

FEDERAL SIGNAL CORP /DE/
Form 10-K
March 02, 2015
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2014

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 1-6003

FEDERAL SIGNAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

36-1063330

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

1415 West 22nd Street,

60523

Oak Brook, Illinois

(Zip Code)

(Address of principal executive offices)

Registrant's telephone number, including area code (630) 954-2000

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

Title of Each Class

Name of Each Exchange on Which Registered

Common Stock, par value \$1.00 per share

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 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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/> (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 28, 2014, the aggregate market value of voting stock held by non-affiliates was \$904,812,929. For purposes of the foregoing calculation only, executive officers and directors of the registrant have been deemed to be affiliates.

As of February 28, 2015, the number of shares outstanding of the registrant's common stock was 62,735,537.

Documents Incorporated By Reference

Portions of the registrant's definitive proxy statement for the 2015 Annual Meeting of Stockholders to be held on April 28, 2015 are incorporated by reference in Part III.

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (“Form 10-K”) is being filed by Federal Signal Corporation and its subsidiaries (referred to collectively as the “Company,” “we,” “our” or “us” herein, unless the context otherwise indicates) with the United States (“U.S.”) Securities and Exchange Commission (the “SEC”), and includes comments made by management that may contain words such as “may,” “will,” “believe,” “expect,” “anticipate,” “intend,” “plan,” “project,” “estimate” and “objective” terminology, or the negative thereof, concerning the Company’s future financial performance, business strategy, plans, goals and objectives. These expressions are intended to identify forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) and the Private Securities Litigation Reform Act of 1995.

Forward-looking statements include information concerning the Company’s possible or assumed future performance or results of operations and are not guarantees. While these statements are based on assumptions and judgments that management has made in light of industry experience as well as perceptions of historical trends, current conditions, expected future developments and other factors believed to be appropriate under the circumstances, they are subject to risks, uncertainties and other factors that may cause the Company’s actual results, performance or achievements to be materially different.

These risks and uncertainties, some of which are beyond the Company’s control, include the cyclical nature of the Company’s industrial, municipal, governmental and commercial markets; compliance with domestic and foreign laws and regulations, economic and political uncertainties and foreign currency rate fluctuations; restrictive debt covenants; availability of credit and third-party financing for customers; our ability to anticipate and meet customer demands for new products and product enhancements and the resulting products generating sufficient revenues to justify research and development expenses; our incurrence of restructuring and impairment charges as we continue to evaluate opportunities to restructure our business; highly competitive markets; increased product liability, warranty, recall claims, client service interruptions and other lawsuits and claims; technological advances by competitors; information technology security threats and cyber-attacks; infringement of, or an inability to protect, our intellectual property rights; disruptions in the supply of parts and components from suppliers and subcontractors; attraction and retention of key personnel; disruptions within our dealer network; work stoppages and other labor relations matters; increased pension funding requirements and expenses beyond our control; costs of compliance with environmental and safety regulations; our ability to use net operating loss and tax credit carryforwards to reduce future tax payments; charges related to goodwill; our ability to expand our business through successful future acquisitions and unknown or unexpected contingencies in our business or in businesses acquired by us. These risks and uncertainties include, but are not limited to, the risk factors described under Item 1A, Risk Factors as set forth in Part I, as well as those discussed elsewhere in this Form 10-K. These factors may not constitute all factors that could cause actual results to differ materially from those discussed in any forward-looking statement. The Company operates in a continually changing business environment and new factors emerge from time to time. The Company cannot predict such factors, nor can it assess the impact, if any, of such factors on its financial condition or results of operations. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. The Company disclaims any responsibility to update any forward-looking statement provided in this Form 10-K.

ADDITIONAL INFORMATION

The Company is subject to the reporting and information requirements of the Exchange Act and, as a result, is obligated to file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other reports and information with the SEC, as well as amendments to those reports. The Company makes these filings available free of charge through our website at www.federsignal.com as soon as reasonably practicable after such materials are filed with, or furnished to, the SEC. Information on our website does not constitute part of this Form 10-K. In addition, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically. All materials that we file with, or furnish to, the SEC may also be read or copied at the SEC’s Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the

SEC at 1-800-SEC-0330.

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PART I

Item 1. Business.

Federal Signal Corporation, founded in 1901, was reincorporated as a Delaware corporation in 1969. The Company designs and manufactures a suite of products and integrated solutions for municipal, governmental, industrial and commercial customers. The Company's portfolio of products includes sewer cleaners, vacuum trucks, street sweepers, waterblasters, safety and security systems, including technology-based products and solutions for the public safety market, and vehicle-mounted aerial platforms. In addition, we sell parts and provide service, repair, equipment rentals and training as part of a comprehensive offering to our customers. Federal Signal Corporation and its subsidiaries operate twelve principal manufacturing facilities in six countries around the world and provide products and integrated solutions to customers in all regions of the world.

Narrative Description of Business

Products manufactured and services rendered by the Company are divided into three major operating segments: the Environmental Solutions Group, the Safety and Security Systems Group and the Fire Rescue Group. The individual operating businesses are organized as such because they share certain characteristics, including technology, marketing, distribution and product application, which create long-term synergies. Corporate contains those items that are not included in our operating segments.

Financial information (net sales, operating income, depreciation and amortization, capital expenditures and total assets) concerning the Company's three operating segments for each of the three years in the period ended December 31, 2014, is included in Note 13 – Segment Information to the accompanying consolidated financial statements and is incorporated herein by reference. Information regarding the Company's discontinued operations is included in Note 15 – Discontinued Operations to the accompanying consolidated financial statements and is incorporated herein by reference.

Environmental Solutions Group

Our Environmental Solutions Group is a leading manufacturer and supplier of a full range of street sweeper vehicles, sewer cleaner and vacuum loader trucks, hydro-excavation trucks and high-performance waterblasting equipment. Products are sold to both municipal and industrial customers under the Elgin®, Vactor®, Guzzler® and Jetstream™ brand names. The Group manufactures vehicles and equipment in the U.S.

Under the Elgin brand name, the Company sells a leading U.S. brand of street sweepers primarily designed for large-scale cleaning of curbed streets, parking lots and other paved surfaces utilizing mechanical sweeping, vacuum and recirculating air technology. Vactor is a leading manufacturer of vacuum trucks used to maintain sewer lines, catch basins and storm sewers, as well as hydro-excavation trucks to meet the need for safe and non-destructive excavation. Guzzler is a leader in industrial vacuum loaders used to manage industrial waste or recover and recycle valuable raw materials. Jetstream manufactures high pressure waterblast equipment and accessories for commercial and industrial cleaning and maintenance operations.

In addition to equipment sales, the Group engages in the sale of parts, service and repair, equipment rentals and training as part of a complete offering to its customers under the FS SolutionsSM brand.

Safety and Security Systems Group

Our Safety and Security Systems Group is a leading manufacturer and supplier of comprehensive systems and products that law enforcement, fire rescue, emergency medical services, campuses, military facilities and industrial sites use to protect people and property. Offerings include systems for campus and community alerting, emergency vehicles, first responder interoperable communications and industrial communications, as well as command and municipal networked security. Specific products include vehicle lightbars and sirens, public warning sirens, general alarm systems, public address systems and public safety software. Products are sold under the Federal Signal™, Federal Signal VAMA™ and Victor™ brand names. The Group operates manufacturing facilities in the U.S., Europe and South Africa.

Fire Rescue Group

Our Fire Rescue Group is a leading manufacturer and supplier of sophisticated, vehicle-mounted, aerial platforms for fire fighting, rescue and industrial applications. End customers include fire departments, industrial fire services, electric utilities and maintenance rental companies for applications such as fire fighting and rescue, transmission line maintenance and installation and maintenance of wind turbines. The Group's telescopic, articulated aerial platforms are designed in accordance with various regulatory codes and standards, such as European Norms ("EN"), National Fire Protection Association ("NFPA") and American National Standards Institute ("ANSI"). In addition to equipment sales, the Group sells parts, service and training as part of a

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complete offering to its customers. The Group manufactures in Finland and sells globally under the Bronto Skylift® brand name.

Marketing and Distribution

The Environmental Solutions and Fire Rescue groups use dealer networks and direct sales to service customers generally depending on the type and geographic location of the customer. The Environmental Solutions Group's direct sales channel concentrates on the industrial, utility and construction market segments, while the dealer networks focus primarily on the municipal markets. Dealer representatives demonstrate the vehicles' functionalities and capabilities to customers and service the vehicles on a timely basis. The Company believes its national and global dealer networks for vehicles distinguishes it from its competitors.

The Safety and Security Systems Group sells to industrial customers through wholesalers and distributors who are supported by Company sales personnel and/or independent manufacturers' representatives. Products are also sold to municipal and governmental customers through active independent distributors, as well as through original equipment manufacturers and direct sales. The Company sells comprehensive integrated warning and interoperable communications through a combination of a direct sales force and distributors. International sales are made through the Group's independent foreign distributors or on a direct basis.

Customers and Backlog

Total orders in 2014 were \$957.4 million, of which approximately 38% were to U.S. municipal and governmental customers, 29% were to U.S. commercial and industrial customers and 33% were to non-U.S. customers. No single customer accounted for 10% or more of the Company's business.

During 2014, the Company's U.S. municipal and governmental orders increased 21% from 2013, compared to a 2% increase in these orders in 2013 as compared to 2012, primarily driven by improved orders of our street sweeper and sewer cleaner products and solid municipal demand. U.S. commercial and industrial orders in 2014 increased 18% from 2013, compared to an increase of 9% in these orders in 2013 as compared to 2012, largely attributable to higher orders of vacuum trucks, inclusive of hydro-excavation products, as well as increased U.S. orders of our aerial lifts. During 2014, the Company's non-U.S. orders increased 5% from 2013, compared to a decrease of 4% in 2013 as compared to 2012. Non-U.S. municipal and governmental markets are similar to the U.S. municipal and governmental market in that they are largely dependent on tax revenues to support spending and orders may be subject to public-entity bid procedures. Improvements in non-U.S. municipal and governmental market segments have more recently lagged those experienced in the U.S. Of the Company's non-U.S. orders for 2014, approximately 35% were derived from Europe, 20% from Canada, 20% from the Asia Pacific, 18% from the Middle East and Africa and less than 10% from any other particular region.

The Company's backlog totaled \$328.2 million at December 31, 2014 compared to \$305.8 million at December 31, 2013. Backlogs vary by Group due to the nature of the Company's products and buying patterns of its customers. The Environmental Solutions Group experiences an average backlog of four to five months of shipments, the Safety and Security Systems Group typically experiences an average backlog of two months of shipments and the Fire Rescue Group normally experiences an average backlog of five months of shipments, excluding service and maintenance contracts that generally cover a period of more than one year. Production of the Company's December 31, 2014 backlog is expected to be substantially completed during 2015.

Suppliers

The Company purchases a wide variety of raw materials from around the world for use in the manufacture of its products, although the majority of current purchases are from North American sources. To minimize risks relating to availability, price and quality of key products and components, the Company is party to numerous strategic supplier arrangements. Although certain materials are obtained from either a single-source supplier or a limited number of suppliers, the Company has identified alternative sources to minimize the interruption of its business in the event of supply problems.

Components critical to the production of the Company's vehicles, such as engines and hydraulic systems, are purchased from a select number of suppliers. The Company also purchases raw and fabricated steel as well as

commercial chassis with certain specifications from multiple sources.

The Company believes it has adequate supplies or sources of availability of the raw materials and components necessary to meet its needs. However, there are risks and uncertainties with respect to the supply of certain raw materials and components that could impact their price, quality and availability in sufficient quantities.

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Competition

Within the Environmental Solutions Group, Elgin is recognized as a market leader among several domestic sweeper competitors and differentiates itself primarily on product performance. Vactor and Guzzler both maintain a leading domestic position in their respective marketplaces by enhancing product performance with leading technology and application flexibility. Jetstream is a market leader in the in-plant cleaning segment of the U.S. waterblast industry, competing on product performance and rapid delivery.

Within specific product categories and domestic markets, the companies within the Safety and Security Systems Group are among the leaders with between one and four significant competitors and several additional ancillary market participants. The Group's international market position varies from leader to ancillary participant depending on the geographic region and product line. Generally, competition is intense within all of the Group's product lines and purchase decisions are made based on competitive bidding, price, reputation, performance and service.

Within the Fire Rescue Group, Bronto Skylift is established as a global leader for aerial platforms used in fire fighting, rescue and industrial applications. Products for these markets typically must be certified to specific qualifications and requirements. Competitor offerings can include trailer-mounted articulated aerials and traditional fire trucks with ladders. Bronto competes on product performance, where it holds technological advantages for its certified products in its designs, materials and production processes.

Research and Development

The Company invests in research to support development of new products and the enhancement of existing products and services. The Company believes this investment is important to maintain and/or enhance its leadership position in key markets. Expenditures for research and development by the Company were \$16.6 million in 2014, \$11.0 million in 2013 and \$10.0 million in 2012, and were reported within selling, engineering, general and administrative expenses.

Patents and Trademarks

The Company owns a number of patents and possesses rights under others to which it attaches importance, but it does not believe that its business as a whole is materially dependent upon any such patents or rights. The Company also owns a number of trademarks, including those listed within the "Narrative Description of Business" section above. We believe these trademarks are important in connection with the identification of our products and associated goodwill with customers, but no material part of the Company's business is dependent on such trademarks.

Employees

The Company employed approximately 2,700 people in its businesses at December 31, 2014 with the Company's U.S. hourly workers accounting for approximately 42% of its total workforce. Approximately 24% of the Company's U.S. hourly workers were represented by unions at December 31, 2014. We believe that our labor relations with our employees are good.

Governmental Regulation of the Environment

The Company believes it substantially complies with federal, state and local provisions that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment. Capital expenditures in 2014 attributable to compliance with such laws were not material. The Company believes that the overall impact of compliance with environmental regulations will not have a material adverse effect on our financial position, results of operations or cash flow.

In May 2012, the Company sold a facility in Pearland, Texas. The facility was previously used by the Company's discontinued Pauluhn business, which manufactured marine, offshore and industrial lighting products. While the Company has not finalized its plans, it is probable that the site will require remediation. As of December 31, 2014 and 2013, \$1.3 million and \$1.4 million, respectively, of reserves related to the environmental remediation of the Pearland facility are included in liabilities of discontinued operations on the Consolidated Balance Sheets. The Company's estimate may change as more information becomes available; however, the costs are not expected to have a material adverse effect on the Company's results of operations, financial position or cash flow.

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Seasonality

Certain of the Company businesses are susceptible to the influences of seasonal buying or delivery patterns. The Company tends to have lower sales in the first quarter compared to other quarters as a result of these influences.

Executive Officers of the Registrant

The following is a list of the Company's executive officers, their ages, business experience and positions as of February 1, 2015:

Dennis J. Martin, age 64, was appointed President and Chief Executive Officer in October 2010 and was appointed to the Board of Directors in March 2008. Mr. Martin had been an independent business consultant from 2005 to October 2010 and was the Chairman, President and Chief Executive Officer of General Binding Corporation from 2001 to 2005.

Bryan L. Boettger, age 62, was appointed President of Public Safety Systems in May 2011. Mr. Boettger was Vice President of Operations for the Safety and Security Systems Group from 2010 to 2011 and Interim Vice President/General Manager Public Safety Systems and President of Emergency Products Division from 2006 to 2009. On January 20, 2015, the Company announced that Mr. Boettger will retire effective May 31, 2015. Mr. Boettger plans to continue working for the Company in a part-time consulting capacity through December 31, 2015.

Julie A. Cook, age 53, was appointed Vice President, Human Resources in September 2012. Ms. Cook served as Johnson Controls, Inc.'s Director of Human Resources, Building Efficiency Programs and then Vice President of Human Resources, Global Manufacturing, Supply Chain and Communications, from 2010 through 2012. Ms. Cook previously served as the Company's Environmental Solutions Group Vice President of Human Resources with responsibility for Corporate Human Resources from 2008 through 2010. Ms. Cook was Group Vice President of Human Resources for the Environmental Solutions Group from 2001 to 2007.

Brian S. Cooper, age 58, was appointed Senior Vice President and Chief Financial Officer in May 2013. Prior to joining the Company, Mr. Cooper served as Chief Financial Officer of Westell Technologies, Inc. from 2009 to 2013. Prior to Westell, Mr. Cooper served as Chief Financial Officer of Fellowes, Inc. from 2007 to 2009 and as Senior Vice President and Treasurer of United Stationers Inc. from 2001 to 2007. Prior to joining United Stationers, Mr. Cooper served as Treasurer of Burns International Services Corporation, and held various financial positions during his 12-year tenure with Amoco Corporation.

Ian A. Hudson, age 38, was appointed Vice President and Corporate Controller in August 2013. Prior to joining the Company, Mr. Hudson served as Director of Accounting – Latin America and Asia Pacific at Groupon, Inc. from June 2012 to August 2013. Prior to that role, Mr. Hudson worked at Ernst & Young, LLP from 1998 to 2012, most recently as Senior Audit Manager.

Esa Peltola, age 63, was appointed President of Bronto Skylift Oy Ab in July 2007. Mr. Peltola was Managing Director of Bronto Skylift from 1998 to 2007.

Jennifer L. Sherman, age 50, was appointed Senior Vice President and Chief Operating Officer in April 2014. Since joining the Company in 1994, Ms. Sherman has served in various roles of increasing responsibility, most recently as Senior Vice President, Chief Administrative Officer, General Counsel and Secretary from 2010 to April 2014. Ms. Sherman also served as Senior Vice President, Human Resources, General Counsel and Secretary from 2008 to 2010, and Vice President, General Counsel and Secretary from 2004 to 2008.

These officers hold office until the next annual meeting of the Board of Directors following their election and until their successors have been elected and qualified.

There are no family relationships among any of the foregoing executive officers.

Item 1A. Risk Factors.

We may occasionally make forward-looking statements and estimates such as forecasts and projections of our future performance or statements of our plans and objectives. These forward-looking statements may be contained in, but are not limited to, filings with the SEC, including this Form 10-K, press releases made by us and oral statements made by our officers. Actual results could differ materially from those contained in such forward-looking statements. Important factors that could cause our actual results to differ from those contained in such forward-looking statements include,

but are not limited to, the risks described below.

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Our financial results are subject to U.S. economic uncertainty.

In 2014, we generated approximately 65% of our net sales in the U.S. Our ability to be profitable depends heavily on varying conditions in the U.S. governmental and municipal markets, as well as the overall U.S. economy. The industrial markets in which we compete are subject to considerable cyclicity, and move in response to cycles in the overall business environment. Many of our customers are municipal government agencies, and as a result, we are dependent on municipal government spending. Spending by our municipal customers can be affected by local political circumstances, budgetary constraints and other factors. The U.S. government and municipalities depend heavily on tax revenues as a source of spending and accordingly, there is a historical correlation of a one or two-year lag between the condition of the U.S. economy and our sales to the U.S. government and municipalities. Therefore, downturns in the U.S. economy are likely to result in decreases in demand for our products. During previous economic downturns, we experienced decreases in sales and profitability, and we expect our business to remain subject to similar economic fluctuations in the future.

We have international operations that are subject to compliance with domestic and foreign laws and regulations, economic and political uncertainties and foreign currency rate fluctuations.

Our business is subject to fluctuations in demand and changing international economic, legal and political conditions that are beyond our control. In 2014, approximately 35% of our net sales were generated outside the U.S. and we expect a significant portion of our revenues to come from international sales in the foreseeable future. Operating in the international marketplace exposes us to a number of risks, including the need to comply with U.S. and foreign laws and regulations applicable to our foreign operations, such as the Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act and their counterparts in other foreign jurisdictions in which we operate, restrictive domestic and international trade regulations, including the imposition of tariffs and trade barriers on our products, changes in these laws, regulations and policies by the U.S. and foreign governments, political and economic instability in the jurisdictions in which we operate, foreign receivables collection risk, local labor market conditions, and, in some cases, international hostilities. The costs of compliance with these various laws, regulations and policies can be significant and penalties for non-compliance could significantly impact our business.

To the extent that our international operations are affected by adverse foreign economic or political conditions, we may experience disruptions and losses which could have a material impact on our financial position, results of operations or cash flow. To mitigate the risk of foreign receivables collection, we typically obtain letters of credit from international customers to satisfy concerns regarding the collectibility of amounts billed to customers.

Some of our contracts are denominated in foreign currencies, which exposes us to the risk of fluctuating currency values and exchange rates, hard currency shortages and controls on currency exchange. Changes in the value of foreign currencies over the long term could increase our U.S. dollar costs for, or reduce our U.S. dollar revenues from, our foreign operations. Any increased costs or reduced revenues as a result of foreign currency fluctuations could adversely affect our results of operations.

We are subject to a number of restrictive debt covenants.

In March 2013, we entered into a credit facility with a term ending in March 2018. The proceeds from this credit facility were used to refinance the majority of our then-existing indebtedness. The credit facility contains certain restrictive debt covenants and other customary events of default. Our ability to comply with these restrictive covenants may be affected by the other factors described in this "Risk Factors" section and other factors outside of our control. Failure to comply with one or more of these restrictive covenants may result in an event of default upon which, if not cured by us or waived by our lenders, our lenders may declare all amounts outstanding as due and payable. Such an acceleration of the maturity of our indebtedness may prevent or limit us from engaging in transactions that benefit us, including responding to changing business and economic conditions and taking advantage of attractive business opportunities.

The execution of our growth strategy is dependent upon the continued availability of credit and third-party financing arrangements for our customers.

Economic downturns result in tighter credit markets, which could adversely affect our customers' ability to secure financing or to secure financing at favorable terms or interest rates necessary to proceed or continue with purchases of our products and services. Our customers' or potential customers' inability to secure financing for projects could result in the delay, cancellation or downsizing of new purchases or the suspension of purchases already under contract, which could cause a decline in the demand for our products and services and negatively impact our financial position, results of operations or cash flow.

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Our efforts to develop new products and services or enhance existing products and services involve substantial research, development and marketing expenses, and the resulting new or enhanced products or services may not generate sufficient revenues to justify the expense.

We place a high priority on developing new products and services, as well as enhancing our existing products and services. As a result of these efforts, we may be required to expend substantial research, development and marketing resources, and the time and expense required to develop a new product or service or enhance an existing product or service are difficult to predict. We may not succeed in developing, introducing or marketing new products or services or product or service enhancements. In addition, we cannot be certain that any new or enhanced product or service will generate sufficient revenue to justify the expense and resources devoted to this product diversification effort.

We could incur restructuring and impairment charges as we continue to evaluate opportunities to restructure our business and rationalize our manufacturing operations in an effort to optimize our cost structure.

We continue to evaluate opportunities to restructure our business and rationalize our manufacturing operations in an effort to optimize our cost structure. These actions could result in significant charges that could adversely affect our financial condition and results of operations. Future actions could result in restructuring and related charges, including but not limited to impairments, employee termination costs and charges for pension and other postretirement contractual benefits and pension curtailments that could be significant and could have an adverse effect on our financial condition, results of operations or cash flow.

We operate in highly competitive markets.

The markets in which we operate are highly competitive. Many of our competitors have significantly greater financial resources than we do. The intensity of this competition, which is expected to continue, can result in price discounting and margin pressures throughout the industry and may adversely affect our ability to increase or maintain prices for our products. In addition, certain of our competitors may have lower overall labor or material costs. In some cases, our contracts with municipal and other governmental customers are awarded and renewed through competitive bidding. We may not be successful in obtaining or renewing these contracts, which could have an adverse effect on our financial condition, results of operations or cash flow.

We may incur material losses and costs as a result of product liability, warranty, recall claims, client service interruption or other lawsuits or claims that may be brought against us.

We are exposed to product liability and warranty claims in the normal course of business in the event that our products actually or allegedly fail to perform as expected, or the use of our products results, or is alleged to result, in bodily injury and/or property damage. For example, we have been sued by firefighters seeking damages claiming that exposure to our sirens has impaired their hearing and that the sirens are, therefore, defective. In addition, we are subject to other claims and litigation from time to time as further described in the accompanying notes to our consolidated financial statements. We could experience material warranty or product liability costs in the future and incur significant costs to defend ourselves against these claims. While we carry insurance and maintain reserves for product liability claims, our insurance coverage may be inadequate if such claims do arise, and any defense costs and liability not covered by insurance could have a material adverse impact on our financial condition, results of operations or cash flow. A future claim could involve the imposition of punitive damages, the award of which, pursuant to state laws, may not be covered by insurance. In addition, warranty and certain other claims are not typically covered by insurance. Any product liability or warranty issues may adversely impact our reputation as a manufacturer of high quality, safe products and may have a material adverse effect on our business.

Failure to keep pace with technological developments may adversely affect our operations.

We are engaged in an industry that will be affected by future technological developments. The introduction of products or processes utilizing new technologies could render our existing products or processes obsolete or unmarketable. Our success will depend upon our ability to develop and introduce on a timely and cost-effective basis new products, applications and processes that keep pace with technological developments and address increasingly sophisticated customer requirements. We may not be successful in identifying, developing and marketing new products, applications and processes and product or process enhancements. We may experience difficulties that could

delay or prevent the successful development, introduction and marketing of product or process enhancements or new products, applications or processes. Our products, applications or processes may not adequately meet the requirements of the marketplace and achieve market acceptance. Our financial condition, results of operations or cash flow could be materially and adversely affected if we were to incur delays in developing new products, applications or processes or product or process enhancements, or if our products do not gain market acceptance.

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Increased information technology security threats and more sophisticated cyber-attacks pose a risk to our systems, networks, products and operations.

We have observed a global increase in information technology security threats and more sophisticated cyber-attacks. Our business could be impacted by such disruptions, which in turn could pose a risk to the security of our systems and networks and the confidentiality, accessibility and integrity of information stored and transmitted on those systems and networks. We have adopted measures to prevent cyber-attacks and mitigate potential risks to our systems from these information technology-related disruptions. However, given the unpredictability of the timing, nature and scope of such disruptions, our systems and networks remain potentially vulnerable to attacks. Depending on their nature and scope, such attacks could potentially lead to the compromising of confidential information, misuse of our systems and networks, manipulation and destruction of data, production stoppages and supply shortages, which in turn could adversely affect our reputation, financial condition, results of operations or cash flow.

Infringement of, or an inability to protect, our intellectual property rights could adversely affect our business.

We rely on a combination of patents, trademarks, copyrights, nondisclosure agreements, information technology security systems, physical security and other measures to protect our proprietary intellectual property and the intellectual property of certain customers and suppliers. However, we cannot be certain that our efforts to protect these intellectual property rights will be sufficient. Intellectual property protection is subject to applicable laws in various jurisdictions where interpretations and protections differ or can be unpredictable and costly to enforce. Further, our ability to protect our intellectual property rights may be limited in certain foreign jurisdictions that do not have, or do not enforce, strong intellectual property rights. Any failure to protect or enforce our intellectual property rights could have a material adverse effect on our competitive position, financial condition, results of operations or cash flow.

The inability to obtain raw materials, component parts and/or finished goods in a timely and cost-effective manner from suppliers would adversely affect our ability to manufacture and market our products.

We purchase from suppliers raw materials and component parts to be used in the manufacturing of our products. In addition, we purchase certain finished goods from suppliers. Changes in our relationships with suppliers, shortages, production delays, regulatory restrictions or work stoppages by the employees of such suppliers could have a material adverse effect on our ability to timely manufacture and market products. In addition, increases in the costs of purchased raw materials, component parts or finished goods could result in manufacturing interruptions, delays, inefficiencies or our inability to market products. In addition, our profit margins would decrease if prices of purchased raw materials, component parts or finished goods increase and we are unable to pass on those increases to our customers.

Our ability to operate effectively could be impaired if we fail to attract and retain key personnel.

Our ability to operate our businesses and implement our strategies depends in part on the efforts of our executive officers and other key employees. In addition, our future success will depend on, among other factors, our ability to attract and retain qualified personnel, including finance personnel, research professionals, technical sales professionals and engineers. The loss of the services of any key employee or the failure to attract or retain other qualified personnel could have a material adverse effect on our business or business prospects.

Disruptions within our dealer network could adversely affect our business.

We rely on a national and global dealer network to market certain of our products and services. A disruption in our dealer network with a significant dealer or within a specific market could have an adverse impact on our business within the affected market. In addition, the loss or termination of a significant dealer, or significant number of dealers, could cause difficulties in marketing and distributing our products and have an adverse effect on our business, financial condition, results of operations or cash flow.

Our business may be adversely impacted by work stoppages and other labor relations matters.

We are subject to risk of work stoppages and other labor relations matters because a portion of our workforce is unionized. As of December 31, 2014, approximately 24% of our U.S. hourly workers were represented by labor unions and were covered by collective bargaining agreements. Many of these agreements include provisions that limit our ability to realize cost savings. Any strikes, threats of strikes or other organized disruptions in connection with the

negotiation of new labor agreements or other negotiations could materially adversely affect our business as well as impair our ability to implement further measures to reduce costs and improve production efficiencies.

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Our pension funding requirements and expenses are affected by certain factors outside of our control, including the performance of plan assets, the discount rate used to value liabilities, actuarial assumptions and experience and legal and regulatory changes.

Our funding obligations and pension expense for our defined benefit pension plans are driven by the performance of assets set aside in trusts for these plans, the discount rate used to value the plans' liabilities, actuarial assumptions and experience and legal and regulatory funding requirements. Changes in these factors could have an adverse impact on our financial condition, results of operations or cash flow. In addition, a portion of our pension plan assets are invested in equity securities, which can experience significant declines if financial markets weaken. The level of the funding of our defined benefit pension plan liabilities was approximately 77% as of December 31, 2014. The current year funding status was impacted by lower discount rates and revised mortality assumptions which project longer life expectancy. Our future pension expenses and funding requirements could increase significantly due to the effect of adverse changes in the discount rate, asset values or the estimated expected return on plan assets. In addition, we could be legally required to make increased cash contributions to the pension plans, and these contributions could be material and negatively affect our cash flow.

The costs associated with complying with environmental and safety regulations could lower our margins.

We, like other manufacturers, continue to face heavy governmental regulation of our products, especially in the areas of the environment and employee health and safety. Complying with environmental and safety requirements has added and will continue to add to the cost of our products, and could increase the capital required to support our business. While we believe that we are in compliance in all material respects with these laws and regulations, we may be adversely impacted by costs, liabilities or claims with respect to our operations under existing laws or those that may be adopted. These requirements are complex, change frequently and have tended to become more stringent over time. Therefore, we could incur substantial costs, including cleanup costs, fines and civil or criminal sanctions as a result of violation of, or liabilities under, environmental laws and safety regulations.

Our ability to use net operating loss and tax credit carryforwards to reduce future tax payments could be negatively impacted if there is a change in our ownership or a failure to generate sufficient taxable income.

Presently, the only U.S. federal net operating loss carryforwards ("NOLs") we have remaining are from previously acquired companies and hence are limited to specific annual amounts as permitted by Section 382 of the Internal Revenue Code of 1986, as amended ("Section 382"). If an ownership change, as defined in Section 382, occurs with respect to our capital stock, our ability to use these NOLs could be further limited to more restrictive specific annual amounts. Generally, an ownership change occurs if certain persons or groups increase their aggregate ownership by more than 50% of our total capital stock in a three-year period. If more than a 50% ownership change were to occur, use of our NOLs to reduce payments of federal tax may be deferred to later years within the 20-year carryover period; however, if the carryover period for any loss year expires, the use of the remaining NOLs for the loss year will be prohibited. If we should fail to generate a sufficient level of taxable income prior to the expiration of the applicable NOL carryforward periods, then we will lose the ability to apply the NOLs as offsets to future taxable income. We also have a significant amount of tax credit carryforwards ("tax credits") which are generally available to offset future U.S. income tax. The usage of these tax credits is subject to similar limitations upon a change in ownership. At December 31, 2014, our tax credits totaled \$30.8 million and had carryforward periods generally ranging from 3 to 20 years.

An impairment in the carrying value of goodwill could negatively affect our financial position and results of operations.

We have a substantial amount of goodwill, which is recorded at fair value at the time of acquisition and is not amortized, but is reviewed for impairment at least annually or more frequently if impairment indicators arise. In evaluating the potential for impairment of goodwill, we make assumptions regarding future operating performance, business trends, competition and market and general economic conditions. Such analyses further require us to make certain assumptions about our sales, operating margins, growth rates and discount rates. There are inherent uncertainties related to these factors and in applying these factors to the assessment of goodwill recoverability.

Goodwill reviews are prepared using estimates of the fair value of reporting units, which incorporate estimates of the present value of future discounted cash flow. We could be required to evaluate the recoverability of goodwill prior to the annual assessment if we experience disruptions to the business, unexpected significant declines in operating results, a divestiture of a significant component of our business or market capitalization declines.

If the future operating performance of our reporting units is not consistent with our assumptions, we could be required to record non-cash impairment charges. Impairment charges could substantially affect our total consolidated assets and results of operations in the periods such charges are recorded. As of December 31, 2014, total consolidated goodwill was approximately 40% of total consolidated assets.

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We may be unsuccessful in our future acquisitions, if any, which may have an adverse effect on our business. Our long-term strategy includes exploring acquisition of companies or businesses to facilitate our growth, enhance our global market position and broaden our product offerings. Such acquisitions may help us expand into adjacent markets, add complementary products and services or allow us to leverage our distribution channels. In connection with this strategy, we could face certain risks and uncertainties in addition to those we face in the day-to-day operations of our business. We also may be unable to identify suitable targets for acquisition or to make acquisitions at favorable prices. If we identify a suitable acquisition candidate, our ability to successfully implement the acquisition would depend on a variety of factors, including our ability to obtain financing on acceptable terms. In addition, our acquisition activities could be disrupted by overtures from competitors for the targeted companies, governmental regulation and rapid developments in our industry that decrease the value of a potential target's products or services.

Acquisitions involve risks, including those associated with the following:

- integrating the operations, financial reporting, disparate systems and processes and personnel of acquired companies;
- managing geographically dispersed operations;
- diverting management's attention from other business concerns;
- entering markets or lines of business in which we have either limited or no direct experience; and
- losing key employees, customers and strategic partners of acquired companies.

We also may not achieve anticipated revenue and cost benefits associated with our acquisitions. Acquisitions may not be accretive to our earnings and may negatively impact our results of operations as a result of, among other things, the incurrence of debt, acquisition costs, impairment of goodwill and amortization of other intangible assets. In addition, future acquisitions could result in dilutive issuances of equity securities.

Businesses acquired by us may have liabilities that are not known to us.

We may assume liabilities in connection with the acquisition of businesses. There may be liabilities that we fail or are unable to discover in the course of performing due diligence investigations on the acquired businesses. In these circumstances, we cannot assure that our rights to indemnification from the sellers of the acquired businesses to us will be sufficient in amount, scope or duration to fully offset the possible liabilities associated with the businesses or property acquired. Any such liabilities, individually or in the aggregate, could have a material adverse effect on our financial condition, results of operations or cash flow.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

As of December 31, 2014, the Company utilized six principal manufacturing plants located throughout the U.S., as well as five in Europe and one in South Africa. The Company also leases certain facilities within the U.S. and Europe from which we sell parts and/or provide service. As of December 31, 2014, the Company devoted approximately 1.0 million square feet to manufacturing and 0.6 million square feet to service, warehousing and office space. Of the total square footage, approximately 46% is devoted to the Environmental Solutions Group, 39% to the Safety and Security Systems Group and 15% to the Fire Rescue Group. Approximately 21% of the total square footage is owned by the Company with the remaining 79% being leased. Owned facilities are subject to lien under the Company's Senior Secured Credit Facility dated March 13, 2013 (the "Senior Secured Credit Facility").

All of the Company's properties, as well as the related machinery and equipment, are considered to be well-maintained, suitable and adequate for their intended purposes. In the aggregate, these facilities are of sufficient capacity for the Company's current business needs.

Item 3. Legal Proceedings.

The information concerning the Company's legal proceedings included in Note 9 – Legal Proceedings to the accompanying consolidated financial statements is incorporated herein by reference.

Item 4. Mine Safety Disclosures.

Not applicable.

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PART II

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

Market Information

The Company's common stock is listed and traded on the New York Stock Exchange ("NYSE") under the symbol "FSS". The following table presents a summary of the high and low market price per share of our common stock for each quarter of 2014 and 2013:

	2014		2013	
	High	Low	High	Low
1 st Quarter	\$15.42	\$11.53	\$8.63	\$7.30
2 nd Quarter	16.05	13.35	9.19	7.25
3 rd Quarter	15.41	13.24	13.05	8.80
4 th Quarter	15.97	11.66	15.89	12.53

Holders

As of February 28, 2015, there were 1,846 holders of record of the Company's common stock.

Dividends

On April 22, 2014, the Company's Board of Directors (the "Board") reinstated the Company's quarterly cash dividend by declaring a dividend of \$0.03 per common share. During 2014, the Company declared and paid dividends totaling \$5.6 million. On February 20, 2015, the Board declared a quarterly cash dividend of \$0.06 per common share payable on March 27, 2015 to holders of record at the close of business on March 9, 2015. No dividends were declared or paid during 2013.

The payment of future dividends is at the discretion of the Board and will depend, among other things, upon future earnings and cash flow, capital requirements, the Company's general financial condition, general business conditions and other factors including restrictive debt covenants as described below.

Under the Senior Secured Credit Facility, dividends are permitted only if the following conditions are met:

• No default or event of default shall exist or shall result from such dividend payment;

• The leverage ratio (consolidated total indebtedness to consolidated EBITDA, as defined therein) of the Company and its subsidiaries shall be, for the trailing 12-month period ending on the date of distribution, less than 3.25; and

• The Company is in compliance with the quarterly consolidated total leverage ratio and consolidated fixed charge coverage ratio, as defined therein.

The Company may declare dividends at current levels under the restricted payment guidelines set forth above.

Securities Authorized for Issuance under Equity Compensation

Information concerning the Company's equity compensation plans is included under Item 12 of Part III of this Form 10-K.

Recent Sales of Unregistered Securities

There were no sales of unregistered securities by the Company during the year ended December 31, 2014.

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Purchases of Equity Securities

The following table provides a summary of the Company's repurchase activity for its common stock during the three months ended December 31, 2014:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs ^(a) ^(b)
October 2014 (9/28/14 - 11/1/14)	—	\$—	—	\$8,281,588
November 2014 (11/2/14 - 11/29/14)	—	—	—	83,281,588
December 2014 (11/30/14 - 12/31/14)	233,638	15.1580	233,638	79,740,102

(a) On April 22, 2014, the Board authorized a stock repurchase program of up to \$15 million of the Company's common stock.

(b) On November 4, 2014, the Board authorized an additional stock repurchase program of up to \$75 million of the Company's common stock. This program supplements the April 2014 stock repurchase program, which remains in effect.

Performance Graph

The following graph compares the cumulative five-year total return to stockholders of the Company's common stock relative to the cumulative total returns of the Russell 2000 index, the S&P Midcap 400 index and the S&P Industrials index. The graph assumes that the value of the investment in the Company's common stock, and in each index, was \$100 on December 31, 2009 and assumes reinvestment of all dividends through December 31, 2014.

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	As of December 31,					
	2009	2010	2011	2012	2013	2014
Federal Signal Corporation	\$100.00	\$118.05	\$71.41	\$130.96	\$252.10	\$267.32
Russell 2000	100.00	126.86	121.56	141.43	196.34	205.95
S&P Midcap 400	100.00	126.64	124.45	146.69	195.84	214.97
S&P Industrials	100.00	126.73	125.98	145.32	204.43	224.52

The stock price performance included in this graph is not necessarily indicative of future stock price performance. Notwithstanding anything set forth in any of our previous filings under the Securities Act or the Exchange Act, which might be incorporated into future filings in whole or part, including this Form 10-K, the preceding performance graph shall not be deemed incorporated by reference into any such filings.

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Item 6. Selected Financial Data.

The following table summarizes selected financial information of the Company as of and for each of the five years in the period ended December 31, 2014:

(\$ in millions, except per share data)	For the Years Ended December 31,					
	2014	2013	2012	2011	2010	
Results of Operations:						
Net sales	\$918.5	\$851.3	\$803.2	\$688.7	\$633.1	
Operating income ^{(b) (c) (d)}	92.6	70.6	51.5	33.2	12.4	
Income (loss) from continuing operations ^{(a) (b) (c) (d)}	63.0	160.2	22.0	13.1	(74.1)	
Gain (loss) from discontinued operations and disposal, net of tax	0.7	(0.2)	(49.5)	(27.3)	(101.6)	
Net income (loss) ^{(a) (b) (c) (d)}	\$63.7	\$160.0	\$(27.5)	\$(14.2)	\$(175.7)	
Financial Position:						
Capital expenditures	\$19.5	\$17.0	\$13.0	\$13.5	\$11.3	
Depreciation and amortization	15.0	14.2	13.2	13.0	11.4	
Total assets	658.7	644.8	613.2	706.7	764.5	
Total debt ^(e)	50.2	92.1	157.8	222.2	262.0	
Common Stock Data:						
Diluted earnings (loss) per share — Continuing operations	\$0.99	\$2.53	\$0.35	\$0.21	\$(1.29)	
Cash dividends per common share	0.09	—	—	—	0.24	
Weighted average shares outstanding — Diluted (in millions)	63.6	63.2	62.7	62.2	57.6	
Performance Measures:						
Operating margin	10.1	% 8.3	% 6.4	% 4.8	% 2.0	%
Debt to adjusted EBITDA ratio ^(f)	0.5	1.1	2.4	4.8	11.0	
Other Data:						
Total orders	\$957.4	\$836.8	\$826.3	\$831.4	\$645.1	
Backlog	328.2	305.8	318.4	295.2	158.1	

(a) 2014 income from continuing operations includes the effects of a \$3.5 million release of valuation allowance that was previously recorded against the Company's foreign deferred tax assets.

(b) 2013 operating income includes restructuring charges of \$0.7 million. 2013 income from continuing operations includes the effects of the restructuring charges, as well as \$8.7 million of debt settlement charges and \$116.2 million of valuation allowance release. The Company's determination to release the valuation allowance on domestic deferred tax assets was based on a qualitative and quantitative analysis of current and expected domestic earnings, industry and market trends, tax planning strategies and general business risks, that resulted in a more likely than not conclusion of being able to realize a significant portion of our U.S. deferred tax assets. In the fourth quarter of 2013, the Company also executed a tax planning strategy that resulted in the release of an additional \$6.7 million of valuation allowance that was previously recorded against the Company's foreign tax credits, which would have begun to expire in 2015.

(c) 2012 operating income includes restructuring charges of \$1.4 million. 2012 income from continuing operations includes the effects of the restructuring charges, as well as \$3.5 million of debt settlement charges.

(d) 2010 operating income includes \$3.9 million in acquisition and integration related costs associated with the Federal Signal Technologies ("FSTech") Group, which was subsequently discontinued in 2012 and \$10.0 million of net costs associated with the firefighter hearing loss litigation. 2010 income from continuing operations includes the effects of the acquisition and integration related costs, hearing loss litigation costs and \$4.4 million of restructuring costs.

In addition, the Company recorded a \$76.0 million valuation allowance on domestic deferred tax assets.

(e) Includes short-term borrowings, the current portion of long-term borrowings and capital lease obligations of \$6.2 million, \$7.4 million, \$5.0 million, \$9.1 million and \$77.7 million, respectively.

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The ratio of debt to adjusted EBITDA is a non-GAAP measure that represents total debt divided by the trailing 12-month total of income (loss) from continuing operations before interest expense, debt settlement charges, other expense, income tax expense or benefit and depreciation and amortization expense. The Company uses the ratio of total debt to adjusted EBITDA as one measure of its long-term financial stability. The Company uses the ratio to calibrate the magnitude of its debt and its debt capacity against adjusted EBITDA, which is used as an operating performance measure. We believe that investors use a version of this ratio in a similar manner. In addition, (f) financial institutions (including the Company's lenders) use the ratio in connection with debt agreements to set pricing and covenant limitations. For these reasons, the Company believes that the ratio is a meaningful metric to investors in evaluating the Company's long term financial performance and stability. Other companies may use different methods to calculate total debt to EBITDA. The following table summarizes the Company's ratio of total debt to adjusted EBITDA and reconciles income (loss) from continuing operations to adjusted EBITDA as of and for each of the five years in the period ended December 31, 2014:

(\$ in millions)	Trailing Twelve Months Ending December 31,				
	2014	2013	2012	2011	2010
Total debt	\$50.2	\$92.1	\$157.8	\$222.2	\$262.0
Income (loss) from continuing operations	\$63.0	\$160.2	\$22.0	\$13.1	\$(74.1)
Add:					
Interest expense	3.8	8.8	21.4	16.4	10.2
Debt settlement charges	—	8.7	3.5	—	—
Other expense, net	1.5	0.1	0.7	0.2	1.2
Income tax expense (benefit)	24.3	(107.2)	3.9	3.5	75.1
Depreciation and amortization	15.0	14.2	13.2	13.0	11.4
Adjusted EBITDA	\$107.6	\$84.8	\$64.7	\$46.2	\$23.8
Total debt to adjusted EBITDA ratio	0.5	1.1	2.4	4.8	11.0

The selected financial data set forth above should be read in conjunction with the Company's consolidated financial statements, including the notes thereto, and management's discussion and analysis of financial condition and results of operations, included under Item 8 of Part II of this Form 10-K and Item 7 of Part II of this Form 10-K, respectively.

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

Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) is designed to provide information that is supplemental to, and shall be read together with, the consolidated financial statements and the accompanying notes contained in this Form 10-K. Information in MD&A is intended to assist the reader in obtaining an understanding of (i) the consolidated financial statements, (ii) the Company’s business segments and how the results of those segments impact the Company’s results of operations and financial condition as a whole and (iii) how certain accounting principles affect the Company’s consolidated financial statements.

Executive Summary

The Company is a leading global manufacturer and supplier of (i) sewer cleaners, vacuum trucks, street sweepers and other environmental vehicles and equipment, (ii) safety, security and communication equipment and (iii) vehicle-mounted, aerial platforms for fire fighting, rescue, electric utility and industrial applications. We also are a designer and supplier of technology-based products and services for the public safety market. In addition, we sell parts and provide service, repair, equipment rentals and training as part of a comprehensive offering to our customer base. We operate twelve manufacturing facilities in six countries around the world and provide products and integrated solutions to municipal, governmental, industrial and commercial customers in all regions of the world. As described in Item 1 of Part I of this Form 10-K, the Company’s business units are organized and managed in three operating segments: the Environmental Solutions Group, the Safety and Security Systems Group and the Fire Rescue Group.

In 2014, the Company continued to focus on executing against its business strategy, which resulted in strong improvement in operating earnings. The Company identified a number of key objectives in 2014, including the following:

• Creating disciplined growth;

- Improving manufacturing efficiencies and costs;

• Leveraging invested capital; and

• Diversifying our customer base.

The Company assessed achievement against these objectives in 2014 as follows:

Creating Disciplined Growth

• We increased net sales by \$67.2 million, or 8%, to \$918.5 million from \$851.3 million in 2013.

• We improved operating income by \$22.0 million, or 31%, to \$92.6 million from \$70.6 million in 2013.

• Orders of \$957.4 million for the year ended December 31, 2014 were \$120.6 million, or 14%, higher than the prior year, contributing to an increased backlog of \$328.2 million at December 31, 2014.

• We continue to generate strong cash flow from our improved operating performance, with cash flow provided by continuing operations for the year ended December 31, 2014 of \$72.2 million.

- The cash generated from operations has helped us to significantly reduce our debt balances, with total debt of \$50.2 million at December 31, 2014, which was down 45% from \$92.1 million at December 31, 2013. At December 31, 2014, we had \$126.1 million of net availability for borrowings under our domestic revolving credit facility, which was up 22% from \$103.6 million at December 31, 2013.

• As a result of the reduction in debt, we reduced our interest expense by 57% in 2014, to \$3.8 million in 2014 from \$8.8 million in 2013.

• Our debt leverage is 0.5 times adjusted EBITDA, compared with 1.1 times adjusted EBITDA in 2013.

• With our improved capital structure, we have the liquidity and flexibility that we need to support our businesses, invest for profitable growth and to consider ways to return value to stockholders.

• We demonstrated our commitment to returning value to stockholders by reinstating a quarterly dividend during the year. Dividends totaling \$5.6 million were paid in 2014.

• Under share repurchase programs announced during 2014, we also repurchased approximately 696,000 shares of our stock at an average price of \$14.74 per share. The remaining aggregate authorization under these programs of \$79.7

million at December 31, 2014 represents approximately 8% of our market capitalization.

Improving Manufacturing Efficiencies and Costs

Operating margin improved to 10.1% in 2014 from 8.3% in 2013.

Following the prior-year implementation of an enterprise-resource planning (“ERP”) system at our Safety and Security Systems Group, we implemented a number of new measures to improve productivity. These measures have helped

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drive efficiency gains that have contributed to a gross margin improvement to 34.5% in 2014 from 33.4% in 2013 in the Safety and Security Systems Group.

During the year, we also made a number of investments within the Finnish manufacturing facilities of our Fire Rescue Group. Efficiencies associated with these investments began to become evident during the fourth quarter of 2014.

We also continue to focus on reducing the break-even levels and product costs in our municipal-based businesses and to improve manufacturing efficiencies within all of our businesses. We started our “80/20” efficiency initiatives in 2010, and they have been a critical part of the margin improvement in our businesses.

Our 80/20 initiatives have also helped us to focus on delivering the right products and services at the right prices to better capture the value-add that we create.

Leveraging Invested Capital

In response to customer demand and to support growth, we expanded capacity within our Environmental Solutions Group businesses during the year including the addition of new production lines, primarily within existing facilities. We have also leased a modest additional facility to supplement capacity, efficiency and product development at one of our businesses with high growth opportunities. We targeted these investments within our businesses with the best opportunities to drive organic growth.

We increased focus on return on invested capital (“ROIC”) in 2014 and introduced an ROIC metric into our long-term incentive compensation programs. This increased focus contributed to a significant year-over-year improvement in ROIC, which we define as net operating profit after taxes divided by average invested capital.

Diversifying Customer Base

Historically, 60% or more of our domestic net sales were derived from municipal and other government markets.

While municipalities will continue to be important customers, our organic and acquisition growth initiatives generally will focus on expanding our industrial customer base. Industrial markets offer more promise to further improve our operating margins while reducing earnings volatility over the longer term.

In 2014, U.S. commercial and industrial orders grew by \$42.4 million, or 18%, compared with their respective prior year levels.

During 2014, we formed a number of strategic partnerships aimed at diversifying into new or growth markets, including expanding an existing dealer relationship to pursue industrial growth opportunities for our Fire Rescue Group in the United States.

We have also continued to focus on new product development in 2014 and are encouraged that these efforts will provide additional opportunities to further diversify our customer base.

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Results of Operations

The following table summarizes our Consolidated Statements of Operations and illustrates the key financial indicators used to assess our consolidated financial results:

(\$ in millions, except per share data)	For the Years Ended December 31,			Change	
	2014	2013	2012	2014 vs. 2013	2013 vs. 2012
Net sales	\$918.5	\$851.3	\$803.2	\$67.2	\$48.1
Cost of sales	685.2	646.2	613.4	39.0	32.8
Gross profit	233.3	205.1	189.8	28.2	15.3
Selling, engineering, general and administrative expenses	140.7	133.8	136.9	6.9	(3.1)
Restructuring	—	0.7	1.4	(0.7)	(0.7)
Operating income	92.6	70.6	51.5	22.0	19.1
Interest expense	3.8	8.8	21.4	(5.0)	(12.6)
Debt settlement charges	—	8.7	3.5	(8.7)	5.2
Other expense, net	1.5	0.1	0.7	1.4	(0.6)
Income before income taxes	87.3	53.0	25.9	34.3	27.1
Income tax (expense) benefit	(24.3)	107.2	(3.9)	(131.5)	111.1
Income from continuing operations	63.0	160.2	22.0	(97.2)	138.2
Gain (loss) from discontinued operations and disposal, net of tax	0.7	(0.2)	(49.5)	0.9	49.3
Net income (loss)	\$63.7	\$160.0	\$(27.5)	\$(96.3)	\$187.5
Other data:					
Operating margin	10.1	% 8.3	% 6.4	% 1.8	% 1.9
Diluted earnings per share — Continuing operations	\$0.99	\$2.53	\$0.35	\$(1.54)	\$2.18
Total orders	957.4	836.8	826.3	120.6	10.5
Backlog	328.2	305.8	318.4	22.4	(12.6)
Depreciation and amortization	15.0	14.2	13.2	0.8	1.0

Year ended December 31, 2014 vs. year ended December 31, 2013

Net sales

Net sales increased by \$67.2 million, or 8%, for the year ended December 31, 2014 compared to the prior year, primarily driven by our Environmental Solutions Group, which reported a net sales improvement of \$62.6 million, or 13%, which primarily resulted from a \$41.1 million increase in sales volumes, improved pricing strategies and favorable product mix linked to higher sales to industrial customers. Vacuum truck sales increased by \$22.6 million, largely resulting from increased production throughput and productivity gains within our manufacturing facilities that have resulted in improved sales volumes of hydro-excavation products. Street sweeper sales were also \$21.5 million higher than prior year, and are reflective of improved municipal demand. There was also improvement in both the Safety and Security Systems and Fire Rescue groups, where net sales increased by \$3.6 million, or 2%, and \$1.0 million, or 1%, respectively.

Cost of sales

For the year ended December 31, 2014, cost of sales increased by \$39.0 million, or 6%, compared to the prior year, largely driven by an increase of \$33.8 million, or 9%, within the Environmental Solutions Group associated with higher unit volumes. Cost of sales were also up year over year within our Fire Rescue Group, which reported an increase of \$5.5 million, or 5%. These increases were partially offset by a \$0.3 million reduction within our Safety and Security Group.

Gross profit

For the year ended December 31, 2014, gross profit increased by \$28.2 million compared to the prior year. Gross margin for the year ended December 31, 2014 was 25.4%, up from 24.1% in the prior year. The improvement in gross margin was primarily the result of increased volumes that leveraged production capacity, favorable product mix associated with higher sales to industrial customers and productivity and facilities utilization improvements within our Environmental Solutions Group. Gross

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margin within our Safety and Security Systems Group improved by 110 basis points in comparison to the prior year, which included inefficiencies associated with an ERP implementation. Partially offsetting these improvements was a deterioration in gross margin within our Fire Rescue Group, which resulted from unfavorable product mix, including a higher concentration of sales to lower-margin geographic regions, and manufacturing inefficiencies.

Selling, engineering, general and administrative expenses

Selling, engineering, general and administrative (“SEG&A”) expenses increased by \$6.9 million for the year ended December 31, 2014 compared to the prior year, primarily due to a \$5.1 million increase within the Environmental Solutions Group, resulting from higher employee incentive and stock-compensation expense, product liability costs and consulting expenses. In addition, SEG&A expenses at Corporate were \$2.3 million higher than prior year, largely due to increased employee incentive and stock-compensation expense. These increases were partially offset by lower expenses of \$1.1 million within the Safety and Security Systems Group, primarily due to lower pension expense and staffing costs.

Restructuring

There were no restructuring charges in 2014.

In 2013, the Company recorded restructuring charges of \$1.2 million and \$0.3 million related to severance costs in the Safety and Security Systems Group and Corporate, respectively. These charges were partially offset by the reversal of \$0.6 million of Corporate restructuring costs that were originally recognized in 2012, after it was determined that the costs were not required.

For further discussion, see Note 14 – Restructuring to the accompanying consolidated financial statements.

Operating income

Operating income for the year ended December 31, 2014 increased by \$22.0 million, or 31%, when compared to the prior year. The increases were primarily attributable to improved operating leverage and increased volumes within our Environmental Solutions Group, which contributed to a \$28.8 million improvement in gross margin, and improved performance in our Safety and Security Systems Group. These increases were offset by increased SEG&A expenses within Corporate and the Environmental Solutions Group, and a \$5.1 million decrease in operating income within our Fire Rescue Group, primarily due to the \$4.5 million reduction in gross profit. Operating income for the year ended December 31, 2014 was also favorably impacted by the \$0.7 million reduction in restructuring charges.

Interest expense

Compared with the prior year, interest expense for the year ended December 31, 2014 decreased by \$5.0 million, or 57%, primarily due to significant reductions in debt levels. For the year ended December 31, 2014, interest expense further benefited from lower interest rates on borrowings that resulted from our March 2013 debt refinancing. For further discussion, see Note 5 – Debt to the accompanying consolidated financial statements.

Debt settlement charges

There were no debt settlement charges in 2014.

In the first quarter of 2013, the Company recorded \$8.7 million of charges related to the termination of our prior debt facilities. The expenses included the write-off of deferred financing fees of \$4.5 million and a prepayment penalty of \$4.2 million.

Other expense, net

Other expense, net totaled \$1.5 million for the year ended December 31, 2014, as compared to \$0.1 million in the prior year. The increase was largely driven by higher realized losses from foreign currency transactions.

Income tax (expense) benefit

The Company recognized income tax expense of \$24.3 million for the year ended December 31, 2014, compared to an income tax benefit of \$107.2 million in the prior year. The Company’s effective tax rate for the year ended December 31, 2014 was 27.8%, compared to (202.3)% in 2013.

In the second quarter of 2013, it was determined that \$102.4 million of valuation allowance previously recorded against U.S. deferred tax assets could be released. This evaluation was based on a qualitative and quantitative analysis of current and expected domestic earnings, industry and market trends, tax planning strategies and general business

risks, that resulted in a more likely than not conclusion of being able to realize a significant portion of our U.S. deferred tax assets.

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Upon releasing the significant portion of our valuation allowance on U.S. deferred tax assets in the second quarter of 2013, a valuation allowance of \$10.4 million was maintained in accordance with the guidance provided in Accounting Standards Codification (“ASC”) 740-270-25-4 and was released through the effective tax rate as domestic income was recognized throughout the course of the year ended December 31, 2013. An additional \$3.4 million reduction in deferred tax valuation allowances was recorded as a discrete item in the year ended December 31, 2013.

In the fourth quarter of 2013, the Company also executed a tax planning strategy that resulted in the release of \$6.7 million of valuation allowance that was previously recorded against the Company’s foreign tax credits, which would have begun to expire in 2015.

As the Company no longer maintains a valuation allowance against most domestic tax assets, tax expense has been recognized on domestic earnings, as well as non-U.S. earnings, in the year ended December 31, 2014.

The Company’s effective tax rate for the year ended December 31, 2014 was also favorably impacted by a \$1.0 million net reduction in unrecognized tax benefits, primarily related to the completion of an IRS audit, a \$3.5 million release of valuation allowance that was previously recorded against the Company’s Spanish deferred tax assets and a \$0.4 million benefit attributable to a change in the enacted tax rate in Spain.

For further discussion, see Note 6 – Income Taxes to the accompanying consolidated financial statements.

Income from continuing operations

Income from continuing operations was \$63.0 million for the year ended December 31, 2014, compared with \$160.2 million in the prior year. The lower income is largely due to increased income tax expense, partially offset by improved operating income and reduced interest expense, as further explained above. Income from continuing operations for the year ended December 31, 2014, was also positively impacted by the absence of \$8.7 million of debt settlement charges incurred in connection with our prior year debt refinancing.

Loss from discontinued operations and disposal, net of tax

For the year ended December 31, 2014, the Company recorded a net gain from discontinued operations and disposal of \$0.7 million. The gain primarily relates to adjustments of estimated product liability obligations of previously discontinued businesses, resulting from updated actuarial valuations.

For the year ended December 31, 2013, a loss from discontinued operations and disposals, net of tax of \$0.2 million was recorded. The loss includes a charge related to special termination benefits provided to certain employees of the legacy FSTech Group businesses that were retained by the Company in order to assist with transitional operations through the end of the third quarter of 2013 as well as certain adjustments relating to assets of other previously discontinued operations.

For further discussion of the loss from discontinued operations and disposals, see Note 15 – Discontinued Operations to the accompanying consolidated financial statements.

Year ended December 31, 2013 vs. year ended December 31, 2012

Net sales

Net sales increased by \$48.1 million for the year ended December 31, 2013. In our Environmental Solutions Group, higher vacuum truck and sewer cleaner shipments of \$5.9 million and \$30.4 million, respectively, contributed to a \$46.2 million net sales increase. The net sales improvement also included the effects of higher shipments of other product lines and improved pricing. Our vacuum truck and municipal sewer cleaner sales continue to exceed prior-year levels largely due to increased production capacity. Net sales in our Fire Rescue Group improved by \$3.3 million, or 2%, benefiting from the effects of favorable foreign currency impacts and favorable product mix, offset by a reduction in unit volumes. Net sales within our Safety and Security Systems Group were down \$1.4 million compared to the prior year.

Cost of sales

Cost of sales increased by \$32.8 million for the year ended December 31, 2013. The increase was predominantly attributable to Environmental Solutions Group, where cost of sales increased by \$28.6 million, largely due to increased unit volumes of \$31.1 million, and \$0.8 million of additional warranty expense, partially offset by favorable pricing and product mix impacts of \$3.4 million. Cost of sales in our Safety and Security Systems Group increased by

\$1.6 million, despite slightly lower sales, primarily due to costs associated with implementation of new ERP software within the U.S. operations, including inefficiencies experienced during the implementation. In our Fire Rescue Group, cost of sales were up \$2.6 million, primarily due to

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unfavorable foreign currency impacts of \$3.5 million and product mix of \$0.4 million, offset by a \$1.3 million reduction in cost of sales due to lower unit volumes.

Gross profit

Gross profit increased by \$15.3 million, or 8%, for the year ended December 31, 2013 and was positively impacted by increased volumes and improved pricing within our Environmental Solutions Group. The increase in gross profit was partially offset by higher information technology costs, as well as lower fixed overhead absorption, at our Safety and Security Systems Group. Gross profit margin in 2013 increased by 0.5% to 24.1% largely due to the factors noted above.

Selling, engineering, general and administrative expenses

SEG&A expenses decreased by \$3.1 million for the year ended December 31, 2013. The overall decrease is primarily due to a \$3.7 million reduction in Corporate expenses, largely due to reduced employee incentive compensation expense and lower medical expenses, and a \$1.3 million decline in SEG&A expenses in our Safety and Security Systems Group, offset by increases of \$1.3 million and \$0.6 million at our Environmental Solutions Group and Fire Rescue Group, respectively.

Restructuring Charges

In 2013, the Company recorded expenses of \$1.2 million and \$0.3 million related to severance costs in the Safety and Security Systems Group and Corporate, respectively.

In 2012, the Company recorded expenses of \$0.9 million and \$0.6 million related to severance costs in the Safety and Security Systems Group and Corporate, respectively. Based upon further developments in 2013, it was determined that the \$0.6 million of Corporate restructuring costs were not required and this charge was reversed in the year ended December 31, 2013.

Operating income

Operating income increased by \$19.1 million, or 37%, for the year ended December 31, 2013. The increase was largely a result of improved gross profit within our Environmental Solutions Group driven by improved product pricing and increased volumes, partially offset by unfavorable gross profit impacts at our Safety and Security Systems Group discussed above, including the effects of an ERP system implementation in the second quarter of 2013.

Interest expense

Interest expense decreased by \$12.6 million, or 59%, for the year ended December 31, 2013. The decrease was primarily due to a significant reduction in total debt, coupled with a reduction in interest rates resulting from the Company's March 2013 debt refinancing.

Debt settlement charges

In the first quarter of 2013, the Company recorded \$8.7 million of charges related to the termination of our prior debt facilities. The expenses included the write-off of deferred financing fees of \$4.5 million and a prepayment penalty of \$4.2 million.

In the first quarter of 2012, the Company recorded \$1.6 million of charges related to the termination of its prior debt agreements. The expenses included \$1.0 million of make-whole interest payments and a write-off of deferred financing fees of \$0.6 million. In the third quarter of 2012, the Company expensed an additional \$1.9 million of deferred financing fees relating to the \$75.0 million reduction of our then existing debt facilities.

Other expense, net

Other expense, net totaled \$0.1 million for the year ended December 31, 2013 as compared to \$0.7 million in the prior year, and includes realized losses from foreign currency transactions and derivative contracts.

Income tax (expense) benefit

The Company recognized an income tax benefit of \$107.2 million and expense of \$3.9 million for the years ended December 31, 2013 and 2012, respectively. The Company's effective tax rate was (202.3)% and 15.1% for the years ended December 31, 2013 and 2012, respectively.

In the second quarter of 2013, it was determined that \$102.4 million of our valuation allowance on U.S. deferred tax assets could be released. This evaluation was based on a qualitative and quantitative analysis of current and expected

domestic

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earnings, industry and market trends, tax planning strategies and general business risks, that resulted in a more likely than not conclusion of being able to realize a significant portion of our U.S. deferred tax assets.

Upon releasing the significant portion of our valuation allowance on U.S. deferred tax assets in the second quarter, a valuation allowance of \$10.4 million was maintained in accordance with the guidance provided in ASC 740-270-25-4 and was released through the effective tax rate as domestic income was recognized throughout the course of the year. An additional \$3.4 million reduction in deferred tax valuation allowances was recorded as a discrete item in the year ended December 31, 2013.

In the fourth quarter of 2013, the Company also executed a tax planning strategy that resulted in the release of \$6.7 million of valuation allowance that was previously recorded against the Company's foreign tax credits, which would have begun to expire in 2015.

The Company also recorded a tax benefit of \$0.8 million associated with a reduction in the tax rate in Finland that was enacted during the fourth quarter of 2013.

Offsetting the benefits associated with the aforementioned releases of the valuation allowance and the tax rate change in Finland during the year ended December 31, 2013 was tax expense on non-U.S. earnings as well as \$0.8 million of tax expense associated with a change in the tax rate in the United Kingdom that was enacted during the third quarter of 2013.

Income from continuing operations

Income from continuing operations was \$160.2 million for the year ended December 31, 2013 as compared to \$22.0 million in the prior year. As indicated above, our results included the release of a significant portion of the valuation allowance on our U.S. deferred tax assets. Income before taxes was positively impacted by improvements in net sales, gross profit and operating efficiencies, as well as a \$12.6 million reduction in interest expense. These improvements were partially offset by higher debt settlement charges of \$5.2 million in connection with our March 2013 refinancing.

Loss from discontinued operations and disposal, net of tax

For the year ended December 31, 2013, a loss from discontinued operations and disposals, net of tax of \$0.2 million was recorded. The loss includes a charge related to special termination benefits provided to certain employees of the legacy FSTech Group businesses that were retained by the Company in order to assist with transitional operations through the end of the third quarter of 2013 as well as certain adjustments relating to assets of other previously discontinued operations.

For the year ended December 31, 2012, the loss from discontinued operations and disposals, net of tax largely reflected the operating losses, as well as the loss on disposal, of the FSTech Group.

Orders & Backlog

(\$ in millions)	2014	2013	2012		
Total orders	\$957.4	\$836.8	\$826.3		
Change in orders year-over-year	14.4	% 1.3	% (0.6))%	
Change in U.S. municipal and government orders year-over-year	20.7	% 1.7	% 7.7)%	
Change in U.S. industrial and commercial orders year-over-year	18.3	% 8.6	% (7.2))%	
Change in non-U.S. orders year-over-year	5.2	% (4.0))% (3.0))%	
Backlog	\$328.2	\$305.8	\$318.4		
Change in backlog year-over-year	7.3	% (4.0))% 7.8)%	

Year ended December 31, 2014 vs. year ended December 31, 2013

For the year ended December 31, 2014, total orders of \$957.4 million increased by \$120.6 million, or 14%, compared to the prior year, largely due to higher demand for street sweepers, vacuum trucks and sewer cleaners which led to an \$85.9 million increase in orders within our Environmental Solutions Group. Our Fire Rescue and Safety and Security Systems groups also reported improved orders of \$19.2 million and \$15.5 million, respectively.

U.S. municipal and governmental orders increased by 21%, primarily due to higher street sweeper orders of \$41.5 million, which were positively impacted by solid municipal demand and an influx of fleet orders, as well as the effects of an improved pricing strategy. Further contributing to the increase in U.S. municipal and governmental orders was

an \$11.2 million increase in sewer cleaner orders and a \$3.6 million improvement in orders of outdoor warning and other public notification systems.

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U.S. industrial orders increased by 18%, primarily as a result of improved orders within our Environmental Solutions Group, including increased orders of \$19.8 million, \$6.3 million and \$4.3 million for vacuum trucks, waterblasters and used equipment, respectively. Our Fire Rescue Group also reported a \$12.1 million improvement in U.S. industrial orders during 2014.

Non-U.S. orders increased by 5%, primarily due to higher integrated systems orders and increased demand in international public safety markets within our Safety and Security Systems Group. Further contributing to the increase were higher non-U.S. orders of aerial lifts within our Fire Rescue Group.

Year ended December 31, 2013 vs. year ended December 31, 2012

For the year ended December 31, 2013, total orders of \$836.8 million increased by 1% compared to the prior year, largely due to improved orders for street sweepers and vacuum trucks within our Environmental Solutions Group. U.S. municipal and governmental orders increased by 2%, primarily resulting from increases in street sweeper orders of \$12.6 million, which were positively impacted by a shift in product mix with increased orders of higher-priced units and the effects of an improved pricing strategy, as well as a \$4.9 million increase in orders within the police market attributable to higher new vehicle registrations in the market coupled with increased market share. Partially offsetting these increases was a \$9.2 million decrease in sewer cleaner orders. As a result of capacity constraints, in 2012 the Company experienced accelerated placement of orders for sewer cleaners by customers seeking to assure availability of these products, which resulted in an inflated backlog. As the Company expanded capacity at the locations most affected by these advanced placement of orders, a return to more normal ordering patterns occurred, which resulted in a lower backlog. Orders for outdoor warning systems in our Safety and Security Systems Group were also down \$4.0 million due to a decrease in military-market orders.

U.S. industrial orders increased by 9%, primarily as a result of improved orders of \$7.3 million for vacuum trucks, \$5.1 million for waterblasters and \$4.7 million for used equipment.

Non-U.S. orders decreased by 4%, primarily due to lower demand in the Asia Pacific region for our fire-lift products and decreased orders for international mining products due to slowing demand from our coal-mining markets.

Backlog

Backlog was \$328.2 million at December 31, 2014 as compared to \$305.8 million at December 31, 2013. The increase was largely due to improved orders for street sweepers, including significant fleet orders, as well as an increased level of orders received in the fourth quarter of 2014 within our Safety and Security Systems Group. This was partially offset by decreasing backlog for sewer cleaners and vacuum trucks as a result of measures taken to increase production capacity to manage sewer cleaner backlog and shorten lead times for vacuum trucks, and reduced U.S. dollar value of backlog of our fire-lift products due to an unfavorable foreign currency impact of \$10.0 million.

Environmental Solutions

The following table summarizes the Environmental Solutions Group's operating results as of and for the years ended December 31, 2014, 2013 and 2012:

(\$ in millions)	For the Years Ended December 31,			Change		
	2014	2013	2012	2014 vs. 2013	2013 vs. 2012	
Net sales	\$536.6	\$474.0	\$427.8	\$62.6	\$46.2	
Operating income	81.9	58.2	42.0	23.7	16.2	
Other data:						
Operating margin	15.3	% 12.3	% 9.8	% 3.0	% 2.5	%
Total orders	\$555.6	\$469.7	\$447.9	\$85.9	\$21.8	
Backlog	218.3	199.3	203.6	19.0	(4.3))
Depreciation and amortization	6.8	6.1	5.4	0.7	0.7	

Year ended December 31, 2014 vs. year ended December 31, 2013

Total orders increased by \$85.9 million, or 18%, for the year ended December 31, 2014. U.S. orders increased \$86.5 million, or 23%, largely due to an increase in orders for street sweepers of \$37.4 million, vacuum trucks of \$15.9

million, sewer cleaners of \$15.0 million and waterblasters of \$6.3 million. Street sweepers and sewer cleaners orders benefited from solid municipal demand and an influx of fleet orders, including significant orders from large municipalities.

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Improved vacuum truck orders are inclusive of hydro-excavation products with applications in industrial markets. Non-U.S. orders decreased by \$0.6 million for the year ended December 31, 2014. Compared with the prior year, orders for street sweepers and sewer cleaners in Canada were \$7.0 million lower, while orders for sewer cleaners in the Middle East were also down \$3.3 million. Partially offsetting these decreases were increased orders of \$8.8 million for street sweepers in the Middle East, which were largely driven by a large fleet order during the second quarter of 2014.

Net sales increased by \$62.6 million, or 13%, for the year ended December 31, 2014. U.S. sales increased \$43.1 million, primarily driven by increased shipments of vacuum trucks and street sweepers of \$25.5 million and \$10.4 million, respectively. Vacuum truck shipments exceeded prior-year levels, largely due to increased production throughput and productivity improvements within our manufacturing facilities which have facilitated increased sales of hydro-excavator products. Higher sales of street sweepers reflected improving municipal demand. Non-U.S. sales increased \$19.5 million, or 25%, primarily due to increased street sweeper sales to the Middle East and Canada, and increased sewer cleaner shipments to Mexico and Canada.

Cost of sales increased by \$33.8 million for the year ended December 31, 2014. The increase was primarily due to higher sales volumes, which resulted in a \$31.5 million increase in cost of sales, as well as increased costs associated with product mix relating to higher-content products within our industrial markets, partially offset by productivity improvements. Gross margin for the year ended December 31, 2014 improved to 23.3% from 20.3% in the prior year largely due to favorable mix associated with higher sales to industrial customers, including increased shipments of hydro-excavation products. Gross margin further benefited from favorable pricing, improved productivity and manufacturing facilities utilization improvements.

SEG&A expenses increased by \$5.1 million for the year ended December 31, 2014. The higher SEG&A expenses were largely the result of increased employee incentive and stock-based compensation expense, product liability costs and consulting expenses of \$1.9 million, \$1.6 million and \$1.1 million, respectively.

Operating income increased by \$23.7 million, or 41%, for the year ended December 31, 2014. The increase in operating income was a result of higher gross profit of \$28.8 million, primarily attributable to operating leverage and favorable product mix, offset by a \$5.1 million increase in SEG&A expenses.

Backlog was \$218.3 million at December 31, 2014, up 10% compared to \$199.3 million at December 31, 2013.

Backlog for street sweepers increased by \$30.3 million, largely as a result of significant fleet orders, while backlog for sewer cleaners and vacuum trucks declined by \$12.1 million, primarily as a result of measures taken to increase production capacity to manage backlog and shorten lead times for sewer cleaners and vacuum trucks.

Year ended December 31, 2013 vs. year ended December 31, 2012

Total orders increased by \$21.8 million for the year ended December 31, 2013. U.S. orders increased \$23.2 million largely due to an increase in street sweeper orders of \$13.7 million. Street sweeper orders were positively impacted by a shift in product mix with increased orders of higher-priced units, as well as the effects of an improved pricing strategy. U.S. orders further benefited from increased orders of vacuum trucks of \$7.3 million, waterblasters of \$5.1 million and used equipment of \$4.7 million. Partially offsetting these increases were decreased sewer cleaner orders of \$9.2 million. The Company experienced a return to more normal ordering patterns as production capacity for sewer cleaners and vacuum trucks has increased. Non-U.S. orders decreased by \$1.4 million compared to the prior year, which benefited from a significant order for vacuum trucks from a customer in the Asia Pacific region. Improved export orders fo