negotiated with our customers.

Warranties. Our warranty liability is established based on our best estimate of the amounts necessary to settle existing and future claims on products sold as of the balance sheet dates. This estimate is based on historical trends of units sold and payment amounts, combined with our current understanding of the status of existing claims. To estimate the warranty liability, we are required to forecast the resolution of existing claims as well as expected future claims on products previously sold. Although we believe that our warranty liability is adequate and that the judgment applied is appropriate, such amounts estimated to be due and payable could differ materially from what will actually transpire in the future.

Allowance for Doubtful Accounts. We have concentrations of sales and trade receivable balances with key customers. Therefore, it is critical that we evaluate the collectability of accounts receivable based on a combination of factors. In circumstances where we are aware of a specific customer's inability to meet their financial obligations, a specific allowance for doubtful accounts is recorded against amounts due to reduce the net recognized receivable to the amount we reasonably believe will be collected. In addition, we review historical trends for collectability in determining an estimate for our allowance for doubtful accounts. If economic circumstances change substantially, estimates of the recoverability of amounts due to the Company could be reduced by a material amount. We do not have collateral requirements with our customers.

Contingencies. We are subject to legal proceedings and claims, including product liability claims, commercial or contractual disputes, environmental enforcement actions and other claims that arise in the normal course of business. We routinely assess the likelihood of any adverse judgments or outcomes to these matters, as well as ranges of probable losses, by consulting with internal personnel principally involved with such matters and with our outside legal counsel handling such matters.

We have accrued for estimated losses when it is probable that a liability or loss has been incurred and the amount can be reasonably estimated. Contingencies by their nature relate to uncertainties that require the exercise of judgment both in assessing whether or not a liability or loss has been incurred and estimating that amount of probable loss. The liabilities may change in the future due to new developments or changes in circumstances. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from any provisions made with respect to their resolution.

Inventory Valuation. Inventories are valued at the lower of cost or market using the FIFO method for our Electronics and Control Devices segments and average cost method for our PST segment. Where appropriate, standard cost systems are utilized for purposes of determining cost and the standards are adjusted as necessary to approximate actual costs. Estimates of the lower of cost or net realizable value of inventory are determined based upon current economic conditions, historical sales quantities and patterns and, in some cases, the specific risk of loss on specifically identified inventories. We adjust our excess and obsolescence reserve at least on a quarterly basis. Excess inventories are quantities of items that exceed anticipated sales or usage for a reasonable period.

Long-Lived and Finite-Lived Assets. We review the carrying value of our long-lived assets and finite-lived intangible assets for impairment when events or circumstances indicate that their carrying value may not be recoverable. Factors that we consider important that could trigger our testing of the related asset groups for an impairment include current period operating or cash flow losses combined with a history of operating or cash flow losses, a projection or forecast that demonstrates continuing losses, significant adverse changes in the business climate within a particular business or current expectations that a long-lived asset will be sold or otherwise disposed of significantly before the end of its estimated useful life. To test for impairment, the estimated undiscounted cash flows expected to be generated from the use and disposal of the asset or asset group is compared to its carrying value. An asset group is established by identifying the lowest level of cash flows generated by the group of assets that are largely independent of cash flows

of other assets. If cash flows cannot be separately and independently identified for a single asset, we will determine whether an impairment has occurred for the group of assets for which we can identify projected cash flows. If these undiscounted cash flows are less than their respective carrying values, an impairment charge would be recognized to the extent that the carrying values exceed estimated fair values. The estimation of undiscounted cash flows and fair value requires us to make assumptions regarding future operating results. The results of the impairment testing are dependent on these estimates which require judgment. The occurrence of certain events, including changes in economic and competitive conditions, could impact cash flows eventually realized and management's ability to accurately assess whether an asset is impaired.

Share-Based Compensation. The estimate for our share-based compensation expense involves a number of assumptions. We believe each assumption used in the valuation is reasonable because it takes into account the experience of the plan and reasonable expectations associated with performance and market based conditions. We estimate volatility and forfeitures based on historical data, future expectations and the expected term of the share-based compensation awards. The assumptions, however, involve inherent uncertainties. As a result, if other assumptions had been used, share-based compensation expense could have varied.

Income Taxes. Deferred income taxes are provided for temporary differences between the amount of assets and liabilities for financial reporting purposes and the basis of such assets and liabilities as measured by tax laws and regulations. Our deferred tax assets include, among other items, net operating loss carryforwards and tax credits that can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. Our U.S. federal net operating losses, if unused, begin to expire in 2030, the state net operating losses expire at various times and the foreign net operating losses expire at various times or have indefinite expiration dates. Our U.S. federal general business credits, if unused, begin to expire in 2021, and the state and foreign tax credits expire at various times.

Accounting standards require that deferred tax assets be reduced by a valuation allowance if, based on all available evidence, it is considered more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. This assessment requires significant judgment, and in making this evaluation, the Company considers available positive and negative evidence, including the potential to carryback net operating losses and credits, the future release of certain taxable temporary differences, actual and forecasted results, and tax planning strategies that are both prudent and feasible. Risk factors include U.S. and Brazilian economic conditions that affect the U.S. and Brazilian automotive and commercial vehicle markets of which the Company has significant operations.

We consider the financial reporting basis in excess of tax basis, which includes unremitted earnings, of certain non-U.S. subsidiaries to be indefinitely invested outside the United States on the basis of estimates that future domestic cash generation will be sufficient to meet future domestic cash needs and our specific plans for investment in those non-U.S. subsidiaries. Therefore, we have not recorded a deferred tax liability. Specifically with respect to unremitted earnings and the impact of those earnings on the amount of the financial reporting basis in excess of tax basis, if in the future we cannot support that the earnings are indefinitely invested outside the United States, we would need to adjust our income tax provision in the period that we determine that the earnings will no longer be indefinitely invested outside the United States (see Note 5).

Recently Issued Accounting Standards Not Yet Adopted

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2017-04, "Simplifying the Test for Goodwill Impairment." It eliminates Step 2 from the goodwill impairment test and an entity should recognize an impairment charge for the amount by which the carrying amount of goodwill exceeds the reporting unit's fair value, not to exceed the carrying amount of goodwill. This guidance is effective for annual and any interim impairment tests in fiscal years beginning after December 15, 2019. The Company does not expect this standard to have any impact on its consolidated financial statements.

In January 2017, the FASB also issued ASU 2017-01, "Clarifying the Definition of a Business. It revises the definition of a business and provides a framework to evaluate when an input and a substantive process are present in

an acquisition to be considered a business. This guidance is effective for annual periods beginning after December 15, 2017. The Company expects to adopt this standard as of January 1, 2018, which is not expected to have any impact on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments (Topic 230)" which provides guidance on the presentation and classification of certain cash receipts and cash payments in the statement of cash flows in order to reduce diversity in practice. The ASU is effective for interim and annual periods beginning after December 15, 2017 with early adoption permitted. The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, “Compensation - Stock Compensation (Topic 718)” which is intended to simplify several aspects of the accounting for share-based payment award transactions including how excess tax benefits should be classified in the Company’s consolidated financial statements. The new standard simplifies the treatment of share based payment transactions by recognizing the impact of excess tax benefits or deficiencies related to exercised or vested awards in income tax expense in the period of exercise or vesting. The new standard also modifies the diluted earnings per share calculation using the treasury stock method by eliminating the excess tax benefits or deficiencies from the calculation. These changes will be recognized prospectively. The new standard also permits companies to recognize forfeitures as they occur as an alternative to utilizing estimated forfeitures rates which has been the required practice. The presentation of excess tax benefits in the statement of consolidated cash flows is also modified to be included with other income tax cash flows as an operating activity. The change can be adopted using a prospective or retrospective transition method. The new standard clarifies that cash paid by an employer when directly withholding shares for tax withholding purposes should be presented as a financing activity in the statement of consolidated cash flows and should be applied retrospectively. The new accounting standard will be effective for fiscal years beginning after December 15, 2016, including interim periods within that year. The Company had unrecognized tax benefits related to share-based payment awards of \$1.7 million as of December 31, 2016. Upon adoption, this amount will be recorded to other long-term assets with a corresponding increase to retained earnings associated with the cumulative effect of the accounting change.

In February 2016, the FASB issued ASU 2016 – 02, “Leases (Topic 842)”, which will require that a lessee recognize assets and liabilities on the balance sheet for all leases with a lease term of more than twelve months, with the result being the recognition of a right of use asset and a lease liability. The amendment is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company expects to adopt this standard as of January 1, 2019. The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements, which will require right of use assets and lease liabilities be recorded in the consolidated balance sheet for operating leases.

In July 2015, the FASB issued ASU 2015 – 11 “Simplifying the Measurement of Inventory” which requires that inventory be measured at the lower of cost or net realizable value. Prior to the issuance of the new guidance, inventory was measured at the lower of cost or market. Replacing the concept of market with the single measurement of net realizable value is intended to reduce cost and complexity. The new accounting standard is effective for fiscal years beginning after December 15, 2016. The Company will adopt this standard as of January 1, 2017, which is not expected to have a material impact on the Company’s consolidated financial statements or disclosures.

In May 2014, the FASB issued ASU 2014-09 “Revenue from Contracts with Customers,” which is the new comprehensive revenue recognition standard that will supersede existing revenue recognition guidance under U.S. GAAP. The standard’s core principle is that a company will recognize revenue when it transfers promised goods or services to a customer in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer, identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. This ASU allows for both retrospective and prospective methods of adoption. The new

standard is effective for annual and interim periods beginning after December 15, 2017 with early adoption on the original effective date permitted. The Company is currently evaluating the impact of adopting this standard on its consolidated financial statements, and anticipate testing our new controls and processes designed to comply with the standard in 2017 to permit the Company's adoption on January 1, 2018. The Company anticipates changes to revenue recognition of pre-production activities such as customer funded tooling and engineering design and development cost recoveries, including the potential recording of these as revenue.

Recently Adopted Accounting Standards

In September 2015, the FASB issued ASU 2015 – 16, “Business Combinations,” which simplifies the accounting for measurement-period adjustments related to business combinations. ASU 2015-16 requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The amendments in the ASU require that the acquirer record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. The Company adopted this standard as of January 1, 2016, and was applied prospectively. The adoption did not have a material impact on the Company's consolidated financial statements or disclosures.

In November 2015, the FASB issued ASU 2015 – 17, “Income Taxes (Topic 740),” which simplifies the presentation of deferred income taxes. Under previous guidance, entities were required to separate deferred income tax liabilities and assets into current and noncurrent amounts in the balance sheet on a jurisdiction by jurisdiction basis. ASU 2015-17 requires that all deferred income taxes be classified as noncurrent in the balance sheet. The Company adopted this standard in 2016 and applied it prospectively. As such, all deferred tax asset and liabilities have been classified as non-current in the balance sheet at December 31, 2016.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rates

We are exposed to interest rate risk primarily from the effects of changes in interest rates. At December 31, 2016, approximately 86.5% of our outstanding debt was floating-rate and 13.5% was fixed-rate. We estimate that a 1.0% change in the interest costs of our floating-rate debt outstanding as of December 31, 2016 would change interest expense on an annual basis by approximately \$0.7 million.

Currency Exchange Rates

In addition to the United States, we have significant operations in Europe, South America and Mexico. As a result we are subject to translation risk because of the transactions of our foreign operations are in local currency (particularly the Brazilian real, Mexican peso, euro, Swedish krona and Argentinian peso) and must be translated into U.S. dollars. As currency exchange rates fluctuate, the translation of our consolidated statements of operations into U.S. dollars affects the comparability of revenues, expenses, operating income (loss), net income (loss) and earnings (loss) per share between years.

We use derivative financial instruments, including foreign currency forward contracts, to mitigate our exposure to fluctuations in foreign currency exchange rates by reducing the effect of such fluctuations on foreign currency denominated intercompany transactions, inventory purchases and other foreign currency exposures.

As discussed in detail in Note 9 to our consolidated financial statements, we enter into foreign currency forward contracts the purpose of which is to reduce exposure related to the Company’s euro-denominated receivables as well as to reduce exposure to future Mexican peso-denominated purchases and U.S. dollar purchases by our non-U.S. dollar functional currency European business units. These foreign currency contracts outstanding at December 31, 2016

expire throughout 2017. We estimate that a 10.0% unidirectional change in currency exchange rates would result in a change in fair value at December 31, 2016 by approximately \$0.7 million. It is important to note that the change in fair value of the foreign currency forward contracts would be partially offset by changes in the underlying exposures being hedged.

We estimate that a 10.0% unidirectional change in currency exchange rates relative to the U.S dollar would have changed our income before income taxes for the year ended December 31, 2016 by approximately \$0.3 million.

Commodity Price Risk

The competitive marketplace in which we operate may limit our ability to recover increased costs through higher prices. As such, we are subject to market risk with respect to commodity price fluctuations principally related to our purchases of purchase of copper, zinc, resins and certain other commodities through a combination of fixed price agreements, staggered short-term contract maturities and commercial negotiations with our suppliers and customers. In the future, if we believe that the terms of a fixed price agreement become beneficial to us, we will enter into another such instrument. We may also consider pursuing alternative commodities or alternative suppliers to mitigate this risk over a period of time.

Item 8. Financial Statements and Supplementary Data.

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS
AND FINANCIAL STATEMENT SCHEDULE**

	Page
<u>Consolidated Financial Statements:</u>	
<u>Report of Independent Registered Public Accounting Firm</u>	38
<u>Consolidated Balance Sheets as of December 31, 2016 and 2015</u>	39
<u>Consolidated Statements of Operations for the Years Ended December 31, 2016, 2015, 2014</u>	40
<u>Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2016, 2015, 2014</u>	41
<u>Consolidated Statements of Cash Flows for the Years Ended December 31, 2016, 2015, 2014</u>	42
<u>Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2016, 2015, 2014</u>	43
<u>Notes to Consolidated Financial Statements</u>	44
<u>Financial Statement Schedule:</u>	
<u>Schedule II – Valuation and Qualifying Accounts</u>	78

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of

Stoneridge, Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheets of Stoneridge, Inc. and Subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), cash flows and shareholders' equity for each of the three years in the period ended December 31, 2016. Our audits also included the financial statement schedule included in Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Stoneridge, Inc. and Subsidiaries at December 31, 2016 and 2015, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Stoneridge, Inc. and Subsidiaries' internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 2, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Detroit, Michigan

March 2, 2017

38

CONSOLIDATED BALANCE SHEETS

(in thousands)	December 31, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 50,389	\$ 54,361
Accounts receivable, less reserves of \$1,630 and \$1,066, respectively	113,225	94,937
Inventories, net	60,117	61,009
Prepaid expenses and other current assets	17,162	21,602
Total current assets	240,893	231,909
Long-term assets:		
Property, plant and equipment, net	91,500	85,264
Intangible assets, net and goodwill	40,191	36,699
Investments and other long-term assets, net	21,945	10,380
Total long-term assets	153,636	132,343
Total assets	\$ 394,529	\$ 364,252
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Current portion of debt	\$ 8,626	\$ 13,905
Accounts payable	62,594	55,225
Accrued expenses and other current liabilities	41,489	38,920
Total current liabilities	112,709	108,050
Long-term liabilities:		
Revolving credit facility	67,000	100,000
Long-term debt, net	8,060	4,458
Deferred income taxes	9,760	41,332
Other long-term liabilities	4,923	3,983
Total long-term liabilities	89,743	149,773
Shareholders' equity:		
Preferred Shares, without par value, 5,000 shares authorized, none issued	-	-
Common Shares, without par value, 60,000 shares authorized, 28,966 and 28,907 shares issued and 27,850 and 27,912 shares outstanding at December 31, 2016 and 2015, respectively, with no stated value	-	-
Additional paid-in capital	206,504	199,254
Common Shares held in treasury, 1,116 and 995 shares at December 31, 2016 and 2015, respectively, at cost	(5,632)	(4,208)

Edgar Filing: STONERIDGE INC - Form 10-K

Retained earnings (accumulated deficit)	45,356	(32,105)
Accumulated other comprehensive loss	(67,913)	(69,822)
Total Stoneridge, Inc. shareholders' equity	178,315	93,119
Noncontrolling interest	13,762	13,310
Total shareholders' equity	192,077	106,429
Total liabilities and shareholders' equity	\$ 394,529	\$ 364,252

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

CONSOLIDATED STATEMENTS OF OPERATIONS

Years ended December 31, (in thousands, except per share data)	2016	2015	2014
Net sales	\$695,977	\$644,812	\$660,579
Costs and expenses:			
Cost of goods sold	500,538	467,834	469,705
Selling, general and administrative	111,145	110,371	123,630
Design and development	40,212	38,792	41,609
Goodwill impairment	-	-	51,458
Operating income (loss)	44,082	27,815	(25,823)
Interest expense, net	6,277	6,365	16,880
Equity in earnings of investee	(1,233)	(608)	(815)
Loss on early extinguishment of debt	-	-	10,607
Other expense (income), net	(147)	1,828	