

FEDERAL SIGNAL CORP /DE/  
Form 10-K  
March 14, 2012  
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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**Form 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)**

**OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2011**

**Commission File Number 1-6003**

**FEDERAL SIGNAL CORPORATION**

*(Exact name of the Company as specified in its charter)*

**Delaware**  
*(State or other jurisdiction of  
incorporation or organization)*

**1415 West 22nd Street,  
Oak Brook, Illinois**  
*(Address of principal executive offices)*

**36-1063330**  
*(I.R.S. Employer  
Identification No.)*

**60523**  
*(Zip Code)*

**The Company's telephone number, including area code**

**(630) 954-2000**

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

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
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

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

Indicate by check mark whether the Company (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 Company 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 Web site, 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 the Company'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. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark if the registrant is a shell company, in Rule 12 b-2 of the Exchange Act. Yes  No

State the aggregate market value of voting stock held by nonaffiliates of the Company as of June 30, 2011: Common stock, \$1.00 par value \$395,450,956

Indicate the number of shares outstanding of each of the Company's classes of common stock, as of February 29, 2012: Common stock, \$1.00 par value 62,184,389 shares

### Documents Incorporated By Reference

Portions of the definitive proxy statement for the 2012 Annual Meeting of Shareholders are incorporated by reference in Part III.

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This Form 10-K and other reports filed by Federal Signal Corporation and subsidiaries ( the Company ) with the Securities and Exchange Commission and comments made by management may contain the words such as may, will, believe, expect, anticipate, intend, plan, estimate and objective or the negative thereof or similar terminology 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 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, government and commercial markets; domestic and foreign governmental policy changes; 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 new and enhanced products generating sufficient revenues to justify research and development expenses; our incurrence of restructuring and impairment changes 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; disruptions in the supply of parts and components from suppliers and subcontractors; attraction and retention of key employees; 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 ( NOL ) carryovers to reduce future tax payments; charges related to goodwill and other long-lived intangible assets; ability to expand our business through successful future acquisitions; unknown or unexpected contingencies in our existing 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*, in the Company s Annual Report on Form 10-K, Form 10-Qs and other filings with the SEC. 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 position 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.

## **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. Federal Signal s portfolio of products includes safety and security systems, vacuum loader vehicles, street sweepers, truck mounted aerial platforms, waterblasters, and technology and solutions for intelligent transportation systems. Federal Signal Corporation and its subsidiaries (referred to collectively as the Company or Company herein, unless context otherwise indicates) operate 19 manufacturing facilities in six countries around the world serving customers in approximately 100 countries in all regions of the world.

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### *Narrative Description of Business*

Products manufactured and services rendered by the Company are divided into four major operating segments: Safety and Security Systems, Fire Rescue, Environmental Solutions and Federal Signal Technologies. 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.

Financial information (net sales, operating income (loss), depreciation and amortization, capital expenditures and identifiable assets) concerning the Company's four operating segments as of December 31, 2011 and 2010, and for each of the three years in the period ended, December 31, 2011 is included in Note 16 to the consolidated financial statements included under Item 8 of Part II of this Form 10-K and is incorporated herein by reference. Information regarding the Company's discontinued operations is included in Note 13 to the consolidated financial statements included under Item 8 of Part II of this Form 10-K and is incorporated herein by reference.

### *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, industrial communications, and command and municipal networked security. Specific products include lightbars and sirens, public warning sirens and public safety software. Products are sold under the Federal Signal, Federal Signal VAMA, Target Tech<sup>®</sup> and Victor brand names. The Group operates manufacturing facilities in North America, 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, electric utility and industrial uses. End customers include fire departments, industrial fire services, electric utilities, 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 complete offering to its customer base. The Group manufactures in Finland and sells globally under the Bronto Skylift<sup>®</sup> brand name.

### *Environmental Solutions Group*

Our Environmental Solutions Group is a leading manufacturer and supplier of a full range of street sweeper and vacuum trucks and high-performance waterblasting equipment for municipal and industrial customers. We also manufacture products for the newer markets of hydro-excavation, glycol recovery and surface cleaning for utility and industrial customers. Products are sold under the Elgin<sup>®</sup>, Vactor<sup>®</sup>, Guzzler<sup>®</sup> and Jetstream brand names. The Group primarily manufactures its vehicles and equipment in the United States.

Under the Elgin brand name, the Company sells the 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 municipal combination catch basin/sewer cleaning vacuum trucks. Guzzler is a leader in industrial vacuum loaders that clean up 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 is increasingly engaged in the sale of parts and tooling, service and repair, equipment rentals and training as part of a complete offering to its customer base.

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### *Federal Signal Technologies Group*

Our Federal Signal Technologies Group ( FSTech ) is a provider of technologies and solutions to the intelligent transportation systems and public safety markets and other applications. These products and solutions provide end users with the tools needed to automate data collection and analysis, transaction processing and asset tracking. FSTech provides technology platforms and services to customers in the areas of radio frequency identification systems ( RFID ), transaction processing, vehicle classification, electronic toll collection, automated license plate recognition ( ALPR ), electronic vehicle registration, parking and access control, cashless payment solutions, congestion charging, traffic management, site security solutions and supply chain systems. Products are sold under PIPS, Idris<sup>®</sup>, Sirit, VESystems and Federal APD brand names. FSTech operates manufacturing facilities in North America and Europe.

### *Financial Services*

The Company ceased entering into new financial services activities in 2008 and sold 92% of its municipal lease portfolio during 2008. At December 31, 2011, the remaining leases and floor plan receivable balances, net of reserves, of \$1.0 million were included on the balance sheet as a component of assets of discontinued operations, net.

### *Marketing and Distribution*

The Safety and Security Systems Group companies sell to industrial customers through approximately 2,000 wholesalers/distributors who are supported by Company sales personnel and/or independent manufacturers' representatives. Products are also sold to municipal and governmental customers through more than 1,900 active independent distributors as well as through original equipment manufacturers and direct sales. International sales are made through the Group's independent foreign distributors or on a direct basis. The Company also sells comprehensive integrated warning and interoperable communications through a combination of a direct sales force and distributors.

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

The Federal Signal Technologies Group companies sell RFID, ALPR, and Back Office management systems and products to municipal and governmental tollway agencies and tollway system integrators. These systems, products and services are sold domestically through a combination of a direct sales force and independent agents. Internationally these systems, products and services are sold through a network of independent representatives. Parking products and systems are sold to municipal agencies, hospitals, universities and private parking operators through an independent network of 110 domestic and international distributors.

### *Customers and Backlog*

Approximately 29%, 34% and 37% of the Company's total 2011 orders were to U.S. municipal and government customers, U.S. commercial and industrial customers, and non-U.S. customers, respectively. No single customer accounted for 10% or more of the Company's business.

During 2011, the Company's U.S. municipal and government orders increased 24% from 2010, compared to a 2% increase in these orders in 2010 as compared to 2009, as the U.S. and global markets continued their recovery from the economic recession. The U.S. commercial and industrial orders increased 57% from 2010, compared to an increase of 67% in these orders in 2010 compared to 2009.

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Approximately 70% of orders to non-U.S. customers flow to municipalities and governments while approximately 30% flow to industrial and commercial customers. The non-U.S. municipal and government segment is essentially similar to the U.S. municipal and government segment in that it is largely dependent on tax revenues to support spending. Of the non-U.S. orders, the Company typically sells approximately 30% of its products in Europe, 16% in Canada, 16% in the Middle East and Africa, 16% in China and less than 10% in any other particular region.

The Company's backlog totaled \$426 million at December 31, 2011 compared to \$217 million at December 31, 2010. The 2011 backlog includes several multi-year contracts for the FSTech Group. Backlogs vary by Group due to the nature of the Company's products and buying patterns of its customers. Safety and Security Systems typically maintains an average backlog of two months of shipments, Environmental Solutions maintains an average backlog of three to four months of shipments, Fire Rescue normally maintains an average backlog of five months of shipments, and FSTech maintains a two to three month average backlog, excluding service and maintenance contracts that generally cover a period of more than one year.

### ***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 the risks of availability, price and quality, 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 a few 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 of these raw materials that could impact their price, quality and availability in sufficient quantities.

### ***Competition***

Within specific product categories and domestic markets, the Safety and Security Systems Group companies are among the leaders with three to four strong 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 with all of the Group's products, and purchase decisions are made based on competitive bidding, price, reputation, performance and servicing.

Within the Fire Rescue Group, Bronto Skylift is established as the global leader for aerial platforms used in fire fighting, rescue and industrial markets. Competitor offerings can include trailer mounted articulated aerials and traditional fire trucks with ladders. Bronto competes on product performance where it holds technological advantages in its designs, materials and production processes.

Within the Environmental Solutions Group, Elgin is recognized as the market leader among several domestic sweeper competitors and differentiates itself primarily on product performance. Vactor and Guzzler both maintain the 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 FSTech, the RFID and Back Office product lines are recognized as leading innovators. They maintain a top tier leadership position amongst three to four major competitors and ancillary market participants

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depending on geography. The ALPR product line maintains a domestic market leadership position by capitalizing on product technical leadership and application innovation. The Parking product line competes in a crowded, competitive market and leverages its distribution network and flexible product offerings to compete as one of the top tier suppliers.

### ***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 approximately \$20 million in 2011, \$19 million in 2010, and \$19 million in 2009.

### ***Patents and Trademarks***

The Company owns a number of patents and possesses rights under others to which it attaches importance, but 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 that it believes are important in connection with the identification of its 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 2,900 people in its businesses at the close of 2011. At December 31, 2011, the Company's U.S. hourly workers accounted for approximately 39% of its total workforce. Approximately 26% of the Company's U.S. hourly workers were represented by unions at December 31, 2011. On April 30, 2012, the current collective bargaining agreement with the International Brotherhood of Electrical Workers at our University Park, Illinois facility expires. The Company believes relations with its employees to be 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 2011 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 its future operations.

The Company retained a consultant to conduct an environmental risk assessment at its Pearland, Texas facility. The facility, which was previously used by the Company's discontinued Pauluhn business, manufactured marine, offshore and industrial lighting products. While the Company has not completed its risk assessment analysis, it appears probable the site will require remediation. As of December 31, 2011, \$2.2 million of reserves related to the environmental remediation are included in liabilities of discontinued operations on the consolidated balance sheet. The Company's estimate may change in the near term 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 liquidity.

### ***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 calendar quarter compared to other quarters as a result of these influences.

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### ***Additional Information***

The Company makes its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, other reports and information filed with the SEC and amendments to those reports available, free of charge, through its Internet website (<http://www.federalsignal.com>) as soon as reasonably practical after it electronically files or furnishes such materials to the SEC. All of the Company's filings may be read or copied at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, DC 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet website (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically.

### **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, among other things, filings with the Securities and Exchange Commission (SEC), including this Annual Report on Form 10-K, press releases made by us and in 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, among other things, the risks described below.

*Our financial results are subject to considerable cyclicity.*

In 2011, we generated approximately 63% of our sales in the United States. Our ability to be profitable depends heavily on varying conditions in the United States government and municipal markets and the overall United States 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 governmental 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 United States government and municipalities depend heavily on tax revenues as a source of their spending and accordingly, there is a historical correlation of a one or two year lag between the overall strength of the United States economy and our sales to the United States government and municipalities. Therefore, downturns in the United States 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 foreign economic and political uncertainties.*

Our business is subject to fluctuations in demand and changing international economic and political conditions that are beyond our control. In 2011, 37% of our sales were generated outside the United States and we expect a significant portion of our revenues to come from international sales for the foreseeable future. Operating in the international marketplace exposes us to a number of risks, including abrupt changes in foreign government policies and regulations, restrictive domestic and international trade regulations, U.S. laws applicable to foreign operations, such as the Foreign Corrupt Practices Act (FCPA), the UK Bribery Act, political, religious and economic instability, local labor market conditions, the imposition of foreign tariffs and other trade barriers and, in some cases, international hostilities. To the extent that our international operations are affected by unexpected and adverse foreign economic and political conditions, we may experience project disruptions and losses which could significantly reduce our revenues and profits. In addition, penalties for non-compliance with laws applicable to international business and trade, such as FCPA, could negatively impact our business.

Some of our contracts are denominated in foreign currencies, which results in additional risk of fluctuating currency values and exchange rates, hard currency shortages and controls on currency exchange. Changes in the

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value of foreign currencies over the longer 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 profits.

*We are subject to a number of restrictive debt covenants.*

We recently entered into new credit facilities for a period of five years ending February 2017. The proceeds from these new credit facilities were used to refinance the majority of the Company's existing indebtedness, including the Company's secured revolving credit facility and private placement notes. Our new credit facilities contain 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 an event of default, if not waived by our lenders, our lenders may declare all amounts outstanding as due and payable. If our current lenders accelerate the maturity of our indebtedness, we may not have sufficient capital available at that time to pay the amounts due to our lenders on a timely basis. In addition, these restrictive covenants may prevent 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 the financing or to secure the 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 down-sizing 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 revenues and earnings.

*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 the cost structure.*

We continue to evaluate opportunities to restructure our business and rationalize our manufacturing operations in an effort to optimize the cost structure which could include, among other actions, additional rationalization of our manufacturing operations. These actions could result in significant charges which 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 post retirement contractual benefits and pension curtailments that could be significant. We have substantial amounts of long-lived assets, including goodwill and intangible assets, which are subject to periodic impairment analysis and review. Identifying and assessing whether impairment indicators exist, or if events or changes in circumstances have occurred, including market conditions, operating results, competition and general economic conditions, requires significant judgment. Any of the above future actions could result in charges that could have an adverse effect on our financial condition and results of operations.

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*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 the Company. 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 addition, our contracts with municipal and other governmental customers are in some cases awarded and renewed through competitive bidding. We may not be successful in obtaining or renewing these contracts, which could be harmful to our business and financial performance.

*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 notes to our consolidated financial statements. In addition, we could experience material liability or contractual damage costs due to software or service interruption in our FSTech business. We could experience material warranty or product liability costs in the future and incur significant costs to defend against these claims. We carry insurance and maintain reserves for product liability claims. However, we cannot assure that our insurance coverage will be adequate if such claims do arise, and any defense costs and liability not covered by insurance could have a material adverse impact on our results of operations and financial position. 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 or 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 which 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 business, operating results and financial condition 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.

*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 raw materials and component parts from suppliers 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 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,

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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 within a specific local market could temporarily have an adverse impact on our business within the affected market. In addition, the loss or termination of a significant number of dealers could cause difficulties in marketing and distributing our products and have an adverse effect on our business, operating results or financial condition.

*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, 2011, approximately 26% of our U.S. hourly workers are represented by labor unions and are 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 resistance in connection with the negotiation of new labor agreements or otherwise could materially adversely affect our business as well as impair our ability to implement further measures to reduce structural costs and improve production efficiencies. On April 30, 2012, the current collective bargaining agreement with the International Brotherhood of Electrical Workers at our University Park, Illinois facility expires.

*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 results of operations, liquidity or shareholders' equity. 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 68% as of December 31, 2011. Our future pension expenses and funding requirements could increase significantly due to the effect of adverse changes in the discount rate and asset levels along with a decline in the estimated return on plan assets. In addition, the Company could be legally required to make increased 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. While we believe that we are in compliance in all material respects with these laws and regulations, we

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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 ( NOL ) carryovers 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, there is no annual limitation on our ability to use U.S. federal NOLs to reduce future income taxes. However, if an ownership change as defined in Section 382 of the Internal Revenue Code of 1986, as amended, occurs with respect to our capital stock, our ability to use NOLs would be limited to specific annual amounts. Generally, an ownership change occurs if certain persons or groups increase their aggregate ownership by more than 50 percentage points of our total capital stock in a three-year period. If an ownership change occurs, our ability to use domestic NOLs to reduce taxable income is generally limited to an annual amount based on the fair market value of our stock immediately prior to the ownership change multiplied by the long-term tax-exempt interest rate. NOLs that exceed the Section 382 limitation in any year continue to be allowed as carry forwards for the remainder of the 20-year carry forward period and can be used to offset taxable income for years within the carryover period subject to the limitation in each year. Our use of new NOLs arising after the date of an ownership change would not be affected. If more than a 50% ownership change were to occur, use of our NOLs to reduce payments of federal taxable income 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 NOL carry forward periods, then we will lose the ability to apply the NOLs as offsets to future taxable income.

*An impairment in the carrying value of goodwill, trade names and other long-lived assets could negatively affect our consolidated results of operations and net worth.*

Goodwill and indefinite-lived intangible assets, such as trade names, are recorded at fair value at the time of acquisition and are not amortized, but are reviewed for impairment at least annually or more frequently if impairment indicators arise. In evaluating the potential for impairment of goodwill and trade names, we make assumptions regarding future operating performance, business trends and market and 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 and trade name recoverability. Goodwill reviews are prepared using estimates of the fair value of reporting units based on the estimated present value of future discounted cash flows. We could be required to evaluate the recoverability of goodwill or trade names 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.

We also continually evaluate whether events or circumstances have occurred that indicate the remaining estimated useful lives of its definite-lived intangible assets, excluding goodwill, and other long-lived assets may warrant revision or whether the remaining balance of such assets may not be recoverable. We use an estimate of the related undiscounted cash flow over the remaining life of the asset in measuring whether the asset is recoverable.

In the fourth quarter of 2011, the Company recognized \$14.8 million and \$7.4 million of impairment charges on goodwill and trade names, respectively, within the FSTech segment. The impairment charges are estimates and may be adjusted during the first quarter of 2012 upon completion of a detailed impairment analysis. The Company also recorded goodwill and trade name impairment charges of \$67.1 million and \$11.8 million, respectively, within the FSTech segment in 2010. An adjustment of \$1.6 million was recorded in the first quarter of 2011 to reduce the goodwill impairment charge recognized in 2010 upon completion of a detailed step

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two analysis. If the future operating performance of our reporting units is not consistent with our assumptions, we could be required to record additional non-cash impairment charges. Impairment charges could substantially affect our reported earnings in the periods such charges are recorded. As of December 31, 2011, total consolidated goodwill was approximately 42% of total consolidated assets.

*We may be unsuccessful in our future acquisitions, if any, which may have an adverse effect on our business.*

Our long-term strategy includes expanding into adjacent markets through selective acquisitions of companies, complementary products and services as well as organic growth in order to enhance our global market position and broaden our product offerings. This strategy may involve the acquisition of companies that, among other things, enable us to build on our existing strength in a market or that give us access to proprietary products and services that are strategically valuable 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 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 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

potentially losing key employees, customers and strategic partners of acquired companies.

We also may not achieve anticipated revenue and cost benefits. 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, write-offs of goodwill, and amortization expenses of other intangible assets. In addition, future acquisitions could result in dilutive issuances of equity securities.

*Businesses acquired by us may have liabilities which 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 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 business.

### **Item 1B. *Unresolved Staff Comments.***

None.

### **Item 2. *Properties.***

As of December 31, 2011, the Company utilized 12 principal manufacturing plants located throughout North America, as well as 6 in Europe, and 1 in South Africa.



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In total, the Company devoted approximately 0.9 million square feet to manufacturing and 0.6 million square feet to service, warehousing and office space as of December 31, 2011. Of the total square footage, approximately 43% is devoted to the Safety and Security Systems Group, 10% to the Fire Rescue Group, 41% to the Environmental Solutions Group, and 6% to the Federal Signal Technologies Group. Approximately 22% of the total square footage is owned by the Company with the remaining 78% being leased.

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 15 of the consolidated financial statements contained under Item 8 of Part II of this Form 10-K is incorporated herein by reference.

### **Item 4. *Mine Safety Disclosures.***

Not applicable.

## **PART II**

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

#### **(a) Market Information**

The Company's common stock is listed and traded on the New York Stock Exchange ( NYSE ) under the symbol FSS. The information concerning the Company's market price range data included in Note 19 of the consolidated financial statements contained under Item 8 of Part II of this Form 10-K is incorporated herein by reference.

#### **(b) Holders**

As of February 29, 2012, there were 2,294 holders of record of the Company's common stock.

#### **(c) Dividends**

The information concerning the Company's quarterly dividend per share data included in Note 19 of the consolidated financial statements contained under Item 8 of Part II of this Form 10-K is incorporated herein by reference. The payment of future dividends is at the discretion of the Company's Board of Directors and will depend, among other things, upon future earnings and cash flows, capital requirements, the Company's general financial condition, general business conditions and other factors.

Effective as of February 22, 2012, under the Company's new Financing Agreement, dividends shall be permitted only if the following conditions are met:

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

The Fixed Charge Ratio of the Company and its subsidiaries, as defined in the Financing Agreement, shall be, both before and after the dividend payment (on a pro forma basis), not less than 1.50 to 1.00; and

The Leverage Ratio of the Company and its subsidiaries, as defined in the Financing Agreement, shall be, both before and after the dividend payment (on a pro forma basis), less than 2.00 to 1.00.



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A complete list of terms and conditions can be found in the Financing Agreement and Credit Agreement, which have been previously filed and are incorporated by reference as exhibits to this Form 10-K.

**(d) 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.

**(e) Performance Graph**

The graph below matches Federal Signal Corporation's cumulative 5-year total shareholder return on common stock with the cumulative total returns of the Russell 2000 Index, the S&P Midcap 400, and the S&P Industrials Index. The graph tracks the performance of a \$100 investment in our common stock and in each index (with the reinvestment of all dividends) from December 31, 2006 to December 31, 2011.

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among Federal Signal Corporation, the Russell 2000 Index,  
the S&P Midcap 400 Index, and the S&P Industrials Index

\*\$100 invested on 12/31/06 in stock or index, including reinvestment of dividends.

Fiscal year ending December 31.

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	12/06	12/07	12/08	12/09	12/10	12/11
Federal Signal Corporation	100.00	71.17	53.19	40.63	47.97	29.02
Russell 2000	100.00	98.43	65.18	82.89	105.14	100.75
S&P Midcap 400	100.00	107.98	68.86	94.60	119.80	117.72
S&P Industrials	100.00	112.03	67.30	81.39	103.15	102.54

*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 of 1933, as amended, or the Securities Act of 1934, as amended, which might be incorporated into future filings in whole or part, including this Annual Report on Form 10-K, the preceding performance graph shall not be deemed incorporated by reference into any such findings.*

**Table of Contents****Item 6. Selected Financial Data.**

	2011	2010	2009	2008	2007
<b>Operating Results (\$ in millions):</b>					
Net sales	\$ 795.6	\$ 726.5	\$ 750.4	\$ 878.0	\$ 854.5
(Loss) income before income taxes	(13.3)	(88.4)	25.1	22.6	47.5
(Loss) income from continuing operations	(14.4)	(160.7)	19.8	28.7	35.3
Operating margin	0.4%	(10.6)%	4.8%	5.9%	8.1%
Return on average common shareholders' equity	(7.2)%	(33.8)%	7.5%	(25.9)%	13.1%
<b>Common Stock Data (per share):</b>					
(Loss) income from continuing operations - diluted	\$ (0.23)	\$ (2.79)	\$ 0.41	\$ 0.61	\$ 0.74
Cash dividends per share	0.00	0.24	0.24	0.24	0.24
<b>Market price range:</b>					
High	\$ 7.79	\$ 10.30	\$ 9.30	\$ 17.50	\$ 17.00
Low	3.50	4.91	3.73	5.10	10.82
Average common shares outstanding (in millions)	62.2	57.6	48.6	47.7	47.9
<b>Financial Position at Year-End (\$ in millions):</b>					
Working capital (a)	\$ 126.8	\$ 85.4	\$ 113.2	\$ 147.7	\$ 83.3
Current ratio (a)	1.9	1.4	1.7	1.8	1.4
Total assets	706.7	764.5	744.5	839.0	1,172.9
Long-term debt, net of current portion	213.1	184.4	159.7	241.2	240.7
Shareholders' equity	174.7	220.9	328.7	287.1	447.3
Debt-to-capitalization ratio (b)	56.0%	54.3%	38.0%	49.3%	39.2%
Net debt-to-capitalization ratio (c)	54.9%	47.6%	35.4%	46.1%	38.2%
<b>Other (\$ in millions):</b>					
Orders	\$ 1,013.4	\$ 742.6	\$ 638.7	\$ 859.5	\$ 919.2
Backlog	426.1	216.8	171.2	287.3	319.3
Net cash provided by operating activities	6.3	31.2	62.4	123.7	65.4
Net cash (used for) provided by investing activities	(13.8)	(108.0)	31.0	54.6	(106.6)
Net cash (used for) provided by financing activities	(45.8)	117.6	(96.5)	(166.7)	36.8
Capital expenditures	15.7	12.8	14.4	27.9	19.5
Depreciation and amortization	22.5	19.2	14.7	14.3	13.0
Employees	2,919	2,812	2,605	3,024	3,192

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

(a) Working capital: current assets less current liabilities; current ratio: current assets divided by current liabilities

(b) Total debt divided by the sum of total debt plus equity. Total debt includes capital lease obligations.

(c) Total debt less cash and cash equivalents divided by equity plus total debt less cash and cash equivalents

Loss (income) before income taxes includes restructuring costs of \$5.0 million and \$1.5 million for the years ended December 31, 2010 and 2009, respectively and none in 2011. The 2011 loss before income taxes includes goodwill and intangible asset impairment charges of \$20.6 million recorded in the FSTech Group. The 2010 loss before income taxes was impacted by \$78.9 million of goodwill and intangible asset impairment charges recorded in the FSTech Group, \$3.9 million in acquisition and integration related costs associated with Sirit and VESystems, and a \$3.8 million settlement charge related to the ongoing firefighter hearing loss litigation. In the fourth quarter of 2010, the Company recorded \$85.0 million of valuation allowance to reflect the amount of domestic deferred tax assets that may not be realized. The 2010 operating loss was also impacted by higher research and development costs and amortization expenses due to the newly acquired businesses, Sirit,



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VESystems and Diamond, and the recognition of deferred retention expenses associated with Diamond. The 2008 income before income taxes was impacted by a \$6.9 million loss incurred to settle a dispute and write off assets associated with a large parking systems contract, and a \$13.0 million loss associated with the Company's decision to terminate funding of a joint venture in China.

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

The information concerning the Company's selected quarterly data included in Note 19 of the consolidated financial statements contained under Item 8 of this Form 10-K is incorporated herein by reference.

### **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 Annual Report on Form 10-K for the year ended December 31, 2011. Information in MD&A is intended to assist the reader in obtaining an understanding of the consolidated financial statements, information about 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 how certain accounting principles affect the Company's consolidated financial statements.

### **Executive Summary**

The Company is a leading global manufacturer and supplier of (i) safety, security and communication equipment, (ii) street sweepers and other environmental vehicles and equipment, and (iii) vehicle-mounted, aerial platforms for fire fighting, rescue, electric utility and industrial uses. We also are a designer and supplier of technology-based products and services for the public safety and intelligent transportation systems markets. In addition, we sell parts and tooling and provide service and repair, equipment rentals and training as part of a comprehensive offering to our customer base. We operate 19 manufacturing facilities in six countries and provide our products and integrated solutions to municipal, governmental, industrial and commercial customers throughout the world.

The Company's business units are organized and managed in four operating segments as follows:

#### *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, public safety interoperable communications, industrial communications and command and municipal networked security. Specific products include lightbars and sirens, public warning sirens and public safety software. Products are sold primarily under the Federal Signal, Federal Signal VAMA, Target Tech<sup>®</sup> and Victor brand names. The Group operates manufacturing facilities in North America, Europe, and South Africa.

#### *Environmental Solutions Group*

Our Environmental Solutions Group is a leading manufacturer and supplier of a full range of street sweeper and vacuum trucks and high-performance waterblasting equipment for municipal and industrial customers. We also manufacture products for the newer markets of hydro-excavation, glycol recovery and surface cleaning for utility and industrial customers. Products are sold under the Elgin<sup>®</sup>, Vactor<sup>®</sup>, Guzzler<sup>®</sup> and Jetstream brand names. The Group primarily manufactures its vehicles and equipment in the United States.

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Under the Elgin brand name, the Company sells the 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 municipal combination catch basin/sewer cleaning vacuum trucks. Guzzler is a leader in industrial vacuum loaders that clean up 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 is increasingly engaged in the sale of parts and tooling, service and repair, equipment rentals and training as part of a complete offering to its customer base.

*Fire Rescue Group*

Our Fire Rescue Group is a leading manufacturer and supplier of sophisticated, vehicle-mounted, aerial platforms for fire fighting, rescue, electric utility and industrial uses. End customers include fire departments, industrial fire services, electric utilities, 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 complete offering to its customer base. The Group manufactures in Finland and sells globally under the Bronto Skylift® brand name.

*Federal Signal Technologies Group*

Our Federal Signal Technologies Group is a provider of technologies and solutions to the intelligent transportation systems and public safety markets and other applications. These products and solutions provide end users with the tools needed to automate data collection and analysis, transaction processing and asset tracking. FSTech provides technology platforms and services to customers in the areas of radio frequency identification systems, transaction processing, vehicle classification, electronic toll collection, automated license plate recognition, electronic vehicle registration, parking and access control, cashless payment solutions, congestion charging, traffic management, site security solutions and supply chain systems. Products are sold under PIPS, Idris®, Sirit, VESystems and Federal APD brand names. The Group operates manufacturing facilities in North America and Europe.

**Results of Operations****Orders**

	2011	2010	2009
Analysis of orders:			
Total orders (\$ in millions):	\$ 1,013.4	\$ 742.6	\$ 638.7
Change in orders year over year	36.5%	16.3%	(25.7)%
Change in U.S. municipal and government orders year over year	23.8%	2.1%	(13.4)%
Change in U.S. industrial and commercial orders year over year	56.7%	66.8%	(37.9)%
Change in non-U.S. orders year over year	31.4%	3.9%	(27.6)%

Orders of \$1.0 billion in 2011 increased 37% compared to 2010 with increases across all segments, primarily fueled by strong demand for industrial vacuum trucks and sewer cleaners, improved demand for fire-lift products in the Asian and Australian markets and one large three-year back office and operations contract with a total order value of approximately \$68.0 million in the FSTech segment. U.S. municipal and government orders increased 24% in 2011 driven by a \$28.3 million increase in orders for sewer cleaners, \$12.2 million increase in sweepers, and a \$9.1 million increase in outdoor warning systems. U.S. industrial and commercial orders increased 57% due to strong order intake of intelligent transportation systems products and services and

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industrial vacuum trucks, partly offset by soft demand for police products. Non-US orders increased 31% compared to 2010 with increases across all segments, primarily led by a \$35.4 million increase in orders for Bronto units, a \$29.5 million increase in sweepers, and a \$12.5 million increase in FSTech products.

Orders in 2010 increased 16% compared to 2009 as a result of strong industrial market demands for vacuum trucks and the orders associated with the newly acquired businesses Sirit and VESystems. U.S. municipal and government orders increased 2% in 2010 driven by a \$13.5 million increase in orders for sewer cleaners and a \$2.1 million increase in ALPR cameras, offset by a decrease of \$8.5 million in first responder products, and a \$2.1 million decline in outdoor warning systems. U.S. industrial and commercial orders increased 67% driven by a \$41.5 million increase in orders for vacuum trucks, a \$22.5 million increase associated with the newly acquired businesses, a \$8.5 million increase in parking system products, a \$7.6 million increase in Safety and Security Systems products, and a \$6.1 million increase in waterblasters. Non-U.S. orders increased 4% primarily due to an increase in orders related to the newly acquired businesses of \$7.1 million, an increase of \$3.3 million in Bronto units, and a \$2.8 million increase in Safety and Security Systems products. The increase in non-U.S. orders would have been 6% when excluding the effect of unfavorable foreign currency translation.

**Consolidated results of operations**

The following table summarizes the Company's results of operations and selected operating metrics for each of the three years in the period ended December 31 (\$ in millions, except per share amounts):

	2011	2010	2009
Net sales	\$ 795.6	\$ 726.5	\$ 750.4
Cost of sales	600.6	542.3	557.3
Gross profit	195.0	184.2	193.1
Selling, engineering, general and administrative	171.1	173.3	155.8
Acquisition and integration related costs	-	3.9	-
Goodwill and intangible assets impairment	20.6	78.9	-
Restructuring charges	-	5.0	1.5
Operating income (loss)	3.3	(76.9)	35.8
Interest expense	16.4	10.3	11.4
Other expense (income)	0.2	1.2	(0.7)
Income tax provision	(1.1)	(72.3)	(5.3)
(Loss) income from continuing operations	(14.4)	(160.7)	19.8
Gain (loss) from discontinued operations and disposal, net of tax	0.2	(15.0)	3.3
Net (loss) income	\$ (14.2)	\$ (175.7)	\$ 23.1
<b>Other data:</b>			
Operating margin	0.4%	(10.6)%	4.8%
(Loss) earnings per share - continuing operations	\$ (0.23)	\$ (2.79)	\$ 0.41
Orders	1,013.4	742.6	638.7
Depreciation and amortization	22.5	19.2	14.7
<b>Year Ended December 31, 2011 vs. December 31, 2010</b>			

Net sales increased 9.5% or \$69.1 million compared to 2010, primarily as a result of an increase in industrial vacuum and sewer cleaner truck shipments and increased net sales associated with the Sirit and VESystems businesses that were acquired in March 2010. Gross profit margin was 24.5% in 2011 compared to 25.4% in 2010. Operating income increased \$80.2 million in 2011 due to a reduction in goodwill and intangible impairment charges of \$58.3 million in 2011, higher sales volume in 2011, and the absence of restructuring charges of \$5.0 million that were recorded in 2010. During the fourth quarter of 2011, the Company recorded



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\$22.2 million in goodwill and intangible impairment charges. In the first quarter of 2011, the Company recorded a goodwill impairment adjustment of \$1.6 million upon finalizing the detailed step two impairment analysis for the FSTech segment that also contributed to the increase in operating income in 2011. In the fourth quarter of 2010, the Company recorded \$78.9 million in goodwill and intangible impairment charges for the FSTech segment.

Interest expense increased \$6.1 million from 2010, primarily due to an increase in interest rates on the amended debt agreements that have now been replaced by new financing agreements as of February 2012. For further discussion of the debt agreements, see Note 6 of the consolidated financial statements contained under Item 8 of Part II of this Form 10-K.

Other expense (income) totaled \$0.2 million in 2011 and \$1.2 million in 2010 and primarily includes realized losses from foreign currency transactions and on derivative contracts.

The 2011 effective tax rate on income from continuing operations increased to (8.3%) from (81.7%) in the prior year. The 2010 rate includes aggregate tax expense of \$85.0 million related to a domestic valuation allowance and non-deductible goodwill impairments of \$19.5 million. The Company's 2011 effective tax rate of (8.3%) reflects no recorded tax benefits for domestic operating losses or domestic loss carryforwards. However, an income tax provision is recorded for foreign operations and other jurisdictions that are not in a cumulative loss position.

Loss from continuing operations was \$14.4 million in 2011 compared to a loss of \$160.7 million in 2010. The increase of \$146.3 million was primarily due to the absence of the \$85.0 million expense related to establishing the domestic valuation allowance, a reduction in goodwill and trade name impairment charges in 2011, and from other changes in operating income as described above.

Loss from discontinued operations and disposal was \$15.0 million in 2010 and a \$0.2 million gain was recognized in 2011. Of the \$15.0 million loss from discontinued operations in 2010, \$5.0 million related to product liability and settlement costs associated with the Company's discontinued E-ONE business, \$7.2 million related to the discontinued Riverchase and China Wholly-Owned Foreign Enterprise ( China WOFE ) businesses, and \$2.2 million related to the environmental remediation liability at the Company's Pearland, Texas site.

Net loss was \$14.2 million in 2011 compared to a net loss of \$175.7 million in 2010.

### **Year Ended December 31, 2010 vs. December 31, 2009**

Net sales decreased 3% or \$23.9 million compared to 2009 as a result of lower volume caused by soft municipal spending in most western market segments, partially offset by a stronger demand from the industrial market and increases resulting from FSTech acquisitions. Unfavorable foreign currency movement, most notably a stronger U.S. dollar versus European currencies in the comparable prior year periods, reduced sales by 1%. Gross profit margin of 25.4% in 2010 was consistent with 2009. Operating loss was \$76.9 million in 2010 compared to operating income of \$35.8 million in 2009, primarily due to goodwill and indefinite lived intangible asset impairment of \$78.9 million in the FSTech Group, higher selling, engineering, general, and administrative expense ( SEG&A ) of \$17.5 million, acquisition and integration related costs of \$3.9 million, and higher restructuring costs of \$3.5 million. SEG&A expenses increased due to a \$3.8 million settlement charge in connection with the Company's ongoing hearing loss litigation. In addition, the Company incurred higher research and development costs, amortization expenses, and additional costs due to higher headcounts related to the newly acquired businesses, Sirit, VESystem and Diamond, and recognition of deferred retention expenses associated with Diamond. See Note 2 for further discussion of the deferred retention expenses.

Interest expense decreased 10% from 2009, primarily due to lower average borrowing cost of debt.

Other expense (income) of \$1.2 million primarily includes realized losses from foreign currency transactions, partially offset by realized gains from derivatives contracts.

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The 2010 effective tax rate on (loss) income from continuing operations increased to (81.7%) from 21.1% in the prior year. The Company's 2010 effective rate of (81.7%) includes aggregate tax expense of \$85.0 million related to a domestic valuation allowance and non-deductible goodwill impairments of \$19.5 million. The 2009 rate benefited from an R&D tax credit and foreign tax effects.

Loss from continuing operations was \$160.7 million in 2010, compared to income from continuing operations of \$19.8 million in 2009. The decrease of \$180.5 million was primarily due to a valuation allowance of \$85.0 million recorded in the fourth quarter of 2010 to reflect the amount of domestic deferred tax assets that may not be realized, goodwill and trade name impairment charges of \$67.1 million and \$11.8 million, respectively, due to a reduction in the estimated sales and cash flow of the FSTech segment and from other charges in operating loss as described above.

Loss from discontinued operations and disposal was \$15.0 million in 2010 compared to a gain from discontinued operations and disposal of \$3.3 million in 2009. Of the \$15.0 million loss from discontinued operations, \$5.0 million related to product liability and settlement costs associated with the Company's discontinued E-ONE business, \$7.2 million related to the discontinuation of the Riverchase and China WOFE businesses, and \$2.2 million related to the environmental remediation liability at the Company's Pearland, Texas site. Net gain from discontinued operations totaled \$3.3 million in 2009. The gain primarily related to the sale of the Company's RAVO and Pauluhn businesses, partially offset by a tax benefit adjustment related to the sale of the Pauluhn business. For further discussion of the discontinued operations, see Note 13 of the consolidated financial statements contained under Item 8 of Part II of this Form 10-K.

**Safety and Security Systems**

The following table presents the Safety and Security Systems Group's results of operations for each of the three years in the period ended December 31 (\$ in millions):

	2011	2010	2009
Total orders	\$ 235.3	\$ 215.6	\$ 216.3
Net sales	221.4	214.5	225.8
Operating income	21.5	23.7	24.1
Operating margin	9.7%	11.0%	10.7%
Depreciation and amortization	4.4	3.7	3.1

Orders increased \$19.7 million or 9.1% compared to the prior year period. U.S. orders increased \$8.7 million or 7%, as improved municipal spending for outdoor warning systems and higher demand in industrial markets were offset by continued weakness in the police market. Non-U.S. orders increased \$11.0 million or 11%, driven by strong demand for U.S. exports in public safety markets as well as strength in international mining markets.

Net sales increased \$6.9 million or 3.2% compared to the prior year period as a result of increases in sales of U.S. industrial products, mining products, and U.S. export products to Asia and Latin America, which were partially offset by a soft U.S. police market as well as weakness in Europe and public safety markets. Operating income decreased \$2.2 million, despite sales increases, primarily due to increased selling costs, commissions, and legal expenses. There were no restructuring costs recorded in 2011, while \$1.7 million of restructuring charges were incurred in 2010.

Orders in 2010 were slightly below 2009 levels. U.S. orders decreased 3% or \$3.5 million due to lower municipal spending of \$11 million in the police, fire and outdoor warning markets, partially offset by stronger industrial demand of \$7.6 million. Non-U.S. orders increased 3% or \$2.8 million due to stronger demand in police and industrial products.

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Net sales decreased 5% or \$11.3 million in 2010 compared to 2009 caused by lower municipal spending, and an unfavorable currency impact of \$1.8 million, which were partially offset by strong industrial demand. Although the sale volumes were down, the operating income in 2010 was flat compared to 2009 levels due to lower operating expenses. Operating expenses were lower than the prior year by \$5.0 million driven by cost reduction initiatives throughout the Company. As a result, the operating margin improved 0.3% compared to the prior year.

**Fire Rescue**

The following table presents the Fire Rescue Group's results of operations for each of the three years in the period ended December 31 (\$ in millions):

	2011	2010	2009
Total orders	\$ 137.6	\$ 101.3	\$ 96.6
Net sales	109.5	108.8	160.0
Operating income	6.6	9.4	19.2
Operating margin	6.0%	8.6%	12.0%
Depreciation and amortization	2.5	2.2	1.9

Orders in 2011 increased \$36.3 million or 36% compared to the prior year period, primarily as a result of strong demand for the fire-lift product in the Asian and Australian markets, partially offset by a soft European market.

Net sales in 2011 increased \$0.7 million compared to the prior year as a result of favorable currency impacts, despite 4% lower sales volume. Operating income decreased \$2.8 million due to lower sales volumes and unfavorable product mix, partially offset by favorable currency impacts.

Orders in 2010 increased 5% or \$4.7 million compared to 2009, net of an unfavorable currency impact of \$5.4 million. The increase in orders was mainly due to the increased demand in the Asian market, as the demands for both fire-lift and industrial products remained slow in most western markets.

Net sales in 2010 decreased 32% (29% excluding currency translation) compared to 2009 due to the weak demand in most regions except the Asia market. Operating income decreased 51% and operating margin decreased by 3.4% due to the lower sales volumes and lower gross profit margin, partially offset by the margin improvements related to cost reductions and process improvements.

**Environmental Solutions**

The following table presents the Environmental Solutions Group's results of operations for each of the three years in the period ended December 31 (\$ in millions):

	2011	2010	2009
Total orders	\$ 458.5	\$ 328.2	\$ 265.1
Net sales	357.8	309.8	299.6
Operating income	24.5	17.9	15.1
Operating margin	6.8%	5.8%	5.0%
Depreciation and amortization	5.2	4.7	4.5

Orders in 2011 increased \$130.3 million or 40% compared to the prior year. U.S. orders increased 37% or \$100.8 million in 2011, primarily as a result of increases in orders for vacuum trucks of \$51.9 million, sewer cleaners of \$28.3 million, sweepers of \$12.2 million, and waterblasters of \$3.6 million. Non-U.S. orders increased 52% or \$29.5 million from the prior year, with increases in U.S. export orders from Canada, Mexico, Latin America and the Middle East.

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Net sales in 2011 increased \$48.0 million or 15% compared to the prior year as a result of improvements within the industrial market, partially offset by mix changes between domestic and international sales. Operating income increased \$6.6 million or 37% compared to the prior year.

Orders in 2010 increased 24% or \$63.1 compared to the prior year due to an increase in demand for sewer cleaning and industrial vacuum trucks. U.S. orders increased 30% in 2010 from the prior year driven by a \$55.0 million increase in sewer cleaning and industrial vacuum trucks, a \$6.1 million increase in waterblasters, a \$0.8 increase in parts sales and a \$0.7 million increase in sweepers. Non-U.S. orders increased slightly by 1% or \$0.5 million compared to the prior year.

Net sales in 2010 increased 3% or \$10.2 million compared to the prior year period driven by higher sales volume in waterblaster and parts sales of \$8.2 million, and better price mix in street sweepers, sewer cleaning and industrial vacuum trucks of \$1.4 million. Operating income increased 19% and operating margin improved by 1%, respectively, due to the increase in sales volumes compared to the prior year.

**Federal Signal Technologies**

The following table presents the Federal Signal Technologies Group's results of operations for each of the three years in the period ended December 31 (\$ in millions):

	2011	2010	2009
Total orders	\$ 182.0	\$ 97.5	\$ 60.7
Net sales	106.9	93.4	65.0
Operating (loss) income	(29.5)	(89.3)	6.0
Operating margin	(27.6)%	(95.6)%	9.2%
Depreciation and amortization	9.5	7.8	4.4

Orders nearly doubled to \$182.0 million compared to the prior year. U.S. orders increased \$72.0 million and doubled in size in 2011, primarily due to a \$68.0 million order for one large three year back office and operations system project received in the fourth quarter of 2011 and other new business from the acquired businesses of Sirit and VESystems. Non-U.S. orders increased \$12.5 million or 43% compared to the prior year.

Net sales increased \$13.5 million or 14% compared to the prior year, primarily due to a full year of business in 2011 versus 10 months in 2010 from the acquired businesses of Sirit and VESystems. Operating loss was \$29.5 million in 2011 compared to \$89.3 million in 2010. Included in the 2011 operating loss was \$20.6 million of goodwill and indefinite intangible asset impairment charges that are discussed further in Note 5. Included in the 2010 operating loss was \$78.9 million of goodwill and indefinite intangible asset impairment charges.

Orders in 2010 increased 61% or \$36.8 million compared to the prior year as a result of orders attributed to the newly acquired businesses, Sirit, VESystems, and Diamond, and stronger demands in industrial parking system products and the ALPR cameras in U.S. markets. U.S. orders in 2010 increased 92% or \$32.9 million driven by increases of \$22.5 million attributed to the newly acquired businesses, \$8.5 million from the parking system products, and \$2.1 million from ALPR cameras in U.S. markets. Non-US orders increased 16% or \$3.9 million, primarily driven by an increase of \$7.1 million from the newly acquired businesses, offset by decreases of \$2.1 million in ALPR cameras in European markets and \$1.1 million in parking system products.

Net sales in 2010 increased 44% or \$28.4 million compared to 2009 due to sales from the newly acquired businesses of Sirit, VESystems, and Diamond, of \$31.5 million, offset by a decrease of \$3.1 million in parking systems. Operating loss was \$89.3 million in 2010, compared to operating income of \$6.0 million in 2009. Included in the 2010 operating loss was \$78.9 million of goodwill and indefinite lived intangible asset impairment charges that are discussed further in Note 5. The operating loss was also impacted by increased

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operating expenses of \$23.5 million as result of higher research and development costs, higher amortization expense due to the newly acquired businesses, Sirit, VESystems, and Diamond, and recognition of deferred retention expenses associated with Diamond.

The deferred retention expense is calculated in accordance with the sale and purchase agreement of Diamond. A sum of £1,000,000 (one million pounds sterling) was payable to the former owners of Diamond on or before January 31, 2011 in the event that the former owners of Diamond were employed by the Company on December 31, 2010 and were at that time actively engaged in the business. An additional amount of £1,000,000 (one million pounds sterling) was payable to the former owners of Diamond on or before January 31, 2012 in the event that former owners of Diamond were employed by the Company on December 31, 2011 and were at that time actively engaged in the business. The former owners of Diamond did maintain employment through December 31, 2011 and as of January 31, 2012 have been paid both contingent payments totaling £2,000,000 (two million pounds sterling).

In accordance with the Accounting Standards Codification ( ASC ) 805-10-55-25, the deferred retention payments have been treated as compensation expense for post-combination services as the contingent payments are automatically forfeited if employment is terminated. The total contingency of £2,000,000 (two million pounds sterling) has been expensed ratably over the two-year period that the employees were required to stay in order to earn the retention payment.

### **Corporate Expense**

Corporate expenses totaled \$19.8 million, \$38.6 million, and \$28.6 million in 2011, 2010, and 2009, respectively. The 49% decrease in 2011 compared to 2010 is due to a \$10.2 million reduction in legal expenses primarily associated with the hearing loss litigation. In addition, 2011 benefited by the absence of \$1.2 million in restructuring costs, \$1.0 million in expense related to the departure of the Company's former CEO, and \$3.9 million in acquisition and integration related costs associated with Sirit and VESystems, and a \$1.3 million reduction in insurance reserves associated with carrier paid claims. Corporate expenses include depreciation and amortization expense of \$0.9 million, \$0.8 million and \$0.8 million for 2011, 2010 and 2009, respectively.

The 35% increase in corporate expenses in 2010 compared to 2009 is primarily due to \$3.9 million in acquisition and integration related costs associated with Sirit and VESystems, a \$3.8 million settlement charge related to the ongoing firefighter hearing loss litigation, \$1.2 million of restructuring costs, and a \$1.0 million expense related to the departure of the Company's former President and Chief Executive Officer. See Note 15 for further discussion of the hearing loss litigation charge of \$3.8 million.

The hearing loss litigation has historically been managed by the Company's legal staff resident at the corporate office and not by management at any reporting segment. In accordance with ASC *Topic 280, Segment Reporting*, which provides that segment reporting should follow the management of the item and that some expenses can be corporate expenses, these legal expenses (which are unusual and not part of the normal operating activities of any of our operating segments), are reported and managed as corporate expenses. Only the Company and no current or divested subsidiary is a named party to these lawsuits.

### **Financial Condition, Liquidity and Capital Resources**

During each of the three years in the period ended December 31, 2011, the Company used its cash flows from operations to pay cash dividends, if any, to shareholders, to fund growth, and to make capital investments that both sustain and reduce the cost of its operations. Beyond these uses, remaining cash was used to fund acquisitions, pay down debt, repurchase shares of common stock and make voluntary pension contributions.

The Company's cash and cash equivalents totaled \$9.5 million, \$62.1 million, and \$21.1 million as of December 31, 2011, 2010, and 2009, respectively.

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As of December 31, 2011, \$8.7 million of cash and cash equivalents, on the consolidated balance sheet, was held by foreign subsidiaries. Cash and cash equivalents held by subsidiaries outside the United States is held primarily in the currency of the country in which it is located. This cash is used to fund the operating activities of our foreign subsidiaries and for further investment in foreign operations. Generally, we consider such cash to be permanently reinvested in our foreign operations and our current plans do not demonstrate a need to repatriate such cash to fund U.S. operations. The Company's ability to refinance its debt in February 2012 demonstrates that it does not need to repatriate cash from its foreign subsidiaries to fund U.S. operations. Repatriation of cash held by foreign subsidiaries may require the accrual and payment of taxes in the United States.

The following table summarizes the Company's cash flows for each of the three years in the period ended December 31 (\$ in millions):

	2011	2010	2009
Net cash provided by operating activities	\$ 6.3	\$ 31.2	\$ 62.4
Proceeds from sales of properties, plant and equipment	1.9	1.9	4.0
Purchases of properties and equipment	(15.7)	(12.8)	(14.4)
Payments for acquisitions, net of cash acquired	-	(97.3)	(13.5)
Gross proceeds from sale of discontinued businesses	-	0.2	47.1
Proceeds from equity offering, net of fees	-	71.2	-
Borrowing activity, net	(40.3)	60.1	(77.7)
Cash dividends paid to shareholders	(3.7)	(13.3)	(11.7)
Payments of debt amendment fees	(2.3)	-	-
Discontinued financing activities	0.1	(1.0)	(7.3)
All other, net	1.1	0.8	8.8
(Decrease) increase in cash and cash equivalents	\$ (52.6)	\$ 41.0	\$ (2.3)

Net cash provided by operating activities totaled \$6.3 million, \$31.2 million and \$62.4 million in 2011, 2010 and 2009, respectively. In 2011, the decrease was primarily due to an increase in cash used to support net working capital. The decrease in 2010 was primarily driven by a reduction in the underlying results of operations, an increase in inventories, and a decrease in cash flow from discontinued operating activities. In the fourth quarter of 2010, the Company recorded an \$85.0 million valuation allowance against its U.S. deferred tax assets as a non-cash charge to income tax expense. Recording the valuation allowance does not restrict the Company's ability to utilize the future deductions and net operating losses associated with the deferred tax assets assuming taxable income is recognized in future periods.

During the fourth quarters of 2011 and 2010, the Company performed its annual goodwill and indefinite-lived intangible asset impairment assessment, and determined that the goodwill and trade names associated with FSTech Group reporting unit were impaired and recorded impairment charges of \$14.8 million and \$7.4 million, respectively, in 2011 and \$67.1 million and \$11.8 million, respectively, in 2010. As of December 31, 2010, the goodwill impairment charge was estimated and subsequently adjusted during the first quarter of 2011 upon completion of a detailed second step impairment analysis.

Capital expenditures increased by \$2.9 million in 2011 compared to 2010. Capital expenditures decreased in 2010 by \$1.6 million compared to 2009 primarily due to decreased spending on production equipment.

The Company acquired two businesses in 2010 that are key components to the development of the Company's intelligent transportation systems strategy. VESystems was acquired for \$34.8 million, of which \$24.6 million was a cash payment. Sirit was acquired for CDN \$77.1 million (USD \$74.9 million), all of which was paid in cash. The acquisitions were funded with the Company's existing cash balances and debt drawn against the availability of the prior revolving credit facility. In addition to the use of cash and debt, the Company

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issued 1.2 million shares of its common stock to fund a portion of the cost of purchasing VESystems. The issuances increased the total number of Company common stock shares outstanding. See Note 2 to the consolidated financial statements for additional information on the acquisitions.

In 2009, the Company acquired Diamond Consulting Services Ltd. for \$13.5 million in cash. See Note 2 of the notes to the consolidated financial statements for additional information on the acquisition. The Company funded the acquisition through cash provided by operations, and from proceeds received from the sale of the RAVO and Pauluhn businesses, included in discontinued operations in 2009, and sold for net proceeds of \$45.1 million in cash. See Note 13 to the consolidated financial statements for additional information on the sale of the RAVO and Pauluhn businesses.

In May 2010, the Company issued 12.1 million common shares at a price of \$6.25 per share for total gross proceeds of \$75.6 million. After deducting direct fees, net proceeds totaled \$71.2 million. Proceeds from the equity offering were used to pay down debt.

On February 22, 2012, the Company entered into a Credit Agreement (the "Credit Agreement"), by and among the Company, as borrower and General Electric Capital Corporation, as a co-collateral agent, and Wells Fargo Capital Finance, LLC, as administrative agent and co-collateral agent, providing the Company with a new \$100 million secured credit facility (the "ABL Facility").

Pursuant to the Credit Agreement, the ABL Facility is a five-year asset-based revolving credit facility pursuant to which up to \$100 million initially will be available, with the right, subject to certain conditions, to increase the availability under the facility by up to an additional \$25 million. The Credit Agreement provides for loans and letters of credit in an amount up to the aggregate availability under the facility subject to meeting certain borrowing base conditions, with a sub-limit of \$50 million for letters of credit. Borrowings under the ABL Facility bear interest, at the Company's option, at a base rate or a LIBOR rate, plus, in each case, an applicable margin set forth in the Credit Agreement. The applicable margin ranges from 1.00% to 2.75% for base rate borrowings and 1.75% to 3.50% for LIBOR borrowings. The Company must also pay a commitment fee to the facility lenders equal to 0.50% per annum on the unused portion of the ABL Facility along with other standard fees. Letter of credit fees are payable on outstanding letters of credit in an amount equal to the applicable LIBOR margin plus other customary fees.

The Company is allowed to prepay in whole or in part advances under the ABL Facility without penalty or premium other than customary breakage costs with respect to LIBOR loans.

The Credit Agreement contains a requirement that the Company, on a consolidated basis, maintain a minimum monthly fixed charge coverage ratio, along with other customary restrictive covenants, certain of which are subject to materiality thresholds.

The obligations under the Credit Agreement are secured by (i) a first priority security interest in the Company's and its domestic subsidiaries accounts, inventory, chattel paper, payment intangibles, cash and cash equivalents and other working capital assets (the "ABL First Priority Collateral") and (ii) a second priority security interest in all other now or hereafter acquired domestic property and assets, the stock or other equity interests in each of the domestic subsidiaries and certain of the first-tier foreign subsidiaries, subject to certain exclusions.

The Company's obligations under the Credit Agreement are guaranteed by certain of the Company's domestic subsidiaries.

On February 22, 2012, the Company also entered into a Financing Agreement (the "Financing Agreement") by and among the Company, certain subsidiaries of the Company, as guarantors, the lenders party thereto (the

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Term Lenders ) and TPG Specialty Lending, Inc., as administrative agent, collateral agent and sole lead arranger, pursuant to which the Term Lenders agreed to provide the Company with a \$215 million term loan (the Term Loan ).

Pursuant to the Financing Agreement, the Term Loan is a five-year, secured term loan maturing on February 22, 2017. Installment payments under the Term Loan do not commence until March 2013. The Financing Agreement includes provisions for mandatory prepayments in certain specified situations. However, based on its current forecast, the Company does not anticipate making any mandatory payments in 2012. Except in these certain specified situations, the Term Loan is not repayable in the first 12 months of the term and thereafter is subject to the following prepayment premium; (i) 2.75% in months 13-24, (ii) 2.00% in months 25-36 and (iii) nothing thereafter. These provisions are subject to change upon the occurrence of certain specified events.

The Term Loan will bear interest, at the Company's option, at a base rate or LIBOR rate, plus, in each case, an applicable margin set forth in the Financing Agreement. The applicable margin ranges from 9.00% to 10.00% for base rate borrowings and 10.00% to 11.00% for LIBOR borrowings. The Company is required to pay certain customary fees in connection with the Term Loan.

The Financing Agreement requires the Company to comply with financial covenants related to the maintenance of a minimum monthly fixed charge coverage ratio, maximum capital expenditures, minimum liquidity, and maximum leverage ratio. The Financing Agreement contains other restrictive covenants which are substantively similar to those contained in the Credit Agreement.

The obligations under the Financing Agreement are secured by (i) a first priority security interest in all now or hereafter acquired domestic property and assets (excluding the ABL First Priority Collateral) the stock or other equity interests in each of the domestic subsidiaries and certain of the first-tier foreign subsidiaries, subject to certain exclusions, and (ii) a second priority security interest in the ABL First Priority Collateral.

The Company's obligations under the Financing Agreement are guaranteed by certain of the Company's non-dormant domestic subsidiaries.

Under the Financing Agreement, dividends shall be permitted only if the following conditions are met:

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

The Fixed Charge Ratio of the Company and its subsidiaries, as defined in the Financing Agreement, shall be, both before and after the dividend payment (on a pro forma basis), not less than 1.50 to 1.00; and

The Leverage Ratio of the Company and its subsidiaries, as defined in the Financing Agreement, shall be, both before and after the dividend payment (on a pro forma basis), less than 2.00 to 1.00.

The Company used the proceeds from the ABL Facility and the Term Loan to (i) repay outstanding balances under the Company's existing \$240 million secured revolving credit facility, dated as of April 25, 2007, as amended, which was to mature on April 25, 2012 (the Prior Credit Agreement); (ii) retire the Company's private placement notes issued pursuant to the Note Purchase Agreement, dated as of June 1, 2009, as amended, and pursuant to the Master Note Purchase Agreement dated as of June 1, 2003, as amended (together, the Prior Note Purchase Agreements); (iii) finance the ongoing general corporate needs of the Company and its subsidiaries; and (iv) pay fees and expenses associated with repayment of amounts due under the Prior Credit Agreement and the Prior Note Purchase Agreements, including the payment of approximately \$1.0 million in resulting breakage fees and premiums under the Prior Credit Agreement and Prior Note Purchase Agreements, and pay fees and expenses associated with the ABL Facility and the Term Loan.

In accounting for the classification of its outstanding debt as of December 31, 2011, the Company considered the guidance in ASC 470-10-45-14. As the Company has effectively refinanced short-term debt on a

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long-term basis subsequent to the balance sheet date, the amounts outstanding under the Prior Credit Agreement and the Prior Note Purchase Agreements as of December 31, 2011 have been reflected as a component of long-term borrowings and capital lease obligations on the consolidated balance sheet.

The Company was in violation of its Interest Coverage Ratio covenant minimum requirement as defined in the Prior Credit Agreement and the Prior Note Purchase Agreements for the fiscal quarter ended December 31, 2010.

On March 15, 2011, the Company executed an amendment and waiver to the Prior Credit Agreement. On the same date, the Company also executed an amendment and waiver to the Prior Note Purchase Agreements (collectively, the 2011 Amendments ). Both of the amendments included a permanent waiver of compliance with the interest coverage ratio covenant for the Company's fiscal quarter ended December 31, 2010. Included in the terms of the 2011 Amendments was the replacement of the interest coverage ratio covenant with a minimum EBITDA covenant, an increase in pricing, mandatory prepayments from proceeds of asset sales, restrictions on use of excess cash flow, restrictions on dividend payments, share repurchases and other restricted payments and a 50 basis points fee paid to the bank lenders and holders of the Notes. The Company also repaid \$30.0 million that was applied to the amounts outstanding under the Prior Credit Agreement and the Prior Note Purchase Agreements on a pro rata basis (i.e., 85.8% under the Prior Credit Facility and 14.2% under the Prior Note Purchase Agreements.) The \$30.0 million was included within the current portion of long-term borrowings and capital lease obligations on the consolidated balance sheet as of December 31, 2010.

The Prior Credit Agreement was secured by a first-priority perfected security interest in substantially all of the tangible and intangible assets of the Company and those domestic subsidiaries that acted as guarantors.

On August 15, 2011 and November 15, 2011, the Company made excess cash flow payments of \$6.5 million and \$6.1 million, respectively. The amounts allocated to the Prior Credit Facility and Prior Note Purchase Agreements were \$10.8 million and \$1.8 million, respectively.

As of December 31, 2011, \$180.0 million was drawn on the Prior Credit Agreement, leaving available borrowings of \$49.1 million that includes \$32.5 million of capacity used for existing letters of credit.

On April 27, 2009, the Company executed the Global Amendment to Note Purchase Agreements (the Global Amendment ) with the holders of its private placement debt notes (the Notes ). The Global Amendment included a provision allowing the Company to prepay \$50.0 million of principal of the \$173.4 million Notes outstanding at par with no prepayment penalty. The prepayment was executed on April 28, 2009, and included principal, related accrued interest and a fee of \$0.2 million totaling \$51.1 million. On September 1, 2010, the Company prepaid \$20.0 million of its outstanding principal balance of its private placement debt at par with no prepayment penalty and related accrued interest of \$0.4 million.

On February 10, 2009 Bronto Skylift OY AB, a wholly-owned subsidiary of the Company, entered into a loan in which principal and interest is paid semi-annually. The loan matured and was paid in full in February 2011.

As of December 31, 2011, \$9.0 million was drawn against the Company's non-U.S. lines of credit which provide for borrowings up to \$16.8 million.

Aggregate maturities of total borrowings amount to approximately \$9.2 million in 2012, \$21.8 million in 2013, \$32.4 million in 2014 and \$159.8 million in 2015 and thereafter. These maturities primarily reflect the payment terms outlined in the ABL Facility and the Term Loan. The fair values of borrowings aggregated \$221.5 million and \$261.7 million at December 31, 2011 and 2010, respectively. Included in 2012 maturities are \$9.0 million of other non-U.S. lines of credit, and \$0.2 million of capital lease obligations.

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At December 31, 2011 and 2010, deferred financing fees, which are amortized over the remaining life of the debt, totaled \$1.0 million and \$0.5 million, respectively, and are included in deferred charges and other assets on the balance sheet. The Company currently estimates the debt issuance costs associated with the execution of the Term loan and ABL Facility to be approximately \$8.5 million.

The Company paid interest of \$16.1 million in 2011, \$9.7 million in 2010 and \$11.3 million in 2009. See Note 9 regarding the Company's utilization of derivative financial instruments relating to outstanding debt.

The weighted average interest rate on short-term borrowings was 3.24% at December 31, 2011.

Cash dividends paid to shareholders in 2011, 2010 and 2009 were \$3.7 million, \$13.3 million, and \$11.7 million, respectively. The Company did not declare any dividends in 2011.

Total debt net of cash and cash equivalents included in continuing operations was \$212.8 million representing 55% of total capitalization at December 31, 2011 versus \$200.3 million or 48% at December 31, 2010. The increase in the percentage of debt to total capitalization in 2011 was due to a reduction in equity of \$46.2 million and an increase in net debt of \$12.5 million.

The Company anticipates that capital expenditures for 2012 will approximate \$16 million and will be restricted to no more than \$20 million under the terms of the Financing Agreement. The Company believes that its financial resources and major sources of liquidity, including cash flow from operations and borrowing capacity, will be adequate to meet its operating and capital needs in addition to its financial commitments.

**Contractual Obligations and Commercial Commitments**

The following table presents a summary of the Company's contractual obligations and payments due by period as of December 31, 2011 (\$ in millions):

	Payments Due by Period				
	Total	Less than 1 Year	2-3 Years	4-5 Years	More than 5 Years
Short-term obligations	\$ 9.0	\$ 9.0	\$ -	\$ -	\$ -
Long-term debt*	213.6	-	53.9	64.5	95.2
Operating lease obligations	62.5	10.0	13.8	11.0	27.7
Capital lease obligations	0.6	0.2	0.3	0.1	-
Interest payments on long term debt	103.1	25.8	45.5	30.0	1.8
Total contractual obligations	\$ 388.8	\$ 45.0	\$ 113.5	\$ 105.6	\$ 124.7

\* Long term debt includes financial service borrowings which are reported in discontinued operations. The payments due by period reflect the payment terms outlined in the Company's new Financing Agreement executed in February 2012, as discussed in Note 6 to the Consolidated Financial Statements.

The Company also enters into foreign currency forward contracts to protect against the variability in exchange rates on cash flows and intercompany transactions with its foreign subsidiaries. As of December 31, 2011, there is \$0.9 million of unrealized losses on the Company's foreign exchange contracts. Volatility in the future exchange rates between the U.S. dollar, the Euro, and British pound will impact the final settlement of any of these contracts.

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The following table presents a summary of the Company's commercial commitments and the notional amount by expiration period as of December 31, 2011 (\$ in millions):

	Notional Amount by Expiration Period			
	Total	Less than 1 Year	2-3 Years	4-5 Years
Financial standby letters of credit	\$ 30.6	\$ 30.5	\$ -	\$ 0.1
Performance standby letters of credit	3.6	3.6	-	-
Purchase obligations	35.8	35.8	-	-
Total commercial commitments	\$ 70.0	\$ 69.9	\$ -	\$ 0.1

Financial standby letters of credit largely relate to casualty insurance policies for the Company's workers' compensation, automobile, general liability and product liability policies. Performance standby letters of credit represent guarantees of performance by foreign subsidiaries that engage in cross-border transactions with foreign customers.

Purchase obligations relate to commercial chassis.

As of December 31, 2011, the Company has a liability of approximately \$4.3 million for unrecognized tax benefits (refer to Note 7). Due to the uncertainties related to these tax matters, the Company cannot make a reasonably reliable estimate of the period of cash settlement for this liability.

**Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The Company considers the following policies to be the most critical in understanding the judgments that are involved in the preparation of the Company's consolidated financial statements and the uncertainties that could impact the Company's financial condition, results of operations and cash flows.

**Revenue Recognition**

Net sales consist primarily of revenue from the sale of equipment, environmental vehicles, vehicle mounted aerial platforms, parts, software, service and maintenance contracts.

The Company recognizes revenue for products when persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable, and collection is probable. Product is considered delivered to the customer once it has been shipped and title and risk of loss have been transferred. For most of the Company's product sales, these criteria are met at the time the product is shipped; however, occasionally title passes later or earlier than shipment due to customer contracts or letter of credit terms. If at the outset of an arrangement the Company determines the arrangement fee is not, or is presumed not to be, fixed or determinable, revenue is deferred and subsequently recognized as amounts become due and payable and all other criteria for revenue recognition have been met.

Prior to January 1, 2011, for any product within these groups that either was software or was considered software-related, the Company accounted for such products in accordance with the specific industry accounting guidance for software and software-related transactions. In October 2009, the FASB issued Accounting Standards Update (ASU) 2009-14, *Topic 985-Certain Revenue Arrangements That Include Software Elements*, which amended the accounting standards for revenue recognition to remove tangible products containing

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software components and non-software components that function together to deliver the products' essential functionality from the scope of industry-specific software revenue recognition guidance. The Company adopted ASU 2009-14 prospectively on January 1, 2011. Certain businesses within the Company's Federal Signal Technologies Group sell tangible products containing software components and non-software components that function together to deliver the products' essential functionality, and therefore such products were removed from the scope of industry specific software guidance effective January 1, 2011.

The Company accounts for multiple element arrangements that consist only of software or software-related products in accordance with industry specific accounting guidance for software and software-related transactions. If a multiple-element arrangement includes software and other deliverables that are neither software nor software-related, the Company applies various revenue-related U.S. GAAP to determine if those deliverables constitute separate units of accounting from the software or software-related deliverables. If the Company can separate the deliverables, the Company applies the industry specific accounting guidance to the software and software-related deliverables and applies other appropriate guidance to the non-software-related deliverables. Prior to January 1, 2011, revenue on arrangements that included multiple elements such as hardware, software, and services was allocated to each element based on the relative fair value of each element. Each element's allocated revenue was recognized when the revenue recognition criteria for that element had been met. Fair value was generally determined by vendor-specific objective evidence (VSOE), which was based on the price charged when each element was sold separately. If the Company could not objectively determine the fair value of any undelivered element included in a multiple-element arrangement, the Company deferred revenue until all elements were delivered and services were performed, or until fair value could objectively be determined for any remaining undelivered elements. When the fair value of a delivered element had not been established, but fair value existed for the undelivered elements, the Company used the residual method to recognize revenue if the fair value of all undelivered elements was determinable. Under the residual method, the fair value of the undelivered elements was deferred and the remaining portion of the arrangement fee was allocated to the delivered elements and was recognized as revenue. In October 2009, the FASB issued ASU 2009-13, *Topic 605-Multiple-Deliverable Revenue Arrangements*, which changes the level of evidence of standalone selling price required to separate deliverables in a multiple deliverable revenue arrangement by allowing a company to make its best estimate of the selling price of deliverables when more objective evidence of selling price is not available and eliminates the use of the residual method. ASU 2009-13 applies to multiple deliverable revenue arrangements that are not accounted for under other accounting pronouncements and retains the use of VSOE if available, and third-party evidence of selling price when VSOE is unavailable. The Company adopted ASU 2009-13 prospectively on January 1, 2011. Certain businesses within the Federal Signal Technologies Group sell under multiple deliverable sales arrangements where the Company utilized estimated selling prices under the relative-selling price method. In arriving at its best estimates of selling price, management considered market conditions as well as Company-specific factors. Management considered the Company's overall pricing model and objectives, including profit objectives and internal cost structure, as well as historical pricing data.

The total effect of adopting the new accounting guidance during 2011 was an increase in revenues of \$4.2 million and an increase in cost of sales of \$1.5 million.

Implementation services include the design, development, testing, and installation of systems. These services are recognized pursuant to ASC 605-35, *Construction-Type and Production-Type Contracts*. In these cases, the Company is required to make reasonably dependable estimates relative to the extent of progress toward completion by comparing the total hours incurred to the estimated total hours for the arrangement and, accordingly, would apply the percentage-of-completion method. If the Company were unable to make reasonably dependable estimates of progress towards completion, then it would use the completed-contract method, under which revenue is recognized only upon completion of the services. If total cost estimates exceed the anticipated revenue, then the estimated loss on the arrangement is recorded at the inception of the arrangement or at the time the loss becomes apparent.

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Revenue from maintenance contracts is deferred and recognized ratably over the coverage period. These contracts typically extend phone support, software updates and upgrades, technical support, and equipment repairs.

Certain products which include software elements that are considered to be more than incidental are sold with post-contract support, which may include certain upgrade rights that are offered to customers in connection with software sales or the sale of extended warranty and maintenance contracts. The Company defers revenue for the fair value of the upgrade rights until the future obligation is fulfilled or the right to the upgrade expires. When the Company's software products are available with maintenance agreements that grant customers rights to unspecified future upgrades over the maintenance term on a when-and-if available basis, revenue associated with such maintenance is recognized ratably over the maintenance term.

### **Allowances for Doubtful Accounts**

The Company performs ongoing credit evaluations of its customers. The Company's policy is to establish, on a quarterly basis, allowances for doubtful accounts based on factors such as historical loss trends, credit quality of the present portfolio, collateral value, and general economic conditions. If the historical loss trend increased or decreased 10% in 2011, the Company's operating income would have decreased or increased by \$0.1 million, respectively. Though management considers the valuation of the allowances proper and adequate, changes in the economy and/or deterioration of the financial condition of the Company's customers could affect the reserve balances required.

### **Inventory Reserve**

The Company performs ongoing evaluations to ensure that reserves for excess and obsolete inventory are properly identified and recorded. The reserve balance includes both specific and general reserves. Specific reserves at 100% are established for identifiable obsolete products and materials. General reserves for materials and finished goods are established based upon formulas which reference, among other things, the level of current inventory relative to recent usage, estimated scrap value, and the level of estimated future usage. Historically, this reserve policy has given a close approximation of the Company's experience with excess and obsolete inventory. The Company does not foresee a need to revise its reserve policy in the future. However, from time to time unusual buying patterns or shifts in demand may cause large movements in the reserve balance.

### **Warranty Reserve**

The Company's products generally carry express warranties that provide repairs at no cost to the customer. The length of the warranty term depends on the product sold, but generally extends from one to ten years based on terms that are generally accepted in the Company's marketplaces. Certain components necessary to manufacture the Company's vehicles (including chassis, engines, and transmissions) are covered under an original manufacturer's warranty. Such manufacturer's warranties are extended directly to end customers.

The Company accrues its estimated exposure to warranty claims at the time of sale based upon historical warranty claim costs as a percentage of sales. Management reviews these estimates on a quarterly basis and adjusts the warranty provisions as actual experience differs from historical estimates. Infrequently, a material warranty issue can arise which is outside the norm of the Company's historical experience; costs related to such issues, if any, are provided for when they become probable and estimable.

The Company's warranty costs as a percentage of net sales totaled 1.3% in 2011, 1.0% in 2010, and 1.3% in 2009. The increase in the rate in 2011 is primarily due to higher number of sewer cleaner installations in 2011 for the Environmental Solutions Group. Management believes the reserve recorded at December 31, 2011 is appropriate. A 10% increase or decrease in the estimated warranty costs in 2011 would have decreased or increased operating income by \$0.9 million, respectively.

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### **Workers Compensation and Product Liability Reserves**

Due to the nature of the products manufactured, the Company is subject to product liability claims in the ordinary course of business. The Company is partially self-funded for workers compensation and product liability claims with various retention and excess coverage thresholds. After the claim is filed, an initial liability is estimated, if any is expected, to resolve the claim. This liability is periodically updated as more claim facts become known. The establishment and update of liabilities for unpaid claims, including claims incurred but not reported, is based on the assessment by the Company's claim administrator of each claim, an independent actuarial valuation of the nature and severity of total claims, and management's estimate. The Company utilizes a third-party claims administrator to pay claims, track and evaluate actual claims experience, and ensure consistency in the data used in the actuarial valuation. Management believes that the reserve established at December 31, 2011 appropriately reflects the Company's risk exposure. The Company has not established a reserve for potential losses resulting from the firefighter hearing loss litigation (see Note 15 to the consolidated financial statements included in Item 8 of Part II of this Form 10-K). If the Company is not successful in its defense after exhausting all appellate options, it will record a charge for such claims, to the extent they exceed insurance recoveries, at the appropriate time.

### **Goodwill**

Goodwill represents the excess of the cost of an acquired business over the amounts assigned to its net assets. Goodwill is not amortized but is tested for impairment at a reporting unit level on an annual basis or when an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The Company performed its annual goodwill impairment test as of October 31, 2011.

Goodwill is tested for impairment based on a two-step test. The first step, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired and the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess. The Company generally determines the fair value of its reporting units using two valuation methods: the Income Approach Discounted Cash Flow Analysis method, and the Market Approach Guideline Public Company Method.

Under the Income Approach Discounted Cash Flow Analysis method the key assumptions consider projected sales, cost of sales, and operating expenses. These assumptions were determined by management utilizing our internal operating plan, growth rates for revenues and operating expenses, and margin assumptions. An additional key assumption under this approach is the discount rate, which is determined by looking at current risk-free rates of capital, current market interest rates, and the evaluation of risk premium relevant to the business segment. If our assumptions relative to growth rates were to change or were incorrect, our fair value calculation may change, which could result in impairment.

Under the Market Approach Guideline Public Company Method the Company identified several publicly traded companies, including Federal Signal, which we believe have sufficiently relevant similarities. For these companies, the Company calculated the mean ratio of invested capital to revenues and invested capital to EBITDA. Similar to the income approach discussed above, sales, cost of sales, operating expenses, and their respective growth rates are key assumptions utilized. The market prices of the Company's common stock and other guideline companies are additional key assumptions. If these market prices increase, the estimated market value would increase. If the market prices decrease, the estimated market value would decrease.

The results of these two methods are weighted based upon management's evaluation of the relevance of the two approaches. In the 2011 evaluation, management determined that the income approach provided a more

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relevant measure of each reporting unit's fair value and used it to determine reporting unit fair value. Management used the market approach to corroborate the results of the income approach. Management used the income approach to determine fair value of the reporting units because it considers anticipated future financial performance. The market approach is based upon historical and current economic conditions which might not reflect the long term prospects or opportunities for the business segment being evaluated.

During the fourth quarter of 2011, the Company performed the annual assessment, determined that the goodwill associated with the FSTech Group reporting unit was impaired, and recorded impairment charges of \$14.8 million. The impairment charge resulted from decreased sales and cash flow estimated in our FSTech Group. As of December 31, 2011, the goodwill impairment charge is an estimate and may be adjusted during the first quarter of 2012 upon finalization of the detailed second step impairment analysis. We have not completed the second step because we are awaiting additional information needed to value certain assets of the reporting unit. We will complete the second step in the first quarter of 2012 and changes to the estimated impairment we have recorded could be material. The fair values of the other reporting units exceeded their respective carrying amounts by 10% or more.

During the fourth quarter of 2010, the Company performed the annual assessment, determined that the goodwill associated with the FSTech Group reporting unit was impaired, and recorded impairment charges of \$67.1 million. As of December 31, 2010, the goodwill impairment charge was an estimate. Upon completion of the detailed second step impairment analysis in the first quarter of 2011, the Company recorded an adjustment of \$1.6 million which reduced a portion of the original goodwill impairment recognized during the fourth quarter of 2010.

The Company had no goodwill impairments in 2009.

Adverse changes to the Company's business environment and future cash flows could cause us to record impairment charges on goodwill in future periods, which could be material. See Note 5 of the consolidated financial statements for further information.

## **Indefinite lived Intangible Assets**

An intangible asset determined to have an indefinite useful life is not amortized. Indefinite lived intangible assets are evaluated each reporting period to determine whether events and circumstances continue to support an indefinite useful life. These assets are tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired.

The impairment test consists of a comparison of the fair value of the indefinite lived intangible asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

Significant judgment is applied when evaluating if an intangible asset has an indefinite useful life. In addition, for indefinite lived intangible assets, significant judgment is applied in testing for impairment. This judgment includes developing cash flow projections, selecting appropriate discount rates, identifying relevant market comparables, and incorporating general economic and market conditions.

During the fourth quarter of 2011, as a result of the annual assessment, the Company concluded that the fair value determined by the income approach, of certain trade names in the FSTech Group was lower than the carrying value. As a result, the Company recognized a \$7.4 million impairment charge to trade names within the FSTech Group in the fourth quarter of 2011.

During the fourth quarter of 2010, as a result of the annual assessment, the Company concluded that the fair value determined by the income approach, of certain trade names in the FSTech Group was lower than the carrying value. As a result, the Company recognized an \$11.8 million impairment charge to trade names within the FSTech Group in the fourth quarter of 2010.

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The Company had no impairments in 2009.

Adverse changes to the Company's business environment and future cash flows could cause us to record impairment charges on indefinite lived intangible assets in future periods, which could be material. See Note 5 of the consolidated financial statements for further information.

**Postretirement Benefits**

The Company sponsors domestic and foreign defined benefit pension and other postretirement plans. Major assumptions used in the accounting for these employee benefit plans include the discount rate, expected return on plan assets and rate of increase in employee compensation levels. A change in any of these assumptions would have an effect on net periodic pension and postretirement benefit costs.

The following table summarizes the impact that a change in these assumptions would have on the Company's operating income (\$ in millions):

	Assumption change:	
	25 Basis Point Increase	25 Basis Point Decrease
Discount rate	0.3	(0.3)
Return on assets	0.3	(0.3)
Employee compensation levels	-	-

The weighted-average discount rate used to measure pension liabilities and costs is set by reference to published, high-quality bond indices. However, these indices give only an indication of the appropriate discount rate because the cash flows of the bonds comprising the indices do not precisely match the projected benefit payment stream of the plan. For this reason, we also consider the individual characteristics of the plan, such as projected cash flow patterns and payment durations, when setting the discount rate. The weighted-average discount rate used to measure U.S. pension liabilities decreased from 5.75% in 2010 to 5.00% in 2011. See Note 8 to the consolidated financial statements for further discussion.

An incremental component is added for the expected return from active management based on the plan's experience and on historical information obtained from the plan's investment consultants. These forecasted gross returns are reduced by estimated management fees and expenses, yielding a long-term rate of return of 8.2% per annum for 2011. The expected asset return assumption is based upon a long-term view; therefore, we do not expect to see frequent changes from year to year based on positive or negative actual performance in a single year.

**Stock-Based Compensation Expense**

The Company accounts for stock-based compensation in accordance with ASC *Topic 718, Compensation - Stock Compensation* which requires all share-based payments to employees, including grants of employee stock options and restricted stock, to be recognized in the financial statements based on their respective grant date fair values. We use the Black-Scholes option pricing model to estimate the fair value of the stock option awards. The Black-Scholes model requires the use of highly subjective and complex assumptions, including the Company's stock price, expected volatility, expected term, risk-free interest rate, and expected dividend yield. For expected volatility, we base the assumption on the historical volatility of the Company's common stock. The expected term of the awards is based on historical data regarding employees' option exercise behaviors. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of the awards. The dividend yield assumption is based on the Company's history and expectation of dividend payouts. In addition to the requirement for fair value estimates, ASC *Topic 718* also requires the recording of an expense that is net of an anticipated forfeiture rate. Therefore, only expenses associated with awards that are ultimately expected to vest are included in our financial statements. Our forfeiture rate is determined based on our historical option cancellation experience.

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We evaluate the Black-Scholes assumptions that we use to value our awards on a quarterly basis. With respect to the forfeiture rate, we revise the rate if actual forfeitures differ from our estimates. If factors change and we employ different assumptions, stock-based compensation expenses related to future stock-based payments may differ significantly from estimates recorded in prior periods.

### **Income Taxes**

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying values of existing assets and liabilities and their respective tax bases. Deferred tax assets are also recorded with respect to net operating losses and other tax attribute carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the years in which temporary differences are expected to be recovered or settled. Valuation allowances are established when it is more likely than not that deferred tax assets will not be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the income of the period that includes the enactment date.

The ultimate recovery of deferred tax assets is dependent upon the amount and timing of future taxable income, and other factors such as the taxing jurisdiction in which the asset is to be recovered. A high degree of judgment is required to determine if, and the extent that, valuation allowances should be recorded against deferred tax assets. In the year ended December 31, 2010, we recorded a valuation allowance of \$85.0 million against our net domestic deferred tax assets based on our assessment of past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. Specifically, beginning in the fourth quarter of 2010, we had three years of cumulative domestic losses for continuing operations. In 2011, we recorded additional valuation allowance of \$13.6 million against our domestic deferred tax assets. We believe having three years of cumulative losses from continuing operations limits our ability to look to future taxable income as a source for recovering our deferred tax assets. We will continue to evaluate our ability to utilize our deferred tax assets and, as a result, we may increase or decrease our valuation allowance in future periods. Although we believe that our approach to estimates and judgments as described herein is reasonable, actual results could differ and we may be exposed to increases or decreases in income taxes that could be material.

Accounting for uncertainty in income taxes addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. We recognize the tax benefit from an uncertain tax position if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement.

The guidance on accounting for uncertainty in income taxes also provides guidance on de-recognition and classification, and requires companies to elect and disclose their method of reporting interest and penalties on income taxes. We recognize interest and penalties related to uncertain tax positions as part of income tax expense.

### **Financial Market Risk Management**

The Company is subject to market risk associated with changes in interest rates and foreign exchange rates. To mitigate this risk, the Company utilizes interest rate swaps and foreign currency forward contracts. The Company does not hold or issue derivative financial instruments for trading or speculative purposes and is not party to leveraged derivatives contracts.

### **Interest Rate Risk**

The Company manages its exposure to interest rate movements by targeting a proportionate relationship between fixed-rate debt to total debt generally within percentages between 40% and 60%. The Company uses

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funded fixed-rate borrowings as well as interest rate swap agreements to balance its overall fixed/floating interest rate mix. During the month of June 2010, floating to fixed interest rate swaps with a total notional amount of \$70 million matured and that portion of the Company's debt was left floating rate. Since the floating rate of interest the Company receives on its revolving credit facility has favorable pricing further enhanced by historically low LIBOR rates, the Company decided to maintain a percentage of floating rate debt outside of the 40% to 60% targets.

The following table presents the principal cash flows and weighted average interest rates by year of maturity for the Company's total debt obligations held at December 31, 2011 (\$ in millions):

	Expected Maturity Date					Total	Fair Value
	2012	2013	2014	2015	Thereafter		
Variable rate	\$ 9.2	\$ 21.8	\$ 32.4	\$ 32.3	\$ 126.6	\$ 223.2	\$ 221.5
Average interest rate	10.7%	10.7%	10.6%	10.4%	9.7%	10.7%	-

See Note 9 to the consolidated financial statements in this Form 10-K for a description of these agreements. A 100 basis point increase or decrease in variable interest rates in 2011 would have increased or decreased interest expense by \$2.0 million, respectively.

**Foreign Exchange Rate Risk**

Although the majority of sales, expenses and cash flows are transacted in U.S. dollars, the Company has exposure to changes in foreign exchange rates, primarily the Euro and the British pound. If average annual foreign exchange rates had collectively weakened against the U.S. dollar by 10%, pre-tax earnings in 2011 would have decreased by \$1.7 million from foreign currency translation.

The Company has foreign currency exposures related to buying and selling in currencies other than the local currency in which it operates. The Company utilizes foreign currency options and forward contracts to manage these risks.

The following table summarizes the Company's foreign currency derivative instruments as of December 31, 2011. All are expected to settle in 2012 (\$ in millions):

	Expected Settlement Date 2012		Fair Value
	Notional Amount	Average Contract Rate	
Forward contracts:			
Buy U.S. dollars, sell Euros	\$ 3.9	1.29	\$ 0.1
Buy British Pounds, sell Euros	5.1	.84	0.1
Buy Euros, sell U.S. dollars	11.8	1.38	(0.8)
Other currencies	1.0		(0.1)
Total foreign currency derivatives	\$ 21.8		\$ (0.7)

See Note 9 to the consolidated financial statements in this Form 10-K for a description of these agreements.

Forward exchange contracts are recorded as a natural hedge when the hedged item is a recorded asset or liability that is revalued each accounting period, in accordance with ASC *Topic 830, Foreign Currency Matters*. For derivatives designated as natural hedges, changes in fair values are reported in the other income (expense) line of the consolidated statements of operations.

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**Other Matters**

The Company has a business conduct policy applicable to all employees and regularly monitors compliance with that policy. The Company has determined that it had no significant related party transactions in each of the three years in the period ended December 31, 2011.

**Item 7A. *Quantitative and Qualitative Disclosures about Market Risk.***

The information contained under the caption Financial Market Risk Management included in Item 7 of this Form 10-K is incorporated herein by reference.

**Item 8. *Financial Statements and Supplementary Data.***

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**FEDERAL SIGNAL CORPORATION**

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**Report of Independent Registered Public Accounting Firm**

**The Board of Directors and Shareholders of Federal Signal Corporation**

We have audited the accompanying consolidated balance sheets of Federal Signal Corporation as of December 31, 2011 and 2010, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2011. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Federal Signal Corporation at December 31, 2011 and 2010, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note 1 of the Notes to the consolidated financial statements, effective January 1, 2011, the Company adopted the Financial Accounting Standards Board's amended accounting standards related to revenue recognition for arrangements with multiple deliverables and arrangements that include software elements.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Federal Signal Corporation's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 14, 2012, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Chicago, Illinois

March 14, 2012

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**Report of Independent Registered Public Accounting Firm**

**The Board of Directors and Shareholders of Federal Signal Corporation**

We have audited Federal Signal Corporation's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Federal Signal Corporation's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Federal Signal Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets as of December 31, 2011 and 2010, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2011 of Federal Signal Corporation and our report dated March 14, 2012, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Chicago, Illinois

March 14, 2012

**Table of Contents****FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS**

	<b>December 31,</b>	
	<b>2011</b>	<b>2010</b>
	<b>(\$ in millions)</b>	
<b>ASSETS</b>		
Current assets		
Cash and cash equivalents	\$ 9.5	\$ 62.1
Accounts receivable, net of allowances for doubtful accounts of \$2.9 million and \$2.8 million, respectively	126.9	100.4
Inventories Note 3	116.1	119.6
Other current assets	21.8	17.9
<b>Total current assets</b>	<b>274.3</b>	<b>300.0</b>
Properties and equipment Note 4	62.2	63.2
Other assets		
Goodwill Note 5	294.1	310.4
Intangible assets, net Note 5	70.7	84.4
Deferred charges and other assets	1.9	3.4
<b>Total assets of continuing operations</b>	<b>703.2</b>	<b>761.4</b>
Assets of discontinued operations, net Note 13	3.5	3.1
<b>Total assets</b>	<b>\$ 706.7</b>	<b>\$ 764.5</b>
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
Current liabilities		
Short-term borrowings Note 6	\$ 9.0	\$ 1.8
Current portion of long-term borrowings and capital lease obligations Note 6	0.2	76.2
Accounts payable	55.6	53.5
Customer deposits	15.0	10.2
Deferred revenue	9.9	12.4
Accrued liabilities		
Compensation and withholding taxes	22.0	21.2
Other	35.8	39.3
<b>Total current liabilities</b>	<b>147.5</b>	<b>214.6</b>
Long-term borrowings and capital lease obligations Note 6	213.1	184.4
Long-term pension and other postretirement benefit liabilities Note 8	74.1	41.3
Deferred gain Note 4	21.4	23.5
Deferred tax liabilities Note 7	47.2	45.8
Other long-term liabilities	16.4	15.8
<b>Total liabilities of continuing operations</b>	<b>519.7</b>	<b>525.4</b>
Liabilities of discontinued operations Note 13	12.3	18.2
<b>Total liabilities</b>	<b>532.0</b>	<b>543.6</b>
Shareholders' equity Notes 10 and 11		
Common stock, \$1 par value per share, 90.0 million shares authorized, 63.1 million and 63.0 million shares issued, respectively	63.1	63.0
Capital in excess of par value	167.7	164.7
Retained earnings	36.4	50.6
Treasury stock, 0.9 million and 0.9 million shares, respectively, at cost	(16.1)	(15.8)

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Accumulated other comprehensive loss	(76.4)	(41.6)
Total shareholders' equity	174.7	220.9
Total liabilities and shareholders' equity	\$ 706.7	\$ 764.5

See notes to consolidated financial statements.

**Table of Contents****FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF OPERATIONS**

	For the Years Ended December 31,		
	2011	2010	2009
	(\$ in millions, except per share data)		
Net sales	\$ 795.6	\$ 726.5	\$ 750.4
Costs and expenses			
Cost of sales	600.6	542.3	557.3
Selling, engineering, general and administrative	171.1	173.3	155.8
Goodwill and intangible assets impairment Note 5	20.6	78.9	-
Acquisition and integration related costs	-	3.9	-
Restructuring charges Note 14	-	5.0	1.5
Operating income (loss)	3.3	(76.9)	35.8
Interest expense	16.4	10.3	11.4
Other expense (income)	0.2	1.2	(0.7)
(Loss) income before income taxes	(13.3)	(88.4)	25.1
Income tax provision Note 7	(1.1)	(72.3)	(5.3)
(Loss) income from continuing operations	(14.4)	(160.7)	19.8
Discontinued operations Note 13			
Gain (loss) from discontinued operations and disposal, net of tax (expense) benefit of \$0.4 million, \$0.0 million, and (\$1.0) million, respectively	0.2	(15.0)	3.3
Net (loss) income	\$ (14.2)	\$ (175.7)	\$ 23.1
Basic and diluted (loss) earnings per share			
(Loss) earnings from continuing operations	\$ (0.23)	\$ (2.79)	\$ 0.41
Earnings (loss) from discontinued operations and disposal, net of taxes	-	(0.26)	0.06
Net (loss) earnings per share	\$ (0.23)	\$ (3.05)	\$ 0.47

See notes to consolidated financial statements.

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**FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY**

	Common Stock Par Value	Capital in Excess of Par Value	Retained Earnings	Treasury Stock (\$ in millions)	Accumulated Other Comprehensive Loss	Total
Balance at December 31, 2008	\$ 49.3	\$ 106.4	\$ 229.0	\$ (36.1)	\$ (61.5)	\$ 287.1
Comprehensive loss:						
Net income			23.1			23.1
Foreign currency translation					12.6	12.6
Unrealized gains on derivatives, net of \$0.1 million tax expense					0.2	0.2
Change in unrecognized gains related to pension benefit plans, net of \$5.4 million tax expense					9.4	9.4
Comprehensive income						45.3
Cash dividends declared (\$0.24 per common share)			(11.7)			(11.7)
Share based payments:						
Non-vested stock and options		3.1				3.1
Stock awards	0.4	0.4				0.8
Common stock cancelled	(0.1)	(0.2)				(0.3)
Issuance of common stock from treasury		(15.9)		20.3		4.4
Balance at December 31, 2009	49.6	93.8	240.4	(15.8)	(39.3)	328.7
Comprehensive loss:						
Net loss			(175.7)			(175.7)
Foreign currency translation					(4.5)	(4.5)
Unrealized gains on derivatives, net of \$0.0 million tax expense					0.8	0.8
Change in unrecognized gains related to pension benefit plans, net of \$0.0 million tax expense					1.4	1.4
Comprehensive loss						(178.0)
Shares issued for acquisition	1.2	9.0				10.2
Equity offering, net of fees	12.1	59.1				71.2
Cash dividends declared (\$0.24 per common share)			(14.1)			(14.1)
Share based payments:						
Non-vested stock and options		2.3				2.3
Stock awards	0.1	0.3				0.4
Common stock cancelled		0.2				0.2
Balance at December 31, 2010	63.0	164.7	50.6	(15.8)	(41.6)	220.9
Comprehensive loss:						
Net loss			(14.2)			(14.2)
Foreign currency translation					(4.3)	(4.3)
Unrealized losses on derivatives, net of \$0.1 million tax benefit					(0.7)	(0.7)
Change in unrecognized losses related to pension benefit plans, net of \$1.6 million tax benefit					(29.8)	(29.8)
Comprehensive loss						(49.0)
Share based payments:						
Non-vested stock and options		2.0				2.0
Stock awards	0.1	0.9				1.0

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Shares received in connection with vesting of awards					(0.3)		(0.3)
Common stock cancelled		0.1					0.1
Balance at December 31, 2011	\$ 63.1	\$ 167.7	\$ 36.4	\$ (16.1)	\$ (76.4)	\$ 174.7	

See notes to consolidated financial statements.

**Table of Contents****FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS**

	For the Years Ended December 31,		
	2011	2010	2009
	(\$ in millions)		
Operating activities			
Net (loss) income	\$ (14.2)	\$ (175.7)	\$ 23.1
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
(Gain) loss on discontinued operations and disposal	(0.2)	15.0	(3.3)
Gain on joint venture	-	(0.1)	(1.2)
Goodwill and intangible assets impairment	20.6	78.9	-
Valuation allowance	-	85.0	-
Depreciation and amortization	22.5	19.2	14.7
Stock option and award compensation expense	2.0	2.3	3.1
Provision for doubtful accounts	0.6	1.2	0.9
Deferred income taxes	(0.5)	(13.7)	3.7
Changes in operating assets and liabilities, net of effects from acquisitions and dispositions of companies			
Accounts receivable	(28.3)	19.6	17.8
Inventories	1.9	(7.9)	21.8
Other current assets	(2.1)	2.6	(0.7)
Accounts payable	2.6	4.0	(3.3)
Customer deposits	5.0	-	(7.4)
Accrued liabilities	(0.8)	(3.4)	(5.8)
Income taxes	2.4	(1.2)	1.9
Pension contributions	(3.8)	(1.1)	(1.0)
Deferred revenue	(2.4)	6.3	0.2
Other	4.6	6.8	(3.5)
Net cash provided by continuing operating activities	9.9	37.8	61.0
Net cash (used for) provided by discontinued operating activities	(3.6)	(6.6)	1.4
Net cash provided by operating activities	6.3	31.2	62.4
Investing activities			
Purchases of properties and equipment	(15.7)	(12.8)	(14.4)
Proceeds from sales of properties and equipment	1.9	1.9	4.0
Payments for acquisitions, net of cash acquired	-	(97.3)	(13.5)
Other, net	-	-	10.0
Net cash used for continuing investing activities	(13.8)	(108.2)	(13.9)
Net cash provided by discontinued investing activities	-	0.2	44.9
Net cash (used for) provided by investing activities	(13.8)	(108.0)	31.0
Financing activities			
(Decrease) increase in short-term borrowings, net	(27.0)	130.9	(12.6)
Proceeds from issuance of long-term borrowings	-	-	12.5
Payments on long-term borrowings	(13.3)	(70.8)	(77.6)
Payments of debt amendment fees	(2.3)	-	-
Cash dividends paid to shareholders	(3.7)	(13.3)	(11.7)
Proceeds from equity offering, net of fees	-	71.2	-
Other, net	0.4	0.6	0.2

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Net cash (used for) provided by continuing financing activities	(45.9)	118.6	(89.2)
Net cash provided by (used for) discontinued financing activities	0.1	(1.0)	(7.3)
Net cash (used for) provided by financing activities	(45.8)	117.6	(96.5)
Effects of foreign exchange rate changes on cash	0.7	0.2	0.8
(Decrease) increase in cash and cash equivalents	(52.6)	41.0	(2.3)
Cash and cash equivalents at beginning of year	62.1	21.1	23.4
Cash and cash equivalents at end of year	\$ 9.5	\$ 62.1	\$ 21.1

See notes to consolidated financial statements.

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**FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(\$ in millions, except per share data)**

**NOTE 1 SIGNIFICANT ACCOUNTING POLICIES**

*Basis of presentation:* The accompanying consolidated financial statements include the accounts of Federal Signal Corporation and all of its significant subsidiaries ( Federal Signal or the Company ) and have been prepared in accordance with accounting principles generally accepted in the United States of America ( GAAP ). All significant intercompany balances and transactions have been eliminated in consolidation. These consolidated financial statements include estimates and assumptions by management that affect the amounts reported in the consolidated financial statements. Actual results could differ from these estimates. The operating results of businesses divested during 2010 and 2009 have been excluded since the date of sale, and which have been reported prior to sale as discontinued operations (See Note 13). Certain prior year amounts have been reclassified to conform to the current year presentation.

Products manufactured and services rendered by the Company are divided into four major operating segments: Safety and Security Systems, Fire Rescue, Environmental Solutions and Federal Signal Technologies ( FSTech ). 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.

*Non-U.S. Operations:* Assets and liabilities of non-U.S. subsidiaries, other than those whose functional currency is the U.S. dollar, are translated at current exchange rates with the related translation adjustments reported in shareholders' equity as a component of accumulated other comprehensive loss. Statements of operations accounts are translated at the average exchange rate during the period. Where the U.S. dollar is considered the functional currency, monetary assets and liabilities are translated at current exchange rates with the related adjustment included in net income. Non-monetary assets and liabilities are translated at historical exchange rates. The Company incurs foreign currency transaction gains/losses relating to assets and liabilities that are denominated in a currency other than the functional currency. For 2011, 2010 and 2009, the Company incurred foreign currency translation losses, included in other expense in the consolidated statements of operations, of \$0.3 million, \$1.3 million, and \$0.3 million, respectively. The cumulative translation adjustment, included in accumulated other comprehensive loss as of December 31, 2011 and 2010, was a cumulative loss of \$0.3 million and cumulative income of \$4.0 million, respectively.

*Cash equivalents:* The Company considers all highly liquid investments with a maturity of three months or less, when purchased, to be cash equivalents.

*Accounts receivable, lease financing and other receivables and allowances for doubtful accounts:* A receivable is considered past due if payments have not been received within agreed upon invoice terms. The Company's policy is generally to not charge interest on trade receivables after the invoice becomes past due, but to charge interest on lease receivables. The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments on the outstanding accounts receivable and outstanding lease financing and other receivables. The allowances are each maintained at a level considered appropriate based on historical and other factors that affect collectability. These factors include historical trends of write-offs, recoveries and credit losses; portfolio credit quality; and current and projected economic and market conditions. If the financial condition of the Company's customers were to deteriorate, resulting in a reduced ability to make payments, additional allowances may be required.

*Inventories:* The Company's inventories are valued at the lower of cost or market. Cost is determined using the first-in, first-out ( FIFO ) method. Included in the cost of inventories are raw materials, direct wages and associated production costs.

*Properties and equipment and related depreciation:* Properties and equipment are stated at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Useful lives

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range from 8 to 40 years for buildings and 3 to 15 years for machinery and equipment. Leasehold improvements are depreciated over the shorter of the remaining life of the lease or the useful life of the improvement. Property and equipment and other long-term assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the sum of the expected undiscounted cash flows is less than the carrying value of the related asset or group of assets, a loss is recognized for the difference between the fair value and carrying value of the asset or group of assets. Such analyses necessarily involve significant judgment.

*Goodwill and Other Intangible assets:* Goodwill represents the excess of the cost of an acquired business over the amounts assigned to its net assets. Goodwill is not amortized but is tested for impairment at a reporting unit level on an annual basis or when an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The Company performed its annual goodwill impairment test as of October 31, 2011.

Goodwill is tested for impairment based on a two-step test. The first step, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired and the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess. The Company generally determines the fair value of its reporting units using two valuation methods: the Income Approach Discounted Cash Flow Analysis method, and the Market Approach Guideline Public Company Method.

Under the Income Approach Discounted Cash Flow Analysis method the key assumptions consider projected sales, cost of sales, and operating expenses. These assumptions were determined by management utilizing our internal operating plan, growth rates for revenues and operating expenses, and margin assumptions. An additional key assumption under this approach is the discount rate, which is determined by looking at current risk-free rates of capital, current market interest rates, and the evaluation of risk premium relevant to the business segment. If our assumptions relative to growth rates were to change or were incorrect, our fair value calculation may change, which could result in impairment.

Under the Market Approach Guideline Public Company Method the Company identified several publicly traded companies, including Federal Signal, which we believe have sufficiently relevant similarities. For these companies the Company calculated the mean ratio of invested capital to revenues and invested capital to EBITDA. Similar to the income approach discussed above, sales, cost of sales, operating expenses, and their respective growth rates are key assumptions utilized. The market prices of Federal Signal and other guideline companies are additional key assumptions. If these market prices increase, the estimated market value would increase. If the market prices decrease, the estimated market value would decrease.

The results of these two methods are weighted based upon management's evaluation of the relevance of the two approaches. In the current year evaluation management determined that the income approach provided a more relevant measure of each reporting unit's fair value and used it to determine reporting unit fair value. Management used the market approach to corroborate the results of the income approach. Management used the income approach to determine fair value of the reporting units because it considers anticipated future financial performance. The market approach is based upon historical and current economic conditions which might not reflect the long term prospects or opportunities for the business segment being evaluated.

During the fourth quarter of 2011, the Company performed the annual assessment, determined that the goodwill associated with the FSTech Group reporting unit was impaired, and recorded impairment charges of \$14.8 million. The impairment charge resulted from decreased sales and cash flow estimated in our FSTech Group. As of December 31, 2011, the goodwill impairment charge is an estimate and may be adjusted during the

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first quarter of 2012 upon completion of a detailed second step impairment analysis. We have not completed the second step because we are awaiting additional information needed to value certain assets of the reporting unit. We will complete the second step in the first quarter of 2012 and changes to the estimated impairment we have recorded could be material. The fair values of the other reporting units exceeded their respective carrying amounts by 10% or more.

During the fourth quarter of 2010, the Company performed the annual assessment, determined that the goodwill associated with the FSTech Group reporting unit was impaired, and recorded impairment charges of \$67.1 million. As of December 31, 2010, the goodwill impairment charge was an estimate. Upon completion of the detailed second step impairment analysis in the first quarter of 2011, the Company recorded an adjustment of \$1.6 million which reduced a portion of the original goodwill impairment recognized during the fourth quarter of 2010.

The Company had no goodwill impairments in 2009. Adverse changes to the Company's business environment and future cash flows could cause us to record impairment charges in future periods which could be material. See Note 5 of the consolidated financial statements for further information.

An intangible asset determined to have an indefinite useful life is not amortized. Indefinite lived intangible assets are evaluated each reporting period to determine whether events and circumstances continue to support an indefinite useful life. These assets are tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired.

The impairment test consists of a comparison of the fair value of the indefinite lived intangible asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

Significant judgment is applied when evaluating if an intangible asset has an indefinite useful life. In addition, for indefinite lived intangible assets, significant judgment is applied in testing for impairment. This judgment includes developing cash flow projections, selecting appropriate discount rates, identifying relevant market comparables, and incorporating general economic and market conditions.

During the fourth quarter of 2011, as a result of the annual assessment, the Company concluded that the fair value determined by the income approach, of certain trade names in the FSTech Group was lower than the carrying value. As a result, the Company recognized a \$7.4 million impairment charge to trade names within the FSTech segment in the fourth quarter of 2011.

During the fourth quarter of 2010, as a result of the annual assessment, the Company concluded that the fair value determined by the income approach, of certain trade names in the FSTech Group was lower than the carrying value. As a result, the Company recognized an \$11.8 million impairment charge to trade names within the FSTech segment in the fourth quarter of 2010.

The Company had no impairments in 2009. Adverse changes to the Company's business environment and future cash flows could cause us to record impairment charges in future periods, which could be material. See Note 5 of the consolidated financial statements for further information.

Definite lived intangible assets are amortized using the straight-line method over the estimated useful lives and are tested for impairment if indicators exist.

*Stock-based compensation plans:* The Company has various stock-based compensation plans, described more fully in Note 10.

The Company accounts for stock-based compensation in accordance with the provisions of Accounting Standards Codification (ASC) Topic 718, *Compensation - Stock Compensation*. The fair value of stock options is determined using a Black-Scholes option pricing model.

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*Use of estimates:* The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

*Warranty:* Sales of many of the Company's products carry express warranties based on terms that are generally accepted in the Company's marketplaces. The Company records provisions for estimated warranty at the time of sale based on historical experience and periodically adjusts these provisions to reflect actual experience. Infrequently, a material warranty issue can arise which is beyond the scope of the Company's historical experience. The Company provides for these issues as they become probable and estimable.

*Product liability and workers' compensation liability:* Due to the nature of the Company's products, the Company is subject to claims for product liability and workers' compensation in the normal course of business. The Company is self-funded for a portion of these claims. The Company establishes a reserve using a third-party actuary for any known outstanding matters, including a reserve for claims incurred but not yet reported.

*Financial instruments:* The Company enters into agreements (derivative financial instruments) to manage the risks associated with interest rates and foreign exchange rates. The Company does not actively trade such instruments nor enter into such agreements for speculative purposes. The Company principally utilizes two types of derivative financial instruments: 1) interest rate swaps to manage its interest rate risk, and 2) foreign currency forward exchange and option contracts to manage risks associated with sales and expenses (forecast or committed) denominated in foreign currencies.

On the date a derivative contract is entered into, the Company designates the derivative as one of the following types of hedging instruments and accounts for the derivative as follows:

*Fair value hedge:* A hedge of a recognized asset or liability or an unrecognized firm commitment is declared as a fair value hedge. For fair value hedges, both the effective and ineffective portions of the changes in the fair value of the derivative, along with the gain or loss on the hedged item that is attributable to the hedged risk, are recorded in earnings and reported in the consolidated statements of operations on the same line as the hedged item.

*Cash flow hedge:* A hedge of a forecast transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability is declared as a cash flow hedge. The effective portion of the change in the fair value of a derivative that is declared as a cash flow hedge is recorded in accumulated other comprehensive income. When the hedged item impacts the statement of operations, the gain or loss previously included in accumulated other comprehensive income is reported on the same line in the consolidated statements of operations as the hedged item. In addition, both the fair value of changes excluded from the Company's effectiveness assessments and the ineffective portion of the changes in the fair value of derivatives used as cash flow hedges are reported in other expense in the consolidated statements of operations.

The Company formally documents its hedge relationships, including identification of the hedging instruments and the hedged items, as well as its risk management objectives and strategies for undertaking the hedge transaction. Derivatives are recorded in the consolidated balance sheets at fair value in other deferred charges and assets and other accrued liabilities. This process includes linking derivatives that are designated as hedges of specific forecast transactions. The Company also formally assesses, both at inception and at least quarterly thereafter, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in either the fair value or cash flows of the hedged item. If it is determined that a derivative ceases to be a highly effective hedge, or if the anticipated transaction is no longer likely to occur, the Company discontinues hedge accounting, and any deferred gains or losses are recorded in other expense (income) in the consolidated statements of operations. Amounts related to terminated interest rate swaps are deferred and amortized as an adjustment to interest expense over the original period of interest exposure, provided the designated liability continues to exist or is probable of occurring.

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*Fair value of financial instruments:* The Company applies the provisions of ASC *Topic 820, Fair Value Measurements and Disclosures*, to its non-financial assets and non-financial liabilities. ASC *Topic 820* established a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

*Revenue recognition:* Net sales consist primarily of revenue from the sale of equipment, environmental vehicles, vehicle mounted aerial platforms, parts, software, service, and maintenance contracts.

The Company recognizes revenue for products when persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable, and collection is probable. Product is considered delivered to the customer once it has been shipped and title and risk of loss have been transferred. For most of the Company's product sales, these criteria are met at the time the product is shipped; however, occasionally title passes later or earlier than shipment due to customer contracts or letter of credit terms. If at the outset of an arrangement the Company determines the arrangement fee is not, or is presumed not to be, fixed or determinable, revenue is deferred and subsequently recognized as amounts become due and payable and all other criteria for revenue recognition have been met.

Prior to January 1, 2011, for any product within these groups that either was software or was considered software-related, the Company accounted for such products in accordance with the specific industry accounting guidance for software and software-related transactions. In October 2009, the FASB issued Accounting Standards Update (ASU) 2009-14, *Topic 985-Certain Revenue Arrangements That Include Software Elements*, which amended the accounting standards for revenue recognition to remove tangible products containing software components and non-software components that function together to deliver the products' essential functionality from the scope of industry-specific software revenue recognition guidance. The Company adopted ASU 2009-14 prospectively on January 1, 2011. Certain businesses within the Company's Federal Signal Technologies Group sell tangible products containing software components and non-software components that function together to deliver the products' essential functionality, and therefore such products were removed from the scope of industry specific software guidance effective January 1, 2011.

The Company accounts for multiple element arrangements that consist only of software or software-related products in accordance with industry specific accounting guidance for software and software-related transactions. If a multiple-element arrangement includes software and other deliverables that are neither software nor software-related, the Company applies various revenue-related U.S. GAAP to determine if those deliverables constitute separate units of accounting from the software or software-related deliverables. If the Company can separate the deliverables, the Company applies the industry specific accounting guidance to the software and software-related deliverables and applies other appropriate guidance to the non-software-related deliverables. Prior to January 1, 2011, revenue on arrangements that included multiple elements such as hardware, software, and services was allocated to each element based on the relative fair value of each element. Each element's allocated revenue was recognized when the revenue recognition criteria for that element had been met. Fair value was generally determined by vendor-specific objective evidence (VSOE), which was based on the price charged when each element was sold separately. If the Company could not objectively determine the fair value of any undelivered element included in a multiple-element arrangement, the Company deferred revenue until all elements were delivered and services were performed, or until fair value could objectively be determined for any remaining undelivered elements. When the fair value of a delivered element had not been established, but fair value existed for the undelivered elements, the Company used the residual method to recognize revenue if the fair value of all undelivered elements was determinable. Under the residual method, the fair value of the undelivered elements was deferred and the remaining portion of the arrangement fee was allocated to the delivered elements and was recognized as revenue. In October 2009, the FASB issued ASU 2009-13, *Topic 605-Multiple-Deliverable Revenue Arrangements*, which changes the level of evidence of standalone selling

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price required to separate deliverables in a multiple deliverable revenue arrangement by allowing a company to make its best estimate of the selling price of deliverables when more objective evidence of selling price is not available and eliminates the use of the residual method. ASU 2009-13 applies to multiple deliverable revenue arrangements that are not accounted for under other accounting pronouncements and retains the use of VSOE if available, and third-party evidence of selling price when VSOE is unavailable. The Company adopted ASU 2009-13 prospectively on January 1, 2011. Certain businesses within the Federal Signal Technologies Group sell under multiple deliverable sales arrangements where the Company utilized estimated selling prices under the relative-selling price method. In arriving at its best estimates of selling price, management considered market conditions as well as Company-specific factors. Management considered the Company's overall pricing model and objectives, including profit objectives and internal cost structure, as well as historical pricing data.

The total effect of adopting the new accounting guidance during 2011 was an increase in revenues of \$4.2 million and an increase in cost of sales of \$1.5 million.

Implementation services include the design, development, testing, and installation of systems. These services are recognized pursuant to ASC 605-35, *Construction-Type and Production-Type Contracts*. In these cases, the Company is required to make reasonably dependable estimates relative to the extent of progress toward completion by comparing the total hours incurred to the estimated total hours for the arrangement and, accordingly, would apply the percentage-of-completion method. If the Company were unable to make reasonably dependable estimates of progress towards completion, then it would use the completed-contract method, under which revenue is recognized only upon completion of the services. If total cost estimates exceed the anticipated revenue, then the estimated loss on the arrangement is recorded at the inception of the arrangement or at the time the loss becomes apparent.

Revenue from maintenance contracts is deferred and recognized ratably over the coverage period. These contracts typically extend phone support, software updates and upgrades, technical support, and equipment repairs.

Certain products which include software elements that are considered to be more than incidental are sold with post-contract support, which may include certain upgrade rights that are offered to customers in connection with software sales or the sale of extended warranty and maintenance contracts. The Company defers revenue for the fair value of the upgrade rights until the future obligation is fulfilled or the right to the upgrade expires. When the Company's software products are available with maintenance agreements that grant customers rights to unspecified future upgrades over the maintenance term on a when-and-if available basis, revenue associated with such maintenance is recognized ratably over the maintenance term.

*Net sales:* Net sales are net of returns and allowances. Returns and allowances are calculated and recorded as a percentage of revenue based upon historical returns. Gross sales include sales of products and billed freight related to product sales. Freight has not historically comprised a material component of gross sales.

*Product shipping costs:* Product shipping costs are expensed as incurred and are included in cost of sales.

*Income Taxes:* We file a consolidated U.S. federal income tax return for Federal Signal Corporation and its eligible domestic subsidiaries. Our non-U.S. subsidiaries file income tax returns in their respective local jurisdictions. We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and tax benefit carry forwards. Deferred tax assets and liabilities at the end of each period are determined using enacted tax rates. A valuation allowance is established or maintained when, based on currently available information and other factors, it is more likely than not that all or a portion of a deferred tax asset will not be realized.

Accounting standards on accounting for uncertainty in income taxes address the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements.

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Under the guidance on accounting for uncertainty in income taxes, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. The guidance on accounting for uncertainty in income taxes also provides guidance on de-recognition, classification, interest and penalties on income taxes, and accounting in interim periods.

*Litigation Contingencies:* The Company is subject to various claims, other pending and possible legal actions for product liability and other damages, and other matters arising out of the conduct of the Company's business. The Company believes, based on current knowledge and after consultation with counsel, that the outcome of such claims and actions will not have an adverse effect on the Company's consolidated financial position or results of operations. However, in the event of unexpected future developments, it is possible that the ultimate resolution of such matters, if unfavorable, could have a material adverse effect on the Company's results of operations. Professional legal fees are expensed when incurred. We accrue for contingent losses when such losses are probable and reasonably estimatable. In the event that estimates or assumptions of contingent losses are different from actual, adjustments are made in subsequent periods to reflect more current information.

**NOTE 2 ACQUISITIONS****Sirit Inc. and Subsidiaries**

On March 5, 2010, the Company acquired all of the issued and outstanding common shares of Sirit Inc. and its Subsidiaries ( Sirit ) for total cash consideration of CDN \$77.1 million (USD \$74.9 million). Sirit designs, develops and manufactures radio frequency identification device technology for applications such as tolling, electronic vehicle registration, parking and access control, cashless payments, supply chain management and asset tracking solutions. The results of Sirit are included within the FSTech operating segment. The following table summarizes the fair values of the assets acquired and liabilities assumed from the acquisition of Sirit:

<i>(\$ in millions)</i>	<b>Final Purchase Price Allocation</b>
Purchase Price	\$ 74.9
Fair Value of Assets Acquired:	
Current assets	7.0
Fixed assets	1.6
Intangible assets	37.1
Other assets	0.4
<b>Total Assets Acquired</b>	<b>46.1</b>
Fair Value of Liabilities Assumed:	
Current liabilities	13.1
Deferred tax liabilities, net	2.7
<b>Total Liabilities Assumed</b>	<b>15.8</b>
Goodwill (1)	44.6

(1) The goodwill of \$44.6 million is non-deductible for tax purposes.

**VESystems, LLC and Subsidiaries**

On March 2, 2010, the Company acquired all of the equity interests in VESystems, LLC and its Subsidiaries ( VESystems ) for an aggregate purchase price of \$34.8 million. The consideration transferred consisted of cash in the amount of approximately \$24.6 million and 1,220,311 shares of Federal Signal common stock with an



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acquisition date fair value of \$10.2 million. VESystems designs, develops and deploys advanced software applications and customer management systems and services for the electronic toll collection and port industries. The results of VESystems are included within the FSTech operating segment. The following table summarizes the fair values of the assets acquired and liabilities assumed from the acquisition of VESystems:

<i>(\$ in millions)</i>	<b>Final Purchase Price Allocation</b>
Purchase Price	\$ 34.8
Fair Value of Assets Acquired:	
Current assets	2.2
Fixed assets	0.1
Intangible assets	16.1
Other assets	0.5
<b>Total Assets Acquired</b>	<b>18.9</b>
Fair Value of Liabilities Assumed:	
Current liabilities	2.2
Total Liabilities Assumed	2.2
<b>Goodwill (2)</b>	<b>18.1</b>

(2) The goodwill of \$18.1 million is deductible for tax purposes over 15 years, starting in 2010.

**Diamond Consulting Services Ltd.**

On December 9, 2009, the Company acquired all equity interests of Diamond Consulting Services Ltd. ( Diamond ) for total consideration of \$13.9 million. In addition to the consideration paid, the Company was required to pay up to \$3.2 million of retention payments in future years if certain contingencies were met. The deferred retention expense was calculated in accordance with the sale and purchase agreement of Diamond. A sum of £1,000,000 (one million pounds sterling) was payable to the former owners of Diamond on or before January 31, 2011 in the event that the former owners of Diamond were employed by the Company on December 31, 2010 and were at that time actively engaged in the business. An additional amount of £1,000,000 (one million pounds sterling) was payable to the former owners of Diamond on or before January 31, 2012 in the event that former owners of Diamond were employed by the Company on December 31, 2011 and were at that time actively engaged in the business. The former owners of Diamond did maintain employment through December 31, 2011 and as of January 31, 2012 have been paid both contingent payments totaling £2,000,000 (two million pounds sterling).

In accordance with ASC 805-10-55-25, the deferred retention payments are being treated as compensation expense for post-combination services as the contingent payments were to be automatically forfeited if employment was terminated. The total contingency of £2,000,000 (two million pounds sterling) was expensed ratably over the two-year period that the employees were required to stay in order to earn the retention payment.

Diamond specializes in vehicle classification systems for tolling and other intelligent transportation systems. The results of Diamond are included in the FSTech operating segment.

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The following table summarizes the fair value of Sirit and VESystems amortizable and indefinite-lived intangible assets as of their respective acquisition dates:

(\$ in millions)	Sirit		VESystems	
	Fair Value	Estimated useful life (in years)	Fair Value	Estimated useful life (in years)
<b>Amortizable intangible assets:</b>				
Patents	\$ -		\$ -	
Customer relationships	18.0	18	9.5	17
Technology	12.1	9	4.9	16
Non-compete	2.9	5	0.4	5
Total amortizable intangible assets	\$ 33.0		\$ 14.8	
<b>Indefinite-lived intangibles:</b>				
Trade names	\$ 4.1		\$ 1.3	
Total intangible assets	\$ 37.1		\$ 16.1	

The Company determined the useful life of its customer relationship intangible assets in accordance with ASC 350, *Goodwill and Other*. In accordance with ASC 350-30-35-2, the useful lives are based on the period during which 95% of the undiscounted cash flows of the assets will be realized. In addition to analyzing the pattern of benefit demonstrated by the asset's cash flow stream, the Company also considered factors discussed in ASC 350-30-35-3 and determined that the useful lives are appropriate.

Subsequent to the completion of the aforementioned acquisitions and in association with the Company's annual impairment assessments, the Company recorded charges of \$78.9 million and \$20.6 million to impair goodwill and certain trade names within the FSTech Group in 2010 and 2011, respectively. See Note 5 for additional information.

**Pro Forma Condensed Combined Financial Information**

The following unaudited pro forma condensed combined financial information presents the results of operations of the Company as they may have appeared if the closing of Sirit and VESystems, presented in the aggregate, had been completed on January 1, 2010 and January 1, 2009, respectively:

(\$ in millions, except per share data)	December 31,	
	2010	2009
Net sales	\$ 734.8	\$ 797.0
(Loss) income from continuing operations	(160.3)	14.0
(Loss) earnings from continuing operations per basic and diluted share	\$ (2.78)	\$ 0.28

The unaudited pro forma condensed combined financial information is presented for illustrative purposes only and does not indicate the actual financial results of the Company had the closing of Sirit and VESystems been completed on January 1, 2010 and January 1, 2009, respectively, nor is it indicative of the results of operations in future periods. Included in the unaudited pro forma combined financial information for the years ended December 31, 2010 and 2009 were pro forma adjustments to reflect the results of operations of Sirit and VESystems as well as the impact of amortizing certain acquisition accounting adjustments such as amortizable intangible assets. The pro forma condensed financial information does not indicate the impact of possible business model changes, nor does it consider any potential impacts of current market conditions, expense efficiencies or other factors. The combined net sales and net loss for the year ended December 31, 2010 was \$30.2 million and \$(40.7) million, respectively.

**Table of Contents****Acquisition and Integration Related Expenses**

For the year ended December 31, 2010, pretax charges totaling \$3.9 million were recorded for acquisition and integration related costs. For the years ended December 31, 2011 and 2009, there were no charges recorded for acquisitions and integration related costs. These charges, which were expensed in accordance with the accounting guidance for business combinations, were recorded in acquisition and integration related costs and are included as a component of corporate expenses.

**NOTE 3 INVENTORIES**

Inventories at December 31 are summarized as follows (\$ in millions):

	2011	2010
Raw materials	\$ 54.1	\$ 55.0
Work in process	28.0	29.0
Finished goods	34.0	35.6
 Total inventories	 \$ 116.1	 \$ 119.6

**NOTE 4 PROPERTIES AND EQUIPMENT**

Properties and equipment at December 31 are summarized as follows (\$ in millions):

	2011	2010
Land	\$ 0.3	\$ 0.3
Buildings and improvements	23.5	23.1
Machinery and equipment	149.3	141.1
Accumulated depreciation	(110.9)	(101.3)
 Total properties and equipment	 \$ 62.2	 \$ 63.2

In July 2008, the Company entered into sale-leaseback transactions for its Elgin and University Park, Illinois plant locations. Net proceeds received were \$35.8 million, resulting in a deferred gain of \$29.0 million. The deferred gain is being amortized over the 15-year life of the respective leases. The balance was \$21.4 million and \$23.5 million at December 31, 2011 and 2010, respectively.

The Company leases certain facilities and equipment under operating leases, some of which contain options to renew. Total rental expense on all operating leases was \$11.0 million in 2011, \$11.4 million in 2010, and \$10.3 million in 2009. Sublease income and contingent rentals relating to operating leases were insignificant. At December 31, 2011, minimum future rental commitments under operating leases having non-cancelable lease terms in excess of one year aggregated \$62.5 million payable as follows: \$10.0 million in 2012, \$7.1 million in 2013, \$6.7 million in 2014, \$5.8 million in 2015, \$5.2 million in 2016, and \$27.7 million thereafter.

**Table of Contents****NOTE 5 GOODWILL AND OTHER INTANGIBLE ASSETS**

Changes in the carrying amount of goodwill and trade names for the years ended December 31, 2011 and 2010, by operating segment, were as follows (\$ in millions):

**Goodwill**

(\$ in millions)	Environmental	Fire	Safety	Federal	Total
	Solutions	Rescue	& Security	Signal Technologies	
December 31, 2009	\$ 120.4	\$ 34.7	\$ 120.9	\$ 43.6	\$ 319.6
Acquisitions	-	-	-	62.2	62.2
Translation/Adjustments	-	(0.8)	(2.7)	(0.8)	(4.3)
Impairment	-	-	-	(67.1)	(67.1)
December 31, 2010	120.4	33.9	118.2	37.9	310.4
Acquisitions	-	-	-	-	-
Translation/Adjustments	-	(0.7)	(1.2)	(1.2)	(3.1)
Impairment	-	-	-	(13.2)	(13.2)
December 31, 2011	\$ 120.4	\$ 33.2	\$ 117.0	\$ 23.5	\$ 294.1

**Trade names**

(\$ in millions)	Environmental	Fire	Safety	Federal	Total
	Solutions	Rescue	& Security	Signal Technologies	
December 31, 2009	\$ -	\$ -	\$ -	\$ 24.4	\$ 24.4
Acquisitions	-	-	-	5.4	5.4
Translation/Adjustments	-	-	-	(2.7)	(2.7)
Impairment	-	-	-	(11.8)	(11.8)
December 31, 2010	-	-	-	15.3	15.3
Acquisitions	-	-	-	-	-
Translation/Adjustments	-	-	-	(0.1)	(0.1)
Impairment	-	-	-	(7.4)	(7.4)
December 31, 2011	\$ -	\$ -	\$ -	\$ 7.8	\$ 7.8

The following table provides the gross carrying value and accumulated amortization for each major class of intangible assets:

(\$ in millions)	Weighted Average Useful Life (Years)	December 31, 2011			December 31, 2010		
		Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Amortizable Intangible Assets:							
Developed software	6	\$ 24.4	\$ (19.3)	\$ 5.1	\$ 23.0	\$ (17.5)	\$ 5.5
Patents	10	3.7	(1.1)	2.6	2.3	(0.6)	1.7
Customer relationships	15	45.1	(10.8)	34.3	45.0	(7.3)	37.7
Technology	11	23.7	(5.3)	18.4	23.7	(3.1)	20.6

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Other	5	5.6	(3.1)	2.5	5.7	(2.1)	3.6
Total	11	102.5	(39.6)	62.9	99.7	(30.6)	69.1
Indefinite-lived Intangible Assets:							
Trade names		7.8	-	7.8	15.3	-	15.3
Total		\$ 110.3	\$ (39.6)	\$ 70.7	\$ 115.0	\$ (30.6)	\$ 84.4

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Amortization expense for the years ended December 31, 2011, 2010, and 2009 totaled \$9.4 million, \$8.2 million, and \$5.2 million, respectively. The Company estimates that the aggregate amortization expenses will be \$8.5 million in 2012, \$7.3 million in 2013, \$7.2 million in 2014, \$6.5 million in 2015, \$6.4 million in 2016, and \$27.0 million thereafter. Actual amounts of amortization may differ from estimated amounts due to additional intangible asset acquisitions, changes in foreign currency rates, impairment of intangible assets, and other events.

The Company accounts for goodwill and indefinite-lived intangible assets in accordance with ASC 360, *Intangibles - Goodwill and Other*, as indicated in Note 1.

During the fourth quarter of 2011, the Company performed the annual assessment, determined that the goodwill and certain trade names within the FSTech Group reporting unit were impaired, and recorded impairment charges of \$14.8 million and \$7.4 million, respectively. The impairment charges resulted from decreased sales and cash flow estimated in our FSTech Group. As of December 31, 2011, the goodwill impairment charge is an estimate and may be adjusted during the first quarter of 2012 upon completion of a detailed second step impairment analysis.

During the fourth quarter of 2010, the Company performed the annual assessment, determined that the goodwill and certain trade names within the FSTech Group reporting unit were impaired, and recorded impairment charges of \$67.1 million and \$11.8 million, respectively. As of December 31, 2010, the goodwill impairment charge was an estimate. Upon completion of the detailed second step impairment analysis in the first quarter of 2011, the Company recorded an adjustment of \$1.6 million which reduced a portion of the original goodwill impairment recognized during the fourth quarter of 2010.

**NOTE 6 DEBT**

Short-term borrowings at December 31 consisted of the following (\$ in millions):

	2011	2010
Non-U.S. lines of credit	\$ 9.0	\$ 1.8
Total short-term borrowings	\$ 9.0	\$ 1.8

Long-term borrowings at December 31 consisted of the following (\$ in millions):

<i>(\$ in millions)</i>	2011	2010
Revolving Credit Facility	\$ 180.0	\$ 214.6
Alternative Currency Facility (within Revolving Credit Facility)	-	4.0
10.79% Private Placement note with annual installments of \$10.0 million due 2010-2011	-	1.3
10.60% Private Placement note with annual installments of \$7.1 million due 2010-2011	-	0.6
12.73% Private Placement note due 2012	27.3	31.9
Private Placement note, floating rate (8.85% and 5.40% at December 31, 2011 and December 31, 2010, respectively) due 2013	6.2	7.1
Subsidiary Loan Agreement	-	1.0
Capital Lease Obligations	0.6	1.0
	214.1	261.5
Unamortized balance of terminated fair value interest rate swaps	0.1	0.6
	214.2	262.1
Less current maturities, excluding financial services activities	-	(75.8)
Less current capital lease obligations	(0.2)	(0.4)
Less financial services activities borrowings (included in discontinued operations)	(0.9)	(1.5)
Total long-term borrowings and capital lease obligations, net	\$ 213.1	\$ 184.4



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On February 22, 2012, the Company entered into a Credit Agreement (the "Credit Agreement"), by and among the Company, as borrower and General Electric Capital Corporation, as a co-collateral agent, and Wells Fargo Capital Finance, LLC, as administrative agent and co-collateral agent, providing the Company with a new \$100 million secured credit facility (the "ABL Facility").

Pursuant to the Credit Agreement, the ABL Facility is a five-year asset-based revolving credit facility pursuant to which up to \$100 million initially will be available, with the right, subject to certain conditions, to increase the availability under the facility by up to an additional \$25 million. The Credit Agreement provides for loans and letters of credit in an amount up to the aggregate availability under the facility subject to meeting certain borrowing base conditions, with a sub-limit of \$50 million for letters of credit. Borrowings under the ABL Facility bear interest, at the Company's option, at a base rate or a LIBOR rate, plus, in each case, an applicable margin set forth in the Credit Agreement. The applicable margin ranges from 1.00% to 2.75% for base rate borrowings and 1.75% to 3.50% for LIBOR borrowings. The Company must also pay a commitment fee to the facility lenders equal to 0.50% per annum on the unused portion of the ABL Facility along with other standard fees. Letter of credit fees are payable on outstanding letters of credit in an amount equal to the applicable LIBOR margin plus other customary fees.

The Company is allowed to prepay in whole or in part advances under the ABL Facility without penalty or premium other than customary breakage costs with respect to LIBOR loans.

The Credit Agreement contains a requirement that the Company, on a consolidated basis, maintain a minimum monthly fixed charge coverage ratio, along with other customary restrictive covenants, certain of which are subject to materiality thresholds.

The obligations under the Credit Agreement are secured by (i) a first priority security interest in the Company's and its domestic subsidiaries accounts, inventory, chattel paper, payment intangibles, cash and cash equivalents and other working capital assets (the "ABL First Priority Collateral") and (ii) a second priority security interest in all other now or hereafter acquired domestic property and assets, the stock or other equity interests in each of the domestic subsidiaries and certain of the first-tier foreign subsidiaries, subject to certain exclusions.

The Company's obligations under the Credit Agreement are guaranteed by certain of the Company's domestic subsidiaries.

On February 22, 2012, the Company also entered into a Financing Agreement (the "Financing Agreement") by and among the Company, certain subsidiaries of the Company, as guarantors, the lenders party thereto (the "Term Lenders") and TPG Specialty Lending, Inc., as administrative agent, collateral agent and sole lead arranger, pursuant to which the Term Lenders agreed to provide the Company with a \$215 million term loan (the "Term Loan").

Pursuant to the Financing Agreement, the Term Loan is a five-year, secured term loan maturing on February 22, 2017. Installment payments under the Term Loan do not commence until March 2013. The Financing Agreement includes provisions for mandatory prepayments in certain specified situations. However, based on its current forecast, the Company does not anticipate making any mandatory prepayments in 2012. Except in these certain specified situations, the Term Loan is not repayable in the first 12 months of the term and thereafter is subject to the following prepayment premium; (i) 2.75% in months 13-24, (ii) 2.00% in months 25-36 and (iii) nothing thereafter. These provisions are subject to change upon the occurrence of certain specified events.

The Term Loan will bear interest, at the Company's option, at a base rate or LIBOR rate, plus, in each case, an applicable margin set forth in the Financing Agreement. The applicable margin ranges from 9.00% to 10.00% for base rate borrowings and 10.00% to 11.00% for LIBOR borrowings. The Company is required to pay certain customary fees in connection with the Term Loan.

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The Financing Agreement requires the Company to comply with financial covenants related to the maintenance of a minimum monthly fixed charge coverage ratio, maximum capital expenditures, minimum liquidity, and maximum leverage ratio. The Financing Agreement contains other restrictive covenants which are substantively similar to those contained in the Credit Agreement.

The obligations under the Financing Agreement are secured by (i) a first priority security interest in all now or hereafter acquired domestic property and assets (excluding the ABL First Priority Collateral) the stock or other equity interests in each of the domestic subsidiaries and certain of the first-tier foreign subsidiaries, subject to certain exclusions, and (ii) a second priority security interest in the ABL First Priority Collateral.

The Company's obligations under the Financing Agreement are guaranteed by certain of the Company's non-dormant domestic subsidiaries.

Under the Financing Agreement, dividends shall be permitted only if the following conditions are met:

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

The Fixed Charge Ratio of the Company and its subsidiaries, as defined in the Financing Agreement, shall be, both before and after the dividend payment (on a pro forma basis), not less than 1.50 to 1.00; and

The Leverage Ratio of the Company and its subsidiaries, as defined in the Financing Agreement, shall be, both before and after the dividend payment (on a pro forma basis), less than 2.00 to 1.00.

The Company used the proceeds from the ABL Facility and the Term Loan to (i) repay outstanding balances under the Company's existing \$240 million secured revolving credit facility, dated as of April 25, 2007, as amended, which was to mature on April 25, 2012 (the Prior Credit Agreement); (ii) retire the Company's private placement notes issued pursuant to the Note Purchase Agreement, dated as of June 1, 2009, as amended, and pursuant to the Master Note Purchase Agreement dated as of June 1, 2003, as amended (together, the Prior Note Purchase Agreements); (iii) finance the ongoing general corporate needs of the Company and its subsidiaries; and (iv) pay fees and expenses associated with repayment of amounts due under the Prior Credit Agreement and the Prior Note Purchase Agreements, including the payment of approximately \$1.0 million in resulting breakage fees and premiums under the Prior Credit Agreement and Prior Note Purchase Agreements, and pay fees and expenses associated with the ABL Facility and the Term Loan.

In accounting for the classification of its outstanding debt as of December 31, 2011, the Company considered the guidance in ASC 470-10-45-14. As the Company has effectively refinanced short-term debt on a long-term basis subsequent to the balance sheet date, the amounts outstanding under the Prior Credit Agreement and the Prior Note Purchase Agreements as of December 31, 2011 have been reflected as a component of long-term borrowings and capital lease obligations on the consolidated balance sheet.

The Company was in violation of its Interest Coverage Ratio covenant minimum requirement as defined in the Prior Credit Agreement and the Prior Note Purchase Agreements for the fiscal quarter ended December 31, 2010.

On March 15, 2011, the Company executed an amendment and waiver to the Prior Credit Agreement. On the same date, the Company also executed an amendment and waiver to the Prior Note Purchase Agreements (collectively, the 2011 Amendments). Both of the 2011 Amendments included a permanent waiver of compliance with the interest coverage ratio covenant for the Company's fiscal quarter ended December 31, 2010. Included in the terms of the 2011 Amendments was the replacement of the interest coverage ratio covenant with a minimum EBITDA covenant, an increase in pricing, mandatory prepayments from proceeds of asset sales, restrictions on use of excess cash flow, restrictions on dividend payments, share repurchases and other restricted payments and a 50 basis points fee paid to the bank lenders and holders of the Notes. The Company also repaid \$30.0 million that was applied to the amounts outstanding under the Prior Credit Agreement and the Prior Note

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Purchase Agreements on a pro rata basis (i.e., 85.8% under the Prior Credit Facility and 14.2% under the Prior Note Purchase Agreements.) The \$30.0 million was included within the current portion of long-term borrowings and capital lease obligations on the consolidated balance sheet as of December 31, 2010.

The Prior Credit Agreement was secured by a first-priority perfected security interest in substantially all of the tangible and intangible assets of the Company and those domestic subsidiaries that acted as the guarantors.

On August 15, 2011 and November 15, 2011, the Company made excess cash flow payments of \$6.5 million and \$6.1 million, respectively. The amounts allocated to the Prior Credit Facility and Prior Note Purchase Agreements were \$10.8 million and \$1.8 million, respectively.

As of December 31, 2011, \$180.0 million was drawn on the Prior Credit Agreement leaving available borrowings of \$49.1 million that includes \$32.5 million of capacity used for existing letters of credit.

On April 27, 2009, the Company executed the Global Amendment to Note Purchase Agreements (the Global Amendment) with the holders of its private placement debt notes (the Notes). The Global Amendment included a provision allowing the Company to prepay \$50.0 million of principal of the \$173.4 million Notes outstanding at par with no prepayment penalty. The prepayment was executed on April 28, 2009, and included principal, related accrued interest and a fee of \$0.2 million totaling \$51.1 million. On September 1, 2010, the Company prepaid \$20.0 million of its outstanding principal balance of its private placement debt at par with no prepayment penalty and related accrued interest of \$0.4 million.

On February 10, 2009 Bronto Skylift OY AB, a wholly-owned subsidiary of the Company, entered into a loan in which principal and interest is paid semi-annually. The loan matured and was paid in full in February 2011.

As of December 31, 2011, \$9.0 million was drawn against the Company's non-U.S. lines of credit which provide for borrowings up to \$16.8 million.

Aggregate maturities of total borrowings amount to approximately \$9.2 million in 2012, \$21.8 million in 2013 and \$32.4 million in 2014 and \$159.8 million in 2015 and thereafter. These maturities primarily reflect the payment terms outlined in the ABL Facility and the Term Loan. The fair values of borrowings aggregated \$221.5 million and \$261.7 million at December 31, 2011 and 2010, respectively. Included in 2012 maturities are \$9.0 million of other non-U.S. lines of credit and \$0.2 million of capital lease obligations.

At December 31, 2011 and 2010, deferred financing fees, which are amortized over the remaining life of the debt, totaled \$1.0 million and \$0.5 million, respectively, and are included in deferred charges and other assets on the balance sheet.

The Company paid interest of \$16.1 million in 2011, \$9.7 million in 2010 and \$11.3 million in 2009. See Note 9 regarding the Company's utilization of derivative financial instruments relating to outstanding debt.

The weighted average interest rate on short-term borrowings was 3.24% at December 31, 2011.

**Table of Contents****NOTE 7 INCOME TAXES**

The provision (benefit) for income taxes for each of the three years in the period ended December 31 consisted of the following (\$ in millions):

	2011	2010	2009
Current:			
Federal	\$ (3.8)	\$ (3.0)	\$ (3.9)
Foreign	2.8	5.2	5.7
State and local	0.3	0.3	(0.2)
	(0.7)	2.5	1.6
Deferred:			
Federal	\$ 4.7	\$ 71.4	\$ 2.7
Foreign	(2.9)	(4.1)	0.5
State and local	-	2.5	0.5
	1.8	69.8	3.7
<b>Total income tax provision</b>	<b>\$ 1.1</b>	<b>\$ 72.3</b>	<b>\$ 5.3</b>

Differences between the statutory federal income tax rate and the effective income tax rate for each of the three years in the period ended December 31 are summarized below:

	2011	2010	2009
Statutory federal income tax rate	35.0%	35.0%	35.0%
State income taxes, net of federal tax benefit	(1.4)	(0.2)	0.8
Domestic Valuation Allowance	(39.2)	(96.2)	-
Non-deductible goodwill impairments	(27.8)	(22.0)	-
Non-deductible acquisition costs	-	(0.5)	1.2
Tax reserves	(5.2)	1.1	(2.5)
R&D tax credits	5.1	0.6	(1.9)
Foreign tax rate effects	23.8	0.8	(11.3)
Other, net	1.4	(0.3)	(0.2)
Effective income tax rate	(8.3)%	(81.7)%	21.1%

The Company's 2011 effective rate was (8.3)%. Due to the company's recent cumulative domestic losses for book purposes and the uncertainty of the realization of certain deferred tax assets, the Company continues to adjust its valuation allowance as the deferred tax assets increase or decrease, resulting in effectively no recorded tax benefit for domestic operating losses. However, the company has recorded tax expense for the increase in the deferred tax liabilities of its domestic indefinite lived intangibles. An income tax provision is still required for foreign operations that are not in a cumulative loss position.

The Company's 2010 effective rate of (81.7)% includes tax expense related to a domestic valuation allowance and non-deductible goodwill impairments.

The Company's 2009 effective rate of 21.1% reflects a benefit for the reduction in reserves primarily due to the completion of an audit of the Company's 2006 U.S. tax return in accordance with ASC *Topic 740, Income Taxes*. The Company's effective rate also reflects benefits for the R&D tax credit and foreign tax rate effects.



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Deferred income tax assets and liabilities at December 31 are summarized as follows (\$ in millions):

	2011	2010
Deferred tax assets:		
Depreciation and amortization	\$ 12.7	\$ 9.5
Accrued expenses	29.7	30.8
Net operating loss, capital loss, alternative minimum tax, research and development, and foreign tax credit carryforwards	75.0	70.0
Definite lived intangibles	1.8	5.8
Indefinite lived intangibles	5.7	-
Pension benefits	27.4	17.8
Other	0.4	0.1
Deferred revenue	2.1	1.9
Gross deferred tax assets	154.8	135.9
Valuation allowance	(122.9)	(109.1)
Total deferred tax assets	31.9	26.8
Deferred tax liabilities:		
Depreciation and amortization	(5.9)	(12.0)
Expenses capitalized for book	(4.1)	(4.1)
Indefinite lived intangibles	(57.0)	(43.2)
Definite lived intangibles	(14.7)	(11.3)
Other	-	(1.8)
Gross deferred tax liabilities	(81.7)	(72.4)
Net deferred tax liability	\$ (49.8)	\$ (45.6)

Federal and state income taxes have not been provided on accumulated undistributed earnings of certain foreign subsidiaries aggregating approximately \$86.1 million and \$85.2 million at December 31, 2011 and 2010, respectively; as such earnings have been reinvested in the business. The determination of the amount of the unrecognized deferred tax liability related to the undistributed earnings is not practicable.

In the fourth quarter of 2010, the Company determined that \$15 million of previously undistributed earnings at one of the Company's foreign subsidiaries would be repatriated in the future. As a result of this change, the Company increased its deferred tax liabilities related to the \$15 million by \$0.2 million. The remainder of the foreign subsidiaries undistributed earnings is indefinitely reinvested.

The deferred tax asset for tax loss carryforwards at December 31, 2011, includes Federal net operating loss carryforwards of \$3.5 million, which begin to expire in 2026, state net operating loss carryforwards of \$1.6 million, which will begin to expire in 2019; foreign net operating loss carryforwards of \$2.4 million of which \$0.5 million has an indefinite life; \$22.2 million for capital loss carryforwards that will expire in 2012 and 2013. The deferred tax asset for tax credit carryforwards includes U.S. research tax credit carryforwards of \$6.3 million, which will begin to expire in 2022, U.S. foreign tax credits of \$20.3 million, which will begin to expire in 2015 and U.S. alternative minimum tax credit carryforwards of \$4.0 million with no expiration.

The deferred tax asset for tax loss carryforwards at December 31, 2010, includes Federal net operating loss carryforwards of \$2.7 million, which begin to expire in 2026, state net operating loss carryforwards of \$1.3 million, which begin to expire in 2019; foreign net operating loss carryforwards of \$2.2 million of which \$0.1 million has an indefinite life; \$22.2 million for capital loss carryforwards that will expire in 2012 and 2013. The deferred tax asset for tax credit carryforwards includes U.S. research tax credit carryforwards of \$5.6 million, which will begin to expire in 2022, U.S. foreign tax credits of \$15.5 million, which will begin to expire in 2015 and U.S. alternative minimum tax credit carryforwards of \$3.4 million with no expiration.

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Valuation allowances totaling \$122.9 million have been established at December 31, 2011 and include \$1.6 million related to state net operating loss carryforwards, \$2.4 million related to the foreign net operating loss carryforwards, \$22.2 million related to capital loss carryforwards, and \$96.7 million related to domestic deferred tax assets.

Valuation allowances totaling \$109.1 million have been established at December 31, 2010 and include \$1.3 million related to state net operating loss carryforwards, \$2.2 million related to the foreign net operating loss carryforwards, \$22.2 million related to capital loss carryforwards, and \$83.4 million related to domestic deferred tax assets

The net deferred tax asset at December 31 is classified in the balance sheet as follows (\$ in millions):

	2011	2010
Current net deferred tax assets	\$ 7.0	\$ 15.9
Current valuation allowance	(9.6)	(15.7)
<b>Total current deferred tax (liability) asset</b>	<b>\$ (2.6)</b>	<b>\$ 0.2</b>
Long-term net deferred tax asset	\$ 66.1	\$ 47.6
Long-term valuation allowance	(113.3)	(93.4)
Long-term net deferred tax liability	\$ (47.2)	\$ (45.8)

ASC Topic 740, *Income Taxes*, requires that the future realization of deferred tax assets depends on the existence of sufficient taxable income in future periods. Possible sources of taxable income include taxable income in carryback periods, the future reversal of existing taxable temporary differences recorded as a deferred tax liability, tax-planning strategies that generate future income or gains in excess of anticipated losses in the carryforward period and projected future taxable income. If, based upon all available evidence, both positive and negative, it is more likely than not such deferred tax assets will not be realized, a valuation allowance is recorded. Significant weight is given to positive and negative evidence that is objectively verifiable. A company's three-year cumulative loss position is significant negative evidence in considering whether deferred tax assets are realizable and the accounting guidance restricts the amount of reliance the Company can place on projected taxable income to support the recovery of the deferred tax assets.

In the fourth quarter of 2010, the company recorded an \$85.0 million valuation allowance against our U.S. Federal deferred tax assets as a non-cash charge to income tax expense after the Company fell into a cumulative three year domestic loss position after excluding the results of discontinued operations and disposals. In reaching this conclusion, the Company considered the weak municipal markets in the United States and significant impairment charges, which have led to a three-year cumulative U.S. loss position from continuing operations in the fourth quarter of 2010. Recording the valuation allowance does not restrict our ability to utilize the future deductions and net operating losses associated with the deferred tax assets assuming taxable income is recognized in future periods.

The \$31.9 million of deferred tax assets at December 31, 2011, for which no valuation allowance is recorded, is anticipated to be realized through the future reversal of existing taxable temporary differences recorded as deferred tax liabilities at December 31, 2011. Should the company determine that it would not be able to realize our remaining deferred tax assets in the future, an adjustment to the valuation allowance would be recorded in the period such determination is made. The need to maintain a valuation allowance against deferred tax assets may cause greater volatility in our effective tax rate.

The Company paid income taxes of \$4.2 million in 2011, \$6.8 million in 2010, and \$5.1 million in 2009.

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(Loss) income from continuing operations before taxes for each of the three years ended December 31 consisted of the following (\$ in millions):

	2011	2010	2009
United States	\$ (14.4)	\$ (74.5)	\$ 4.4
Non-U.S.	1.1	(13.9)	20.7
	\$ (13.3)	\$ (88.4)	\$ 25.1

The following table summarizes the activity related to the Company's unrecognized tax benefits (\$ in millions):

Balance at January 1, 2010	\$ 4.9
Increases related to current year tax positions	0.6
Decreases due to settlements with tax authorities	(1.5)
Decreases due to lapse of statute of limitations	(0.2)
Balance at December 31, 2010	\$ 3.8
Increases related to current year tax	1.3
Decreases due to settlements with tax authorities	(0.2)
Decreases due to lapse of statute of limitations	(0.6)
Balance at December 31, 2011	\$ 4.3

Included in the unrecognized tax benefits of \$4.3 million at December 31, 2011 was \$4.2 million of tax benefits that if recognized, would impact our annual effective tax rate. The Company's continuing practice is to recognize interest and penalties related to income tax matters in income tax expense. Interest and penalties amounting to \$0.2 million and \$0.1 million, respectively, are included in the consolidated balance sheet but are not included in the table above. We expect our unrecognized tax benefits to decrease by \$1.6 million over the next 12 months due to potential expiration of statute of limitations and settlements with tax authorities.

Included in the unrecognized tax benefits of \$3.8 million at December 31, 2010 was \$4.1 million of tax benefits that if recognized, would impact our annual effective tax rate. The Company's continuing practice is to recognize interest and penalties related to income tax matters in income tax expense. Interest and penalties amounting to \$0.8 million and \$0.1 million, respectively, are included in the consolidated balance sheet but are not included in the table above.

We file U.S., state and foreign income tax returns in jurisdictions with varying statutes of limitations. The 2008 through 2011 tax years generally remain subject to examination by federal and most state tax authorities. In significant foreign jurisdictions, the 2007 through 2011 tax years generally remain subject to examination by their respective tax authorities.

**NOTE 8 POSTRETIREMENT BENEFITS**

The Company and its subsidiaries sponsor a number of defined benefit retirement plans covering certain of its salaried and hourly employees. Benefits under these plans are primarily based on final average compensation and years of service as defined within the provisions of the individual plans. The Company also participates in a retirement plan that provides defined benefits to employees under certain collective bargaining agreements.

The Company uses a December 31 measurement date for its U.S. and non-U.S. benefit plans in accordance with ASC *Topic 715, Compensation Retirement Benefits*.

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The components of net periodic pension expense for each of the three years in the period ended December 31, are summarized as follows (\$ in millions):

	U.S. Benefit Plans			Non-U.S. Benefit Plan		
	2011	2010	2009	2011	2010	2009
<b>Company-sponsored plans</b>						
Service cost	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.2	\$ 0.2
Interest cost	7.8	7.9	8.0	2.9	2.7	2.6
Expected return on plan assets	(7.6)	(8.7)	(9.5)	(3.3)	(3.1)	(2.7)
Amortization of actuarial loss	4.8	3.6	2.0	0.9	0.8	1.1
	5.0	2.8	0.5	0.6	0.6	1.2
<b>Multi-employer plans</b>	0.3	0.2	0.2	-	-	-
Net periodic pension expense	\$ 5.3	\$ 3.0	\$ 0.7	\$ 0.6	\$ 0.6	\$ 1.2

The Company, through its subsidiaries, participates in certain multiemployer pension plans under U.S. collective bargaining agreements. None of these plans are considered individually significant to the Company. Contributions to these plans totaled \$0.3 million, \$0.2 million, and \$0.2 million for 2011, 2010, and 2009, respectively.

The following table summarizes the weighted-average assumptions used in determining pension costs in each of the three years for the period ended December 31:

	U.S. Benefit Plans			Non-U.S. Benefit Plan		
	2011	2010	2009	2011	2010	2009
Discount rate	5.8%	6.0%	6.5%	5.4%	5.7%	5.7%
Rate of increase in compensation levels *	3.5%	3.5%	3.5%	N/A	N/A	N/A
Expected long term rate of return on plan assets	8.2%	8.5%	8.5%	6.5%	6.5%	6.8%

\* Non-U.S. plan benefits are not adjusted for compensation level changes.

The following summarizes the changes in the projected benefit obligation and plan assets, the funded status of the Company-sponsored plans, and the major assumptions used to determine these amounts at December 31 (\$ in millions):

	U.S. Benefit Plans		Non-U.S. Benefit Plan	
	2011	2010	2011	2010
<b>Change in Benefit Obligation</b>				
Benefit obligation, beginning of year	\$ 138.4	\$ 133.5	\$ 52.6	\$ 50.0
Service cost	-	-	0.1	0.2
Interest cost	7.8	7.9	2.9	2.7
Actuarial loss	17.4	6.1	4.9	3.0
Benefits paid	(7.0)	(9.1)	(2.5)	(2.4)
Translation and other	-	-	(0.9)	(0.9)
Benefit obligation, end of year	\$ 156.6	\$ 138.4	\$ 57.1	\$ 52.6
Accumulated benefit obligation, end of year	\$ 154.5	\$ 136.5	\$ 57.1	\$ 52.6



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The following table summarizes the weighted-average assumptions used in determining benefit obligations as of December 31:

	U.S. Benefit Plans		Non-U.S. Benefit Plan	
	2011	2010	2011	2010
Discount rate	5.0%	5.8%	4.6%	5.4%
Rate of increase in compensation levels	3.5%	3.5%	N/A	N/A

Change in Plan Assets (\$ in millions)	U.S. Benefit Plans		Non-U.S. Benefit Plan	
	2011	2010	2011	2010
Fair value of plan assets, beginning of year	\$ 104.8	\$ 101.0	\$ 50.6	\$ 48.2
Actual return on plan assets	(3.5)	12.9	(0.8)	4.6
Company contribution	2.7	-	1.1	1.1
Benefits and expenses paid	(7.0)	(9.1)	(2.5)	(2.4)
Translation and other	-	-	(0.5)	(0.9)
Fair value of plan assets, end of year	\$ 97.0	\$ 104.8	\$ 47.9	\$ 50.6

The amounts included in translation and other in the preceding tables reflect the impact of the foreign exchange translation for the non-U.S. benefit plan.

The plan assets fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Following is a description of the valuation methodologies used for assets measured at fair value for U.S. plan:

Cash and Cash Equivalents Valued at net asset value as provided by the administrator of the fund.

U.S. Government and agency securities Valued at the closing price reported on the active market on which the security is traded or valued by the trustee at year-end using various pricing services of financial institutions.

Common stock Valued at the closing price reported on the active market on which the security is traded.

Collective/Common trust Valued at the net asset value, based on quoted market value of the underlying assets, of shares held by the plan at year end.

Mutual funds Valued at the net asset value, based on quoted market prices in active markets, of shares held by the plan at year end.

Plan assets for the non-U.S. benefit plans are based on quoted prices in active markets for identical assets.

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The following table summarizes the Company's pension assets in a three-tier fair value hierarchy for its benefit plan as of December 31 (\$ in millions):

	U. S. Benefit Plans							
	2011				2010			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash and Cash Equivalents	\$ -	\$ 3.9	\$ -	\$ 3.9	\$ -	\$ 1.5	\$ -	\$ 1.5
Equities								
U.S. Large Cap	27.7	-	-	27.7	27.0	-	-	27.0
U.S. Small and Mid Cap	9.9	-	-	9.9	11.8	0.4	-	12.2
Developed International	3.7	-	-	3.7	5.1	0.1	-	5.2
Emerging Markets	3.3	-	-	3.3	3.5	-	-	3.5
Fixed Income								
Government Bonds	4.5	-	-	4.5	6.8	-	-	6.8
Asset-backed Securities	-	6.7	-	6.7	-	4.8	-	4.8
Federal Signal Common Stock	3.9	-	-	3.9	6.4	0.2	-	6.6
Collective/Common Trust and Other								
Mutual Funds	33.3	0.1	-	33.4	36.2	1.0	-	37.2
<b>Total assets at fair value</b>	<b>\$ 86.3</b>	<b>\$ 10.7</b>	<b>\$ -</b>	<b>\$ 97.0</b>	<b>\$ 96.8</b>	<b>\$ 8.0</b>	<b>\$ -</b>	<b>\$ 104.8</b>

	Non-U. S. Benefit Plan							
	2011				2010			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Equity Securities	\$ 29.1	\$ -	\$ -	\$ 29.1	\$ 31.0	\$ -	\$ -	\$ 31.0
Government Securities	4.9	-	-	4.9	4.7	-	-	4.7
Company Bonds and Debt Securities	5.3	-	-	5.3	5.4	-	-	5.4
Insurance Policy	-	-	-	-	0.3	-	-	0.3
Cash	8.6	-	-	8.6	9.2	-	-	9.2
<b>Total</b>	<b>\$ 47.9</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 47.9</b>	<b>\$ 50.6</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50.6</b>

During 2010, the Company adopted a structured derisking investment strategy for the U.S. pension plans to improve alignment of assets and liabilities that includes: (1) maintain a diversified portfolio that can provide a near-term weighted-average target return of 8.2% or more; (2) maintain liquidity to meet obligations; and (3) prudently manage administrative and management costs. The plan invests in equity, mutual funds, and fixed income instruments.

Plan assets for the non-U.S. benefit plan consist principally of a diversified portfolio of equity securities, U.K. government securities, company bonds and debt securities.

As of December 31, 2011 and 2010, equity securities included 0.9 million and 0.9 million shares of the Company's common stock valued at \$3.9 million and \$6.4 million, respectively. Dividends paid on the Company's common stock to the pension trusts aggregated \$0.1 million and \$0.2 million in each of the years ended December 31, 2011 and 2010, respectively.

	U.S. Benefit Plans		Non-U.S. Benefit Plan	
	2011	2010	2011	2010
Funded status, end of year (\$ in millions):				
Fair value of plan assets	\$ 97.0	\$ 104.8	\$ 47.9	\$ 50.6
Benefit obligations	156.6	138.4	57.1	52.6

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Funded status	\$ (59.6)	\$ (33.6)	\$ (9.2)	\$ (2.0)
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	U.S. Benefit Plans		Non-U.S. Benefit Plan	
	2011	2010	2011	2010
Amounts recognized in the Balance Sheet consist of (\$ in millions):				
Long term pension liabilities	\$ (59.6)	\$ (33.6)	\$ (9.2)	\$ (2.0)
Accumulated other comprehensive loss, pre-tax	79.3	55.4	23.2	15.6
Net amount recognized	\$ 19.7	\$ 21.8	\$ 14.0	\$ 13.6

	U.S. Benefit Plans		Non-U.S. Benefit Plan	
	2011	2010	2011	2010
Amounts recognized in Accumulated Other Comprehensive Income consist of (\$ in millions):				
Net actuarial loss	\$ 79.3	\$ 55.4	\$ 23.2	\$ 15.6
Prior service cost	-	-	-	-
Net amount recognized, pre-tax	\$ 79.3	\$ 55.4	\$ 23.2	\$ 15.6

The Company expects \$6.2 million relating to amortization of the actuarial loss to be amortized from Accumulated Other Comprehensive Loss into Net Periodic Benefit Cost in 2012.

The Company expects to contribute up to \$11.2 million to the U.S. benefit plans and up to \$1.5 million to the non-U.S. plan in 2012. Future contributions to the plans will be based on such factors as annual service cost as well as return on plan asset values, interest rate movements, and benefit payments.

The following table presents the benefits expected to be paid under the Company's defined benefit plans in each of the next five years, and in aggregate for the five years thereafter (\$ in millions):

	U.S. Benefit Plans	Non-U.S. Benefit Plan
2012	\$ 7.1	\$ 2.4
2013	7.5	2.5
2014	7.7	2.6
2015	8.4	2.7
2016	8.7	2.8
2017-2021	48.6	15.5

The Company also sponsors a number of defined contribution pension plans covering a majority of its employees. Participation is via automatic enrollment; employees may elect to opt out of the plan. Company contributions to the plan are based on employees' age and service as well as a percentage of employee contributions. In January 1, 2009, the Company suspended the Company match of Federal Signal non-union employees 401(k) contribution to the plans. Effective January 1, 2010, the Company reinstated the company matching contribution.

The cost of these plans during each of the three years in the period ended December 31, 2011, was \$7.0 million in 2011, \$6.3 million in 2010 and \$4.8 million in 2009.

Prior to September 30, 2003, the Company also provided medical benefits to certain eligible retired employees. These benefits were funded when the claims were incurred. Participants generally became eligible for these benefits at age 60 after completing at least fifteen years of service. The plan provided for the payment of specified percentages of medical expenses reduced by any deductible and payments made by other primary group coverage and government programs. Effective September 30, 2003, the Company amended the retiree medical plan and effectively canceled coverage for all eligible active employees except for retirees and a limited group

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that qualified under a formula based on age and years of service. Accumulated postretirement benefit liabilities of \$1.0 million and \$1.2 million at December 31, 2011 and 2010, respectively, were fully accrued. The net periodic postretirement benefit costs have not been significant during the three-year period ended December 31, 2011.

**NOTE 9 DERIVATIVE FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS**

At December 31, 2009, the Company was party to interest rate swap agreements with financial institutions in which the Company pays interest at a fixed rate and receives interest at variable LIBOR rates. These derivative instruments terminated in 2010. These interest rate swap agreements are designated as cash flow hedges.

The Company manages the volatility of cash flows caused by fluctuations in currency rates by entering into foreign exchange forward contracts and options. These derivative instruments may be designated as cash flow hedges that hedge portions of the Company's anticipated third-party purchases and forecast sales denominated in foreign currencies. The Company also enters into foreign exchange contracts that are not intended to qualify for hedge accounting, but are intended to offset the effect on earnings of foreign currency movements on short and long-term intercompany transactions. Gains and losses on these derivative instruments are recorded through earnings.

For assets and liabilities measured at fair value on a recurring basis, the Company uses an income approach to value the assets and liabilities for outstanding derivative contracts which include interest rate swap and foreign currency forward contracts. The income approach consists of a discounted cash flow model that takes into account the present value of future cash flows under the terms of the contracts using current market information as of the reporting date, such as prevailing interest rates and foreign currency spot and forward rates. The following table provides a summary of the fair values of assets and liabilities (\$ in millions):

<b>Fair Value Measurements at December 31, 2011</b>				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Assets</b>				
Derivatives	\$ 0.1	\$ -	\$ 0.1	\$ -

<b>Fair Value Measurements at December 31, 2011</b>				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Liabilities</b>				
Derivatives	\$ 0.8	\$ -	\$ 0.8	\$ -

<b>Fair Value Measurements at December 31, 2010</b>				
Total	Quoted Prices in Active Markets	Significant Other Observable Inputs	Significant Unobservable Inputs	

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		for Identical Assets (Level 1)	(Level 2)	(Level 3)
<b>Assets</b>				
Derivatives	\$ -	\$ -	\$ -	\$ -

**Fair Value Measurements at December 31, 2010**  
Quoted Prices in

		Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	Total			
<b>Liabilities</b>				
Derivatives	\$ 0.6	\$ -	\$ 0.6	\$ -

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The fair value of the Company's derivative instruments was recorded as follows at December 31, 2011 and 2010 (\$ in millions):

	Asset Derivatives December 31, 2011 Balance Sheet		Liability Derivatives December 31, 2011	
	Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives designated as hedging instruments:				
Foreign exchange	Other current assets	\$ -	Other current liabilities	\$ 0.8
Total derivatives designated as hedging instruments		-		0.8
Derivatives not designated as hedging instruments:				
Foreign exchange	Accounts receivable, net	0.1	Other current liabilities	-
Total derivatives not designated as hedging instruments		0.1		0.0
Total derivatives		\$ 0.1		\$ 0.8

	Asset Derivatives December 31, 2010 Balance Sheet		Liability Derivatives December 31, 2010	
	Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives designated as hedging instruments:				
Foreign exchange	Other current assets	\$ -	Other current liabilities	\$ 0.2
Total derivatives designated as hedging instruments		-		0.2
Derivatives not designated as hedging instruments:				
Foreign exchange	Accounts receivable, net	-	Other current liabilities	0.4
Total derivatives not designated as hedging instruments		-		0.4
Total derivatives		\$ -		\$ 0.6

The effect of derivative instruments on the consolidated statement of operations for the year ended December 31, 2011 and 2010, respectively (\$ in millions):

2011	Amount of Gain/(Loss) Recognized in OCI on Derivative (Effective Portion)	Location of Gain/(Loss) Reclassified from Accumulated OCI into Income (Effective Portion)	Amount of Gain/(Loss) Reclassified from Accumulated OCI into Income (Effective Portion)
Derivatives in Cash Flow Hedging Relationships			
Foreign exchange	(0.9)	Net sales	0.2
Total	\$ (0.9)		\$ 0.2

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2010 Derivatives in Cash Flow Hedging Relationships	Amount of Gain/(Loss) Recognized in OCI on Derivative (Effective Portion)	Location of Gain/(Loss) Reclassified from Accumulated OCI into Income (Effective Portion)	Amount of Gain/(Loss) Reclassified from Accumulated OCI into Income (Effective Portion)
Interest rate contracts	\$ 0.4	Interest expense	\$ 0.5
Foreign exchange	(1.2)	Net sales	1.0
<b>Total</b>	<b>\$ (0.8)</b>		<b>\$ 1.5</b>

The location and amount of gain (loss) recognized in income on derivatives not designated as hedging instruments are as follows for the years ended December 31, 2011 and 2010, respectively (\$ in millions):

2011	Location in Consolidated Statement of Operations	Amount of Gain (Loss) Recognized
Foreign currency contracts	Other income (expense)	(0.1)
<b>Total gain (loss)</b>		<b>\$ (0.1)</b>

2010	Location in Consolidated Statement of Operations	Amount of Gain (Loss) Recognized
Foreign currency contracts	Other income (expense)	1.4
<b>Total gain (loss)</b>		<b>\$ 1.4</b>

At December 31, 2011 and 2010, accumulated other comprehensive loss associated with foreign exchange contracts qualifying for hedge accounting treatment was \$0.6 million and \$(0.1) million, respectively, net of income tax effects. The Company expects \$0.9 million of pre-tax net loss on cash flow hedges that are reported in accumulated other comprehensive loss as of December 31, 2011 to be reclassified into earnings within the next 12 months as the respective hedged transactions affect earnings. The Company's foreign currency contracts typically do not extend beyond a year.

The following table summarizes the carrying amounts and fair values of the Company's financial instruments at December 31 (\$ in millions):

	2011		2010	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Short-term debt	\$ 9.0	\$ 9.0	\$ 1.8	\$ 1.8
Long-term debt*	214.2	212.5	262.1	259.9
Foreign exchange contracts	21.8	(0.7)	28.3	(0.6)

\* Long-term debt includes financial service borrowings for all periods presented, which is included in discontinued operations, current portions of long term debt and capital lease obligations.

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The carrying value of short-term debt approximates fair value due to its short maturity. The fair value of long-term debt is based on interest rates that are currently available to us for issuance of debt with similar terms and remaining maturities.

The following table summarizes the Company's money market accounts in a three-tier fair value hierarchy as of December 31 (\$ in millions):

	2011				2010			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash equivalents	\$ -	\$ -	\$ -	\$ -	\$ 37.0	\$ -	\$ -	\$ 37.0
Total	\$ -	\$ -	\$ -	\$ -	\$ 37.0	\$ -	\$ -	\$ 37.0

**Table of Contents****NOTE 10 STOCK-BASED COMPENSATION**

The Company's stock compensation plans, approved by the Company's shareholders and administered by the Compensation and Benefits Committee of the Board of Directors of the Company, provide for the grant of incentive and non-incentive stock options, restricted stock, and other stock-based awards or units to key employees and directors. The plans, as amended, authorize the grant of up to 7.8 million shares or units through April 2020. These share or unit amounts exclude amounts that were issued under predecessor plans.

Stock options vest equally over the three years from the date of the grant. The cost of stock options, based on the fair market value of the shares on the date of grant, is charged to expense over the respective vesting periods. Stock options normally become exercisable at a rate of one-third annually and in full on the third anniversary date. All options and rights must be exercised within ten years from date of grant. At the Company's discretion, vested stock option holders are permitted to elect an alternative settlement method in lieu of purchasing common stock at the option price. The alternative settlement method permits the employee to receive, without payment to the Company, cash, shares of common stock, or a combination thereof equal to the excess of market value of common stock over the option purchase price. The Company intends to settle all such options in common stock.

The weighted average fair value of options granted during 2011, 2010, and 2009 was \$3.12, \$3.27 and \$2.00, respectively. The fair value of each option grant was estimated using the Black-Scholes option pricing model with the following assumptions:

	2011	2010	2009
Dividend yield	0.6%	2.9%	3.7%
Expected volatility	52%	48%	40%
Risk free interest rate	2.2%	2.0%	2.2%
Weighted average expected option life in years	5.9	5.9	6.5

The expected life of options represents the weighted average period of time that options granted are expected to be outstanding giving consideration to vesting schedules and the Company's historical exercise patterns. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of the grant for periods corresponding with the expected life of the options. Expected volatility is based on historical volatility of the Company's common stock. Dividend yields are based on historical dividend payments.

Stock option activity for the three years ended December 31, 2011 was as follows:

	Option Shares			Weighted Average Exercise Price		
	2011	2010	2009	2011	2010	2009
	(In millions)					
Outstanding at beginning of year	1.9	2.1	2.3	\$ 12.61	\$ 13.60	\$ 16.20
Granted	0.7	0.4	0.5	6.50	8.93	6.74
Cancelled or expired	(0.6)	(0.6)	(0.7)	14.02	13.47	17.00
Exercised	-	-	-	6.68	6.68	-
Outstanding at end of year	2.0	1.9	2.1	\$ 10.16	\$ 12.61	\$ 13.60
Exercisable at end of year	1.0	1.2	1.3	\$ 13.12	\$ 14.84	\$ 16.35

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The following table summarizes information concerning stock options outstanding as of December 31, 2011 under all plans:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Shares (in millions)	Weighted Average Remaining Life (in years)	Weighted Average Exercise Price	Shares (in millions)	Weighted Average Exercise Price
\$ 0.00 \$5.00	-	9.7	\$ 4.47	-	\$ -
5.01 10.00	1.0	8.8	6.51	0.2	6.58
10.01 15.00	0.5	6.7	10.78	0.4	11.01
15.01 20.00	0.5	3.3	16.86	0.4	16.86
20.01 25.00	-	0.2	23.00	-	23.00
	2.0	6.9	\$ 10.16	1.0	\$ 13.12

The exercise price of stock options outstanding and exercisable at December 31, 2011 exceeded the market value and therefore, the aggregate intrinsic value was near zero. The closing price on December 31, 2011 was \$4.15.

Restricted stock awards are granted to employees at no cost. Through 2004, these awards primarily vested at the rate of 25% annually commencing one year from the date of award, provided the recipient was still employed by the Company on the vesting date. Beginning in 2005, awards primarily cliff vest at the third anniversary from the date of award, provided the recipient is still employed by the Company on the vesting date. The cost of restricted stock awards, based on the fair market value at the date of grant, is being charged to expense over the respective vesting periods. The following table summarizes restricted stock grants for the twelve month period ended December 31, 2011:

(shares in millions)

	Number of Restricted Shares	Weighted Average Price per Share
Outstanding and non-vested at December 31, 2010	0.6	\$ 8.78
Granted	-	6.09
Vested	(0.1)	10.56
Cancelled	(0.1)	8.72
Outstanding and non-vested at December 31, 2011	0.4	\$ 7.99

The total compensation expense related to all share-based compensation plans was \$2.0 million, \$2.3 million, and \$3.1 million for the years ended December 31, 2011, 2010, and 2009, respectively. Also, as of December 31, 2011, there were \$2.3 million and \$1.6 million of total unrecognized compensation cost related to stock options and stock awards, respectively, that is expected to be recognized over the weighted-average period of approximately 2.2 and 1.4 years, respectively.

Beginning in 2008, the Company established a long term incentive plan for executive officers under which awards thereunder are classified as equity in accordance with ASC *Topic 718, Compensation - Stock Compensation*. Performance shares units shall become vested if (1) the Company achieves certain specified stock performance targets compared to a defined group of peer companies and (2) the employee remains continuously employed by the Company three calendar years from date of the grant. Compensation expense for the stock performance portion of the plan is based on the fair value of the plan that is determined on the day the units are awarded. The fair value is calculated using a Monte Carlo simulation model. The total compensation expense for these awards is being amortized over a three-year service period. Compensation expense relating to these awards included in the consolidated statement of operations was \$0.2 million, (\$0.1) million, and \$0.4 million, for 2011, 2010, and 2009, respectively. As of December 31, 2011, the unrecognized compensation cost relating to these plans was \$0.2 million, which will be amortized over the remaining requisite service period.



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The performance shares units granted in 2011 were extended to certain other non-executive officers. The 2011 performance shares units shall become vested if (1) the Company achieves certain earnings per share (EPS) on December 31, 2011 and (2) the employee remains continuously employed by the Company three calendar years from date of the grant. No compensation expense was recorded relating to this award as the Company did not meet the EPS target.

### **NOTE 11 SHAREHOLDERS EQUITY**

The Company's board of directors has the authority to issue 90.0 million shares of common stock at a par value of \$1 per share. The holders of common stock (i) may receive dividends subject to all of the rights of the holders of preference stock; (ii) shall be entitled to share ratably upon any liquidation of the Company in the assets of the Company, if any, remaining after payment in full to the holders of preference stock; and (iii) receive one vote for each common share held and shall vote together share for share with the holders of voting shares of preference stock as one class for the election of directors and for all other purposes. The Company has 63.1 million and 63.0 million common shares issued as of December 31, 2011 and 2010, respectively. Of those amounts, 62.2 million and 62.2 million common shares were outstanding as of December 31, 2011 and 2010, respectively.

The Company's board of directors is also authorized to provide for the issuance of 0.8 million shares of preference stock at a par value of \$1 per share. The authority of the board of directors includes, but is not limited to, the determination of the dividend rate, voting rights, conversion and redemption features, and liquidation preferences. The Company has not designated or issued any preference stock as of December 31, 2011.

In May 2010, the Company issued 12.1 million shares of common stock at a price of \$6.25 per share for total gross proceeds of \$75.6 million. After deducting direct fees, net proceeds to the Company totaled \$71.2 million. Proceeds from the equity offering were used to pay down debt.

### **NOTE 12 EARNINGS (LOSS) PER SHARE**

Earnings (loss) per share – basic is computed by dividing income or loss available to common stockholders by the weighted average number of shares of common stock outstanding for the period. Earnings (loss) per share – diluted reflects the potential dilution that could occur if options issued under stock-based compensation awards were converted into common stock. In 2011, 2010, and 2009, options to purchase 2.0 million, 1.9 million, and 2.1 million shares of the Company's common stock had exercise prices that were greater than the average market price of those shares during the respective reporting periods. As a result, these shares are excluded from the earnings per share calculation as they are anti-dilutive.

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The following is a reconciliation of net income (loss) to earnings per share basic and diluted at December 31 (\$ in millions, except per share amounts):

**Computation of Earnings (Loss) per Common Share**

**(\$ in millions, except per share data)**

	2011	2010	2009
(Loss) income from continuing operations	\$ (14.4)	\$ (160.7)	\$ 19.8
Gain (loss) from discontinued operations and disposal, net of tax	0.2	(15.0)	3.3
Net (loss) income	\$ (14.2)	\$ (175.7)	\$ 23.1
Average shares outstanding basic	62.2	57.6	48.6
Dilutive effect of stock options and other	-	-	-
Diluted shares outstanding	62.2	57.6	48.6
(Loss) earnings from continuing operations per share			
Basic	\$ (0.23)	\$ (2.79)	\$ 0.41
Diluted	\$ (0.23)	\$ (2.79)	\$ 0.41
(Loss) earnings from discontinued operations per share			
Basic	\$ -	\$ (0.26)	\$ 0.06
Diluted	\$ -	\$ (0.26)	\$ 0.06
(Loss) earnings per share			
Basic	\$ (0.23)	\$ (3.05)	\$ 0.47
Diluted	\$ (0.23)	\$ (3.05)	\$ 0.47

**NOTE 13 DISCONTINUED OPERATIONS**

The following table presents the operating results of the Company's discontinued operations for the three-year period ended December 31 (\$ in millions):

<b>Pauluhn (SSG Segment)</b>	2011	2010	2009
Net sales	\$ -	\$ -	\$ 17.3
Costs and expenses	-	-	(14.6)
Income before income taxes	-	-	2.7
Income tax (expense)	-	-	(0.9)
Income from discontinued operations	\$ -	\$ -	\$ 1.8

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<b>RAVO (ESG Segment)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Net sales	\$ -	\$ -	\$ 28.2
Costs and expenses	-	-	(27.4)
Income before income taxes	-	-	0.8
Income tax expense	-	-	-
Income from discontinued operations	\$ -	\$ -	\$ 0.8

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<b>E-ONE (Fire Rescue Segment)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Net sales	\$ -	\$ -	\$ -
Costs and expenses	-	-	-
Loss before income taxes	-	-	-
Income tax expense	-	-	(0.7)
Loss from discontinued operations	\$ -	\$ -	\$ (0.7)
<b>Financial Services</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Net sales	\$ -	\$ 0.1	\$ 0.2
Costs and expenses	-	(0.1)	(0.4)
Other income	-	-	-
Income (loss) before income taxes	-	-	(0.2)
Income tax (expense) benefit	-	-	0.1
Income (loss) from discontinued operations	\$ -	\$ -	\$ (0.1)
<b>Riverchase (SSG Segment)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Net sales	\$ -	\$ -	\$ 1.3
Costs and expenses	-	(1.3)	(2.5)
Loss before income taxes	-	(1.3)	(1.2)
Income tax benefit	-	-	0.4
Loss from discontinued operations	\$ -	\$ (1.3)	\$ (0.8)
<b>China WOFE</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Net sales	\$ 0.2	\$ 1.5	\$ 0.8
Costs and expenses	(0.5)	(3.2)	(1.7)
Loss before income taxes	(0.3)	(1.7)	(0.9)
Income tax benefit	-	-	-
Loss from discontinued operations	\$ (0.3)	\$ (1.7)	\$ (0.9)
<b>Refuse (ESG Segment)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Net sales	\$ -	\$ -	\$ -
Other income	-	-	-
Income before income taxes	-	-	-
Income tax expense	-	-	-
Income from discontinued operations	\$ -	\$ -	\$ -

In December 2010, the Company determined that its China WOFE business was no longer strategic. The results of the China WOFE operations previously were included within the Environmental Solutions and Safety and Security Systems Groups. The 2010 loss includes a write-down of \$2.1 million to reflect the estimated fair value of the net assets and certain other costs associated with the dissolution of the business. The 2011 loss includes \$0.5 million of costs associated with the wind down of the business.

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On September 1, 2010, the Company sold its Riverchase business for \$0.2 million, which had previously been reported as part of the Safety and Security Systems operating segment. The Company's Riverchase business developed a suite of products that enables emergency response agencies to manage and communicate remotely

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with their fleets. The Company wrote down assets of the Riverchase business to net realizable value, resulting in a net loss of \$2.1 million. The 2010 net loss included the write-off of \$1.9 million of intangible assets.

On November 30, 2009, the Company sold 100% of the shares of Pauluhn, located in Pearland, Texas, for \$35.0 million of which \$3.2 million was received in 2010. The results of Pauluhn's operations were previously included within the Safety and Security Systems Group. Pauluhn provided marine, offshore and industrial lighting products with innovative solutions for hazardous locations and corrosive environments. In association with the sale, the Company recognized a gain on disposal of discontinued operations of Pauluhn of \$14.3 million at December 31, 2009, which included a gain of \$1.8 million transferred from cumulative translation adjustments. The gain included costs associated with the sale of \$1.1 million and the write-off of \$18.3 million of goodwill of the Safety and Security Systems Group attributable to Pauluhn. Proceeds from the sale were used to pay down debt and fund core operations. For the years ended December 31, 2010 and 2009, the Company recorded a loss of \$2.2 million and \$0.7 million, respectively, related to an environmental remediation liability. In December 2010, the Company decided to sell the Pauluhn building after receiving a notice of termination of leasing agreement from the tenant. The net book value of the building was written down by \$0.4 million to its estimated net realizable value.

On July 16, 2009, the Company sold 100% of the shares of its European sweeper business, Ravo Holdings B.V., ( Ravo ) located in the Netherlands for 8.5 million, or approximately \$12.1 million. The Ravo businesses were classified as discontinued operations as of the second quarter of 2009. The results of Ravo's operations were previously included within the Environmental Solutions Group. In association with this sale, the Company recognized a loss on disposal of discontinued operations of Ravo of \$11.3 million at December 31, 2009. The loss includes a write-down of \$4.9 million to reflect the fair value of the net assets sold, costs associated with the sale of \$0.2 million, a gain of \$0.3 million transferred from cumulative translation adjustments, and the write-off of \$6.2 million of goodwill of the Environmental Solutions Group attributable to Ravo. Proceeds from the sale were used to pay down debt and fund core operations.

All of the Company's E-ONE businesses were discontinued in 2008 leaving just the Company's Bronto businesses within its Fire Rescue segment. For the years ended December 31, 2011 and 2010, the Company recorded a loss on discontinued operations associated with E-ONE of \$0.2 million and \$5.0 million, respectively, primarily related to a change in the estimate of workers compensation and product liability reserves.

The Company provided its domestic municipal customers with the opportunity to finance purchases through leasing arrangements with the Company. Following the sale of the E-ONE business, the Company elected to discontinue its financial services activities through divestiture of this leasing portfolio. In 2008, the Company sold its municipal leasing portfolio to Banc of America Public Capital Corp. In October, 2008, the Company discontinued entirely its practice of providing lease financing to its customers and all other financial service activities, principally its dealer floor planning.

In December 2005, the Company determined that its investment in the Refuse business operating under the Leach brand name was no longer strategic. The majority of the assets of the business have been sold since that time and the operation has been shut down. For the years ended December 31, 2011 and 2010, the Company recorded a gain of \$0.4 million and \$0.7 million, respectively, primarily related to a revision in the estimate of product liability reserves.

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The following table shows an analysis of assets and liabilities of discontinued operations as of December 31:

(\$ in millions)	2011	2010
Current assets	\$ 0.6	\$ -
Properties and equipment	0.5	0.7
Long-term assets	1.4	0.8
Financial service assets, net	1.0	1.6
<b>Total assets of discontinued operations</b>	<b>\$ 3.5</b>	<b>\$ 3.1</b>
Current liabilities	\$ 4.0	\$ 5.9
Long-term liabilities	7.4	10.8
Financial service liabilities	0.9	1.5
<b>Total liabilities of discontinued operations</b>	<b>\$ 12.3</b>	<b>\$ 18.2</b>

Included in current liabilities at December 31, 2011 and 2010 is \$2.2 million and \$2.6 million, respectively, related to environment remediation at the Pearland, Texas facility, which was previously used by the Company's discontinued Pauluhn business. Included in long-term liabilities at December 31, 2011 and 2010 is \$5.1 million and \$6.0 million, respectively, relating to estimated product liability obligations of the North American refuse truck body business.

**NOTE 14 RESTRUCTURING**

During fiscal 2010 and 2009, the Company announced restructuring initiatives. As of December 31, 2011 and 2010, the Company's total restructuring accrual was \$0.3 million and \$2.5 million, respectively, and was included in accrued liabilities other on the consolidated balance sheets. There were no new restructuring activities initiated in fiscal 2011. The Company continues to review its business for opportunities to reduce operating expenses and focus on executing its strategy based on core competencies and cost efficiencies.

*2010 Plan*

During the second quarter of 2010, the Company announced restructuring initiatives focused on aligning the Company's cost base with revenues and other functional reorganizations and recorded \$4.6 million in restructuring charges related to a global reduction in force across all functions. The total restructuring charge was \$4.6 million in the year ended December 31, 2010 and these actions are expected to be completed by June 30, 2012.

*2009 Plan*

In July 2009, the Company began an initiative to consolidate a number of manufacturing and distribution operations into the Company's University Park, Illinois, plant. The Company recorded an additional \$0.4 million in charges related to the 2009 plan in 2010. The Company completed these actions as of December 31, 2010.

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The following table summarizes the 2010 restructuring charges by segment and the total charges estimated to be incurred (\$ in millions):

<b>Group</b>	<b>Pre-Tax Restructuring Charges at December 31, 2010</b>	<b>Estimate of Total Charges</b>
Environmental Solutions	\$ 0.8	\$ 0.8
Safety and Security Systems	1.8	1.8
Fire Rescue	0.6	0.6
Federal Signal Technologies	0.6	0.6
Corporate	1.2	1.2
Total restructuring	\$ 5.0	\$ 5.0

The following presents an analysis of the restructuring reserves included in other accrued liabilities as of December 31, 2011 and 2010, respectively (\$ in millions):

	<b>Severance</b>	<b>Other</b>	<b>Total</b>
<i>2010 Plan</i>			
Balance as of December 31, 2009	\$ -	\$ -	\$ -
Charges to selling, general and administrative expenses	3.6	1.0	4.6
Cash payments	(1.7)	(0.4)	(2.1)
Balance as of December 31, 2010	\$ 1.9	\$ 0.6	\$ 2.5
Charges to selling, general and administrative expenses	0.1	(0.1)	-
Cash payments	(2.0)	(0.3)	(2.3)
Balance as of December 31, 2011	\$ -	\$ 0.2	\$ 0.2
<i>2009 Plan</i>			
Balance as of December 31, 2008	\$ -	\$ -	\$ -
Charges to selling, general and administrative expenses	1.1	0.4	1.5
Cash payments	(0.4)	-	(0.4)
Balance as of December 31, 2009	\$ 0.7	\$ 0.4	\$ 1.1
Charges to selling, general and administrative expenses	0.4	-	0.4
Cash payments	(1.1)	(0.4)	(1.5)
Balance as of December 31, 2010	\$ -	\$ -	\$ -
Charges to selling, general and administrative expenses	-	-	-
Cash payments	-	-	-
Balance as of December 31, 2011	\$ -	\$ -	\$ -

**NOTE 15 LEGAL PROCEEDINGS**

The Company is subject to various claims, other pending and possible legal actions for product liability and other damages, and other matters arising out of the conduct of the Company's business. The Company believes, based on current knowledge and after consultation with counsel, that the outcome of such claims and actions will not have an adverse effect on the Company's consolidated financial position or results of operations. However, in the event of unexpected future developments, it is possible that the ultimate resolution of such matters, if unfavorable, could have a material adverse effect on the Company's results of operations.

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The Company has been sued by firefighters seeking damages claiming that exposure to the Company's sirens has impaired their hearing and that the sirens are therefore defective. There were 33 cases filed during the period 1999-2004, involving a total of 2,443 plaintiffs, in the Circuit Court of Cook County, Illinois. These cases involved more than 1,800 firefighter plaintiffs from locations outside of Chicago. Beginning in 2009, six additional cases were filed in Cook County, involving 299 Pennsylvania firefighter plaintiffs. The trial of the first 27 of these plaintiffs claims occurred in 2008, when a Cook County jury returned a unanimous verdict in favor of the Company. An additional 40 Chicago firefighter plaintiffs were selected for trial in 2009. Plaintiffs' counsel later moved to reduce the number of plaintiffs from 40 to 9. The trial for these nine plaintiffs concluded with a verdict returned against the Company and for the plaintiffs in varying amounts totaling \$0.4 million. The Company is appealing this verdict. A third consolidated trial involving 8 Chicago firefighter plaintiffs occurred during November 2011. The jury returned a unanimous verdict in favor of the Company at the conclusion of this trial. Following this last trial, the Court advised the parties that it was considering the possibility of a bifurcated class action trial in which it would consolidate claims of all Chicago Fire Department firefighters and conduct a trial on the issue of whether the Company's sirens are defective and unreasonably dangerous. On March 12, 2012, after considering briefs and argument submitted by the parties, the Court entered an order certifying a class of the remaining Chicago firefighter plaintiffs for trial on certain issues, including whether Federal Signal sirens were defective and unreasonably dangerous. The Court has scheduled this trial for September 4, 2012. The Company is considering an appeal of this ruling.

The Company has also been sued on this issue outside of the Cook County, Illinois venue. Most of these cases have involved lawsuits filed by a single attorney in the Court of Common Pleas, Philadelphia County, Pennsylvania. Since September 2007, this attorney filed a total of 71 lawsuits, involving 71 plaintiffs in this jurisdiction. Three of these cases have been dismissed pursuant to pretrial motions filed by the Company. Another case has been voluntarily dismissed. Prior to trial in four cases, the Company paid nominal sums, which included reimbursements of expenses, to obtain dismissals. Three trials have occurred in Philadelphia involving these cases. The first trial involving one of these plaintiffs occurred in 2010, when the jury returned a verdict for the plaintiff. In particular, the jury found that the Company's siren was not defectively designed, but that the Company negligently constructed the siren. The jury awarded damages in the amount of \$0.1 million, which was subsequently reduced to \$0.08 million. The Company appealed this verdict. Another trial, involving 9 Philadelphia firefighter plaintiffs, also occurred in 2010 when the jury returned a defense verdict for the Company as to all claims and all plaintiffs involved in that trial. The third trial, involving 9 Philadelphia firefighter plaintiffs, was completed during 2010 when the jury returned a defense verdict for the Company as to all claims and all plaintiffs involved in that trial.

Following defense verdicts in the last two Philadelphia trials, the Company negotiated settlements with respect to all remaining filed cases in Philadelphia as well as other firefighter claimants represented by the attorney who filed the Philadelphia cases. On January 4, 2011, the Company entered into a Global Settlement Agreement (the Settlement Agreement) with the law firm of the attorney representing the Philadelphia claimants, on behalf of 1,125 claimants the firm represents (the Claimants) and who have asserted product claims against the Company (the Claims). Three hundred and eight of these claimants have lawsuits pending against the Company in Cook County, Illinois.

The Settlement Agreement, as amended, provided that the Company pay (the Settlement Payment) a total amount of \$3.8 million to settle the Claims (including the costs, fees and other expenses of the law firm in connection with its representation of the claimants), subject to certain terms, conditions and procedures set forth in the Settlement Agreement. In order for the Company to be required to make the Settlement Payment: (i) each claimant who agreed to settle his or her claims must sign a release acceptable to the Company (a Release); (ii) each Claimant who agreed to the settlement and who was a plaintiff in a lawsuit, must dismiss his or her lawsuit, with prejudice; (iii) by April 29, 2011, at least 93% of the claimants identified in Appendix A to the Settlement Agreement must have agreed to settle their claims and provided a signed Release to the Company; and (iv) the law firm shall have withdrawn from representing any claimants who did not agree to the settlement, including those who filed lawsuits. If the conditions to the settlement set forth in the Settlement Agreement were

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met, but less than 100% of the Claimants have agreed to settle their Claims and sign a Release, the Settlement Payment will be reduced by the percentage of Claimants who do not agree to the settlement.

On April 22, 2011, the Company confirmed that the terms and conditions of the Settlement Agreement had been met and made a payment of \$3.6 million to conclude the settlement. The amount was based upon the Company's receipt of 1,069 signed releases provided by claimants, which was 95.02% of all claimants identified in the Settlement Agreement.

The Company generally denies the allegations made in the claims and lawsuits and denies that its products caused any injuries to the claimants. Nonetheless, to avoid the expense and uncertainty of further litigation, the Company has entered into the Settlement Agreement for the purpose of minimizing its expenses, including legal fees, and the inconvenience and distraction of the claims and lawsuits.

Firefighters have brought hearing loss claims against the Company in jurisdictions other than Philadelphia and Cook County. In particular, cases have been filed in New Jersey, Missouri, Maryland, and New York. All of those cases, however were dismissed prior to trial, including four cases in the Supreme Court of Kings County, New York which were dismissed upon the Company's motion in 2008. The trial court subsequently denied reconsideration of its ruling. On appeal, the appellate court affirmed the trial court's dismissal of these cases. Plaintiffs' attorneys have threatened to file additional lawsuits. The Company intends to vigorously defend all of these lawsuits.

Federal Signal's ongoing negotiations with CNA over insurance coverage on these claims have resulted in reimbursements of a portion of the Company's defense costs. In the year ended December 31, 2011, the Company recorded \$0.8 million of reimbursements from CNA as a reduction of corporate operating expenses of which \$0.8 million has been received as of December 31, 2011. In the years ended December 31, 2010 and 2009, the Company recorded \$0.6 million and \$0.7 million, respectively, of CNA reimbursements.

On July 29, 2011, Neology, Inc. filed a complaint against the Company for alleged patent infringements in the U.S. District Court of Delaware. The lawsuit demands that the Company cease manufacturing, marketing, importing or selling Radio Frequency Identification systems and products that infringe certain specified patents owned by Neology, and also demands compensation for past alleged infringement. On December 2, 2011, Neology filed a motion for preliminary injunction, requesting that the court enter an order preliminarily enjoining the Company from further alleged infringement of certain Neology patents. The court has scheduled a hearing on the motion on May 1, 2012. The Company has denied the allegations in the complaint and the motion for preliminary injunction and intends to vigorously defend itself in this litigation.

## **NOTE 16 SEGMENT AND RELATED INFORMATION**

The Company has four continuing operating segments as defined under *ASC Topic 280, Segment Reporting*. Business units are organized under each segment because they share certain characteristics, such as technology, marketing, distribution and product application, which create long-term synergies. The principal activities of the Company's operating segments are as follows:

Information regarding the Company's discontinued operations is included in Note 13 Discontinued Operations.

*Safety and Security Systems* 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 used to protect people and property. Offerings include systems for campus and community alerting, emergency vehicles, first responder interoperable communications, industrial communications and command and municipal networked security. Specific products include lightbars and sirens, public warning sirens and public safety software. Products are primarily sold under the Federal

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Signal™, Federal Signal VAMA™, Target Tech®, and Victor™ brand names. The Group operates manufacturing facilities in North America, Europe, and South Africa.

*Fire Rescue* The Fire Rescue Group manufactures articulated and telescopic aerial platforms for rescue and fire fighting and for maintenance purposes. This Group sells to municipal and industrial fire services, civil defense authorities, rental companies, electric utilities and industrial customers. The Group manufactures in Finland and sells globally under the Bronto Skylift® brand name.

*Environmental Solutions* The Environmental Solutions Group manufactures a variety of self-propelled street cleaning vehicles, vacuum loader vehicles, municipal catch basin/sewer cleaning vacuum trucks, and waterblasting equipment. Environmental Solutions sells primarily to municipal and government customers and industrial contractors. Products are sold under the Elgin®, Vactor®, Guzzler® and Jetstream® brand names. The Group primarily manufactures its vehicles and equipment in the United States.

*Federal Signal Technologies* Our Federal Signal Technologies Group is a provider of technologies and solutions to the intelligent transportation systems and public safety markets and other applications. These products and solutions provide end users with the tools needed to automate data collection and analysis, transaction processing and asset tracking. FSTech provides technology platforms and services to customers in the areas of radio frequency identification systems, transaction processing vehicle classification, electronic toll collection, automated license plate recognition, electronic vehicle registration, parking and access control, cashless payment solutions, congestion charging, traffic management, site security solutions and supply chain systems. Products are sold under the PIPS™, Idris®, Sirit™ and VESystems™ brand names. The Group operates manufacturing facilities in North America and Europe.

Corporate contains those items that are not included in our other operating segments.

Net sales by operating segment reflect sales of products and services to external customers, as reported in the Company's consolidated statements of operations. Intersegment sales are insignificant. The Company evaluates performance based on operating income of the respective segment. Operating income includes all revenues, costs and expenses directly related to the segment involved. In determining operating segment income, neither corporate nor interest expenses are included. Operating segment depreciation expense, identifiable assets and capital expenditures relate to those assets that are utilized by the respective operating segment. Corporate assets consist principally of cash and cash equivalents, short-term investments, notes and other receivables and fixed assets. The accounting policies of each operating segment are the same as those described in the summary of significant accounting policies.

Revenues attributed to customers located outside of the U.S. aggregated \$296.0 million in 2011, \$285.8 million in 2010, and \$333.4 million in 2009, of which sales exported from the U.S. aggregated \$126.1 million, \$112.4 million, and \$113.5 million, respectively.

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 approximately \$19.7 million in 2011, \$18.8 million in 2010, and \$19.0 million in 2009.

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A summary of the Company's continuing operations by segment for each of the three years in the period ended December 31 is as follows (\$ in millions):

	2011	2010	2009
<b>Net sales</b>			
Safety and Security Systems	\$ 221.4	\$ 214.5	\$ 225.8
Fire Rescue	109.5	108.8	160.0
Environmental Solutions	357.8	309.8	299.6
Federal Signal Technologies	106.9	93.4	65.0
<b>Total net sales</b>	<b>\$ 795.6</b>	<b>\$ 726.5</b>	<b>\$ 750.4</b>
<b>Operating income (loss)</b>			
Safety and Security Systems	\$ 21.5	\$ 23.7	\$ 24.1
Fire Rescue	6.6	9.4	19.2
Environmental Solutions	24.5	17.9	15.1
Federal Signal Technologies	(29.5)	(89.3)	6.0
Corporate expense	(19.8)	(38.6)	(28.6)
<b>Total operating (loss) income</b>	<b>3.3</b>	<b>(76.9)</b>	<b>35.8</b>
Interest expense	(16.4)	(10.3)	(11.4)
Gain (loss) on investment in joint venture (Environmental Solutions Segment)	-	0.1	1.2
Other (expense)	(0.2)	(1.3)	(0.5)
<b>Income (loss) before income taxes</b>	<b>\$ (13.3)</b>	<b>\$ (88.4)</b>	<b>\$ 25.1</b>
<b>Depreciation and amortization</b>			
Safety and Security Systems	\$ 4.4	\$ 3.7	\$ 3.1
Fire Rescue	2.5	2.2	1.9
Environmental Solutions	5.2	4.7	4.5
Federal Signal Technologies	9.5	7.8	4.4
Corporate	0.9	0.8	0.8
<b>Total depreciation and amortization</b>	<b>\$ 22.5</b>	<b>\$ 19.2</b>	<b>\$ 14.7</b>
		<b>2011</b>	<b>2010</b>
<b>Identifiable assets</b>			
Safety and Security Systems		\$ 200.3	\$ 246.9
Fire Rescue		117.3	123.1
Environmental Solutions		231.7	240.6
Federal Signal Technologies		134.7	104.8
Corporate		19.2	46.0
<b>Total assets of continuing operations</b>		<b>703.2</b>	<b>761.4</b>
Assets of discontinued operations		3.5	3.1
<b>Total identifiable assets</b>		<b>\$ 706.7</b>	<b>\$ 764.5</b>
	<b>2011</b>	<b>2010</b>	<b>2009</b>

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Capital expenditures			
Safety and Security Systems	\$ 3.6	\$ 3.0	\$ 2.6
Fire Rescue	2.9	1.1	2.2
Environmental Solutions	6.7	6.5	8.9
Federal Signal Technologies	2.2	1.5	0.4
Corporate	0.3	0.7	0.3
Total capital expenditures	\$ 15.7	\$ 12.8	\$ 14.4

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The segment information provided below is classified based on geographic location of the Company's subsidiaries (\$ in millions):

	2011	2010	2009
<b>Net sales</b>			
United States	\$ 499.6	\$ 440.7	\$ 417.0
Europe	255.0	244.7	299.2
Canada	41.0	41.1	34.2
	\$ 795.6	\$ 726.5	\$ 750.4
<b>Long-lived assets (including intangibles)</b>			
United States	\$ 253.1	\$ 231.0	
Europe	162.3	202.1	
Canada	11.9	27.1	
Other	1.6	1.2	
	\$ 428.9	\$ 461.4	
<b>Long-lived assets (excluding intangibles)</b>			
United States	\$ 47.8	\$ 49.8	
Europe	15.7	16.3	
Other	0.6	0.5	
	\$ 64.1	\$ 66.6	

**NOTE 17 COMMITMENTS**

At December 31, 2011 and 2010, the Company had outstanding standby letters of credit aggregating \$34.2 million and \$29.6 million, respectively, principally to act as security for retention levels related to casualty insurance policies and to guarantee the performance of subsidiaries that engage in export transactions to foreign governments and municipalities.

The Company issues product performance warranties to customers with the sale of its products. The specific terms and conditions of these warranties vary depending upon the product sold and country in which the Company does business, with warranty periods generally ranging from one to ten years. The Company estimates the costs that may be incurred under its basic limited warranty and records a liability in the amount of such costs at the time the sale of the related product is recognized. Factors that affect the Company's warranty liability include the number of units under warranty from time to time, historical and anticipated rates of warranty claims, and costs per claim. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary.

Changes in the Company's warranty liabilities for the years ended December 31, 2011 and 2010 were as follows (\$ in millions):

	2011	2010
Balance at January 1	\$ 5.7	\$ 6.2
Provisions to expense	10.2	7.5
Actual costs incurred	(8.7)	(8.0)
Balance at December 31	\$ 7.2	\$ 5.7

The Company has retained an environmental consultant to conduct an environmental risk assessment at its Pearland, Texas facility. The facility, which was previously used by the Company's discontinued Pauluhn business, manufactured marine, offshore, and industrial lighting products. While the Company has not completed the risk assessment analysis, it appears probable the site will require remediation. An undiscounted estimate of



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the range of costs to remediate the site is \$1.6 million to \$2.6 million, depending upon the remediation approach and other factors. As of December 31, 2010, \$2.6 million of expense had been recognized in connection with this matter. No additional amounts were recorded in 2011. At December 31, 2011 and 2010, \$2.2 million and \$2.6 million, respectively, of reserves related to the environmental remediation are included in the liabilities of discontinued operations. The Company's estimate may change in the near term 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 liquidity.

**NOTE 18 NEW ACCOUNTING PRONOUNCEMENTS**

In October 2009, the FASB issued ASU No. 2009-14, *Topic 985, Certain Revenue Arrangements That Include Software Elements*, which amended the accounting standards for revenue recognition to remove tangible products containing software components and non-software components that function together to deliver the products' essential functionality from the scope of industry-specific software revenue recognition guidance.

In October 2009, the FASB also issued ASU No. 2009-13, *Topic 605, Multiple-Deliverable Revenue Arrangement*, which changes the level of evidence of standalone selling price required to separate deliverables in a multiple deliverable revenue arrangement by allowing a company to make its best estimate of the selling price of deliverables when more objective evidence of selling price is not available and eliminates the use of residual method. ASU No. 2009-13 applies to multiple deliverable revenue arrangements that are not accounted for under other accounting pronouncements and retains the use of vendor-specific objective evidence (VSOE) of selling price if available and third-party evidence of selling price, when VSOE is unavailable.

The Company adopted ASU No. 2009-14 and ASU No. 2009-13 prospectively on January 1, 2011. The majority of the Company's businesses generate revenue through the manufacture and sale of a broad range of specialized products and components, with revenue recognized upon transfer of title and risk of loss, which is generally upon shipment. Certain businesses within the Federal Signal Technologies Group sell under multiple deliverable sales arrangements where the Company utilized estimated selling prices under the relative-selling price method. In arriving at its best estimates of selling price, management considered market conditions as well as Company-specific factors. Management considered the Company's overall pricing model and objectives, including profit objectives and internal cost structure, as well as historical pricing data. The effect of adopting the new accounting guidance during 2011 was an increase in revenues of \$4.2 million and an increase in cost of sales of \$1.5 million.

In May 2011, the FASB issued ASU No. 2011-04, *Fair Value Measurement Topic 820, Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS*, which amends the definition of fair value measurement principles and disclosure requirements to eliminate differences between U.S. GAAP and International Financial Reporting Standards. ASU 2011-04 requires new quantitative and qualitative disclosures about the sensitivity of recurring Level 3 measurement disclosures, as well as transfers between Level 1 and Level 2 of the fair value hierarchy. The provisions of this update are effective as of January 1, 2012. The Company is currently evaluating the impact of this update on its financial statement disclosures.

In June 2011, the FASB issued ASU No. 2011-05, *Topic 220, Presentation of Comprehensive Income*, which requires companies to include a statement of comprehensive income as part of its interim and annual financial statements. The new guidance gives companies the option to present net income and comprehensive income either in one continuous statement or in two separate but consecutive statements. This approach represents a change from current GAAP, which allows companies to report other comprehensive income (OCI) and its components in the statement of shareholders' equity. The guidance also allows companies to present OCI either net of tax with details in the notes or shown gross of tax (with tax effects shown parenthetically). The Company's disclosure of OCI for the year ended December 31, 2011 is presented in the Company's Consolidated Statements of Shareholders' Equity under Item 8 of this Form 10-K. Under the new guidance, certain information

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set forth in the statement would be shown in the new statement of comprehensive income. This guidance is effective for fiscal years beginning after December 15, 2011. ASU 2011-05 is effective for fiscal years, and interim periods within those years, beginning January 1, 2012 and should be applied retrospectively. The new guidance impacts disclosures only and will not have an impact on the Company's financial position, results of operations, or liquidity. The Company is currently evaluating the impact of this update on its financial statement disclosures.

In September 2011, the FASB issued ASU No. 2011-08, *Topic 350, Testing of Goodwill for Impairment*, which allows companies to assess qualitative factors to determine whether they need to perform the two-step quantitative goodwill impairment test. Under the option, an entity no longer would be required to calculate the fair value of a reporting unit unless it determines, based on that qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. The ASU may change how a company tests goodwill for impairment but should not change the timing or measurement of goodwill impairments. The ASU is effective for fiscal years beginning after December 15, 2011. ASU 2011-08 is effective for the Company for annual and interim periods beginning January 1, 2012. The Company does not expect the adoption of ASU 2011-08 to have a material impact on its results of operations or financial position.

In September 2011 the FASB issued ASU No. 2011-09, *Subtopic 715-80, Disclosures about an Employer's Participation in a Multiemployer Plan*. This update requires additional disclosures, both quantitative and qualitative, about an employer's participation in significant multiemployer pension plans. Some of the required disclosures include the plan names and identifying numbers of the significant multiemployer plans in which an employer participates, the level of an employer's participation in the plans, the financial health of the plans, and the nature of employer commitments to the plans. ASU 2011-09 is effective for the Company's annual reporting period ended December 31, 2011. The adoption of this ASU during the fourth quarter of 2011 had an immaterial impact on the Company's disclosures as its multiemployer plans are not significant individually or in the aggregate.

In December 2011, the FASB issued ASU No. 2011-11, *Topic 210, Disclosures about Offsetting Assets and Liabilities*. This update is intended to improve the comparability of statements of financial position prepared in accordance with GAAP and IFRS, requiring both gross and net presentation of offsetting assets and liabilities. The new requirements are effective for fiscal years beginning on or after January 1, 2013, and for interim periods within those fiscal years. The Company will adopt this standard for 2013 and does not expect it to have a material impact on its results of operations or financial position.

No other new accounting pronouncements issued or effective during 2011 have had or are expected to have a material impact on the consolidated financial statements.

**NOTE 19 SELECTED QUARTERLY DATA (UNAUDITED)**

The Company reports its interim quarterly periods on a 13-week basis ending on a Saturday with the fiscal year ending on December 31. For convenience purposes, the Company uses March 31, June 30, September 30 and December 31 to refer to its results of operations for the quarterly periods then ended. In 2011, the Company's interim quarterly periods ended April 2, July 2, October 1, and December 31; and in 2010, the Company's interim quarterly periods ended April 3, July 3, October 2, and December 31, respectively.

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The following is a summary of the quarterly results of operations, including income per share, for the Company for the quarterly periods of fiscal 2011 and 2010 (\$ in millions, except per share amount):

	2011			
	April 2	July 2	October 1	December 31
Net sales	\$ 173.6	\$ 204.5	\$ 194.2	\$ 223.3
Gross margin	41.5	51.7	46.3	55.5
(Loss) income from continuing operations	(5.3)	5.7	2.0	(16.8)
Gain (loss) from discontinued operations and disposal	0.0	0.3	(0.3)	0.2
Net (loss) income	(5.3)	6.0	1.7	(16.6)
Per share data diluted: (loss) earnings from continuing operations	\$ (0.08)	\$ 0.09	\$ 0.03	\$ (0.27)
Earnings from discontinued operations	-	0.01	-	-
Net (loss) income	(0.08)	0.10	0.03	(0.27)
Dividends paid per share	-	-	-	-
Market price range per share				
High	7.79	6.96	6.79	5.21
Low	5.06	5.74	4.26	3.50

	2010			
	April 3	July 3	October 2	December 31,
Net sales	\$ 164.6	\$ 195.6	\$ 179.6	\$ 186.7
Gross margin	40.3	51.2	44.5	48.2
(Loss) income from continuing operations	(4.0)	(0.5)	2.2	(158.4)
(Loss) from discontinued operations and disposal	(1.0)	(2.2)	(1.0)	(10.8)
Net (loss) income	(5.0)	(2.7)	1.2	(169.2)
Per share data diluted: (loss) earnings from continuing operations	\$ (0.08)	\$ (0.01)	\$ 0.04	\$ (2.55)
Loss from discontinued operations	(0.02)	(0.04)	(0.02)	(0.17)
Net (loss) income	(0.10)	(0.05)	0.02	(2.72)
Dividends paid per share	0.06	0.06	0.06	0.06
Market price range per share				
High	9.50	10.30	6.95	7.16
Low	6.02	5.58	4.91	5.22

In fourth quarter of 2011, the Company recorded goodwill and trade name impairment charges of \$14.8 million and \$7.4 million, respectively. In addition, during first quarter 2011, the goodwill adjustment for recorded in fourth quarter 2010 was subsequently reduced by \$1.6 million upon completion of a detailed step two impairment analysis.

In fourth quarter of 2010, the Company recorded goodwill and trade name impairment charges of \$67.1 million and \$11.8 million, respectively. The Company also recorded \$85.0 million of valuation allowance in the fourth quarter of 2010 to income tax provision on continuing operations to reflect the estimated amount of domestic deferred tax assets that may not be realized.

**NOTE 20 SUBSEQUENT EVENTS**

On February 22, 2012, the Company completed a refinancing of its existing senior secured credit facilities. The new senior secured credit facilities are comprised of a fully funded \$215 million five-year senior secured term loan and a \$100 million five-year senior secured revolving credit facility. See Note 6 for additional information.

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

None.

**Item 9A. *Controls and Procedures.***

**(a) Evaluation of Disclosure Controls and Procedures**

The Company carried out an evaluation, under the supervision and with the participation of its management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in the Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report.

Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2011.

**(b) Management's Annual Report on Internal Control over Financial Reporting and Attestation Report of the Registered Public Accounting Firm**

The Company's management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as defined in the Exchange Act Rule 13a-15(f). Management conducted an assessment of the Company's internal control over financial reporting based on the framework established by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework. Based on the assessment, management concluded that, as of December 31, 2011, the Company's internal control over financial reporting is effective.

Ernst & Young LLP, an independent registered public accounting firm, has audited the consolidated financial statements included in this Annual Report on Form 10-K and, as part of their audit, has issued its report, included herein, on the effectiveness of the Company's internal control over financial reporting. See Report of Independent Registered Public Accounting Firm on page 37.

**(c) Changes in Internal Control over Financial Reporting**

From time to time, the Company may make changes aimed at enhancing the effectiveness of the controls and to ensure that the systems evolve with the business. There were no changes in the Company's internal control over financial reporting that occurred during the Company's most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

**Item 9B. *Other Information.***

None.

**PART III**

**Item 10. *Directors, Executive Officers and Corporate Governance.***

Information regarding directors and nominees for directors is set forth in the Company's proxy statement for its 2012 Annual Meeting of Stockholders and is incorporated herein by reference.

The following is a list of the Company's executive officers, their ages, business experience and positions and offices as of February 1, 2012:

Dennis J. Martin, age 61, was appointed President and Chief Executive Officer in October 2010 and was appointed to the Board of Directors in March 2008. Mr. Martin has been an independent business consultant since 2005 and was the Chairman, President and Chief Executive Officer of General Binding Corporation from 2001 to 2005.



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Charles F. Avery, Jr., age 47, was appointed Vice President, Corporate Controller and Chief Information Officer in May 2011. Mr. Avery was Vice President, Information Technology and Controller from March 2010 to May 2011 and was Vice President Finance for the Environmental Solutions Group from March 2005 to March 2010.

William G. Barker, III, age 53, was appointed Senior Vice President and Chief Financial Officer in December 2008. Mr. Barker was Senior Vice President and Chief Financial Officer of Sun-Times Media Group from 2007 to 2008. He was Vice President, Finance and Strategy, Gatorade of PepsiCo, Inc. from 2001 to 2007.

Bryan L. Boettger, age 59, 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.

Esa Peltola, age 60, was appointed President of Bronto Skylift Oy Ab in July 2007. Mr. Peltola was Managing Director of Bronto Skylift from 1998 to 2007.

Manfred A. Rietsch, age 70, was appointed President of the Federal Signal Technologies Group in April 2010. Mr. Rietsch was the founder and Chief Executive Officer of VESystems, LLC, established in 2000.

Jennifer L. Sherman, age 47, was appointed Chief Administrative Officer, Senior Vice President, General Counsel and Secretary in October 2010. Ms. Sherman was Senior Vice President, Human Resources, General Counsel and Secretary from April 2008 to July 2010. Ms. Sherman was Vice President, General Counsel and Secretary from 2004 to March 2008 and was Deputy General Counsel and Assistant Secretary from 1998 to 2004.

Mark D. Weber, age 54, was appointed President of the Environmental Solutions Group in April 2003. Mr. Weber was Vice President Sweeper Products for the Environmental Solutions Group from 2002 to 2003 and General Manager of Elgin Sweeper Company from 2001 to 2002.

Joseph W. Wilson, age 54, was appointed President of Industrial Systems Division in May 2011. Mr. Wilson was Vice President/General Manager of the Industrial Systems Division from 2010 to 2011, in 2007 was Vice President/General Manager Industrial & Commercial System Division, and in 2006 was Vice President/General Manager Public Safety & Transportation System Division.

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.

Information regarding Compliance with Section 16(a) of the Exchange Act is set forth in the Company's 2012 proxy statement under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" and is incorporated herein by reference. Information regarding the Company's Audit Committee, Nominating and Governance Committee, and Compensation and Benefits Committee are set forth in the Company's 2012 proxy statement under the caption "Information Concerning the Board of Directors" and is incorporated herein by reference.

The Company has adopted a code of ethics that applies to its principal executive officer, principal financial officer and principal accounting officer. This code of ethics and the Company's corporate governance policies are posted on the Company's website at <http://www.federsignal.com>. The Company intends to satisfy its disclosure requirements regarding amendments to or waivers from its code of ethics by posting such information on this website. The charters of the Audit Committee, Nominating and Corporate Governance Committee, and

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Compensation and Benefits Committee of the Company's Board of Directors are available on the Company's website and are also available in print free of charge.

### **Item 11. *Executive Compensation.***

The information contained under the captions "Information Concerning the Board of Directors", "Compensation Committee Interlocks and Insider Participation", "Compensation Discussion and Analysis", "Compensation and Benefits Committee Report" and "Executive Compensation in the Last Fiscal Year" of the Company's 2012 proxy statement is incorporated herein by reference.

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

Information regarding security ownership of certain beneficial owners, of all directors and nominees, of the named executive officers, and of directors and executive officers as a group is set forth in the Company's 2012 proxy statement under the caption "Ownership of Our Common Stock" and is incorporated herein by reference. Information regarding our equity compensation plans is set forth in the Company's 2012 proxy statement under the caption "Equity Compensation Plan Information" and is incorporated herein by reference.

### **Item 13. *Certain Relationships and Related Transactions, and Director Independence.***

Information regarding certain relationships is hereby incorporated by reference from the Company's 2012 proxy statement under the heading "Information Concerning the Board of Directors" and under the heading "Certain Relationships and Related Party Transactions".

### **Item 14. *Principal Accountant Fees and Services.***

Information regarding principal accountant fees and services is incorporated by reference from the Company's 2012 proxy statement under the heading "Accounting Fees".

## **PART IV**

### **Item 15. *Exhibits, Financial Statement Schedules.***

#### *(a) 1. Financial Statements*

The following consolidated financial statements of Federal Signal Corporation and Subsidiaries and the report of the Independent Registered Public Accounting Firm contained under Item 8 of this Form 10-K are incorporated herein by reference:

Consolidated balance sheets as of December 31, 2011 and 2010

Consolidated Statements of Operations for the Years Ended December 31, 2011, 2010 and 2009

Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2011, 2010 and 2009

Consolidated Statements of Cash Flows for the Years Ended December 31, 2011, 2010 and 2009

Notes to Consolidated Financial Statements

#### *2. Financial Statement Schedules*

The following consolidated financial statement schedule of Federal Signal Corporation and Subsidiaries, for the three years ended December 31, 2011 is filed as a part of this Report in response to Item 15(a)(2):

Schedule II Valuation and Qualifying Accounts



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All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore, have been omitted.

3. *Exhibits*

See Exhibit Index.

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**Signatures**

Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FEDERAL SIGNAL CORPORATION

By: */s/ Dennis J Martin*  
Dennis J. Martin  
*President and Chief Executive Officer*

Date: March 14, 2012

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities indicated, as of March 14, 2012.

<i>/s/ Dennis J. Martin</i>	President and Chief
Dennis J. Martin	Executive Officer
	Board of Director
	(Principal Executive Officer)
<i>/s/ William G. Barker, III</i>	Senior Vice President and Chief
William G. Barker, III	Financial Officer
	(Principal Financial Officer)
<i>/s/ Charles F. Avery, Jr.</i>	Vice President, Corporate Controller and Chief Information Officer
Charles F. Avery, Jr.	(Principal Accounting Officer)
<i>/s/ James E. Goodwin</i>	Chairman and Director
James E. Goodwin	
<i>/s/ Charles R. Campbell</i>	Director
Charles R. Campbell	
<i>/s/ Paul W. Jones</i>	Director
Paul W. Jones	
<i>/s/ Richard R. Mudge</i>	Director
Richard R. Mudge	

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/s/ William F. Owens Director

William F. Owens

/s/ Brenda L. Reichelderfer Director

Brenda L. Reichelderfer

/s/ Dominic A. Romeo Director

Dominic A. Romeo

/s/ Joseph R. Wright Director

Joseph R. Wright

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## SCHEDULE Valuation and Qualifying Accounts

## SCHEDULE II

## FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES

## Valuation and Qualifying Accounts

For the Years Ended December 31, 2011, 2010 and 2009

Description	Balance at Beginning of Year	Additions Charged to Costs and Expenses (\$ in millions)	Deductions Accounts Written off Net of Recoveries	Balance at End of Year
<b>Allowance for doubtful accounts:</b>				
Year ended December 31, 2011:	\$ 2.8	\$ 0.6	\$ (0.5)	\$ 2.9
Year ended December 31, 2010:	\$ 2.4	\$ 1.2	\$ (0.8)	\$ 2.8
Year ended December 31, 2009:	\$ 2.0	\$ 0.9	\$ (0.5)	\$ 2.4
<b>Inventory obsolescence:</b>				
Year ended December 31, 2011:	\$ 7.7	\$ 3.9	\$ (2.9)	\$ 8.7
Year ended December 31, 2010:	\$ 7.6	\$ 2.4	\$ (2.3)	\$ 7.7
Year ended December 31, 2009:	\$ 5.9	\$ 4.6	\$ (2.9)	\$ 7.6
<b>Product liability and workers compensation:</b>				
Year ended December 31, 2011:	\$ 8.2	\$ 3.7	\$ (1.9)	\$ 10.0
Year ended December 31, 2010:	\$ 5.9	\$ 6.4	\$ (4.1)	\$ 8.2
Year ended December 31, 2009:	\$ 5.8	\$ 3.5	\$ (3.4)	\$ 5.9
<b>Income tax valuation allowances:</b>				
Year ended December 31, 2011:	\$ 109.1	\$ 13.9	\$ (0.1)	\$ 122.9
Year ended December 31, 2010:	\$ 25.2	\$ 86.0	\$ (2.1)	\$ 109.1
Year ended December 31, 2009:	\$ 32.5	\$ 0.1	\$ (7.4)	\$ 25.2

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The following exhibits, other than those incorporated by reference, have been included in the Company's Form 10-K filed with the Securities and Exchange Commission. The Company shall furnish copies of these exhibits upon written request to the Corporate Secretary at the address given on the cover page. (\* denotes exhibit filed in this Form 10-K)

3.
  - a. Restated Certificate of Incorporation of the Company. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed April 30, 2010.
  - b. Amended and Restated By-laws of the Company. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed February 28, 2012.
4.
  - a. Second Amended and Restated Credit Agreement among the Company, Bank of Montreal and other third party lenders named therein, dated April 25, 2007. Incorporated by reference to Exhibit 10.3 to the Company's Form 10-Q for the quarter ended September 30, 2007.
  - b. Supplemental Agreement to the Second Amended and Restated Credit Agreement among the Company, Federal Signal of Europe B.V. y CIA, SC, and Bank of Montreal, Ireland and other third party lenders named therein, dated September 6, 2007. Incorporated by reference to Exhibit 4.C to the Company's Form 10-K for the year ended December 31, 2007.
  - c. Second Amendment and Waiver to the Second Amended and Restated Credit Agreement, dated March 27, 2008. Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended March 31, 2008.
  - d. Global Amendment to Note Purchase Agreements between the Company and the holders of senior notes named therein, dated April 27, 2009. Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended March 31, 2009.
  - e. Third Amendment and Waiver to the Second Amended and Restated Credit Agreement, dated March 15, 2011. Incorporated by reference to Exhibit 4.e to the Company's Form 10-K for the year ended December 31, 2011.
  - f. Second Global Amendment and Waiver to the Note Purchase Agreements, dated March 15, 2011. Incorporated by reference to Exhibit 4.f to the Company's Form 10-K for the year ended December 31, 2011.
10.
  - a. The 1996 Stock Benefit Plan, as amended. Incorporated by reference to Exhibit 10.(A) to the Company's Form 10-K for the year ended December 31, 2003.(1)
  - b. Supplemental Pension Plan. Incorporated by reference to Exhibit 10.C to the Company's Form 10-K for the year ended December 31, 1995.(1)
  - c. Executive Disability, Survivor and Retirement Plan. Incorporated by reference to Exhibit 10.D to the Company's Form 10-K for the year ended December 31, 1995.(1)
  - d. Director Deferred Compensation Plan. Incorporated by reference to Exhibit 10.H to the Company's Form 10-K for the year ended December 31, 1997.(1)
  - e. Pension Agreement with Stephanie K. Kushner. Incorporated by reference to Exhibit 10.G to the Company's Form 10-K for the year ended December 31, 2002.(1)
  - f. Savings Restoration Plan, as amended and restated January 1, 2007. Incorporated by reference to Exhibit 10.FF to the Company's Form 10-K for the year ended December 31, 2008.(1)
  - g. First Amendment of the Federal Signal Corporation Savings Restoration Plan. Incorporated by reference to Exhibit 10.MM to the Company's Form 10-K for the year ended December 31, 2008.(1)
  - h. Second Amendment to Federal Signal Corporation Savings Restoration Plan. Incorporated by reference to Exhibit 10.NN to the Company's Form 10-K for the year ended December 31, 2008.(1)
  - i. Third Amendment to Federal Signal Corporation Savings Restoration Plan. Incorporated by reference to Exhibit 10.OO to the Company's Form 10-K for the year ended December 31, 2008.(1)
  - j. Executive General Severance Plan, as amended and restated October 2011. Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended September 30, 2011.(1)

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- k. Form of 2008 Executive Change-In-Control Severance Agreement (Tier 1) with certain executive officers. Incorporated by reference to Exhibit 10.HH to the Company's Form 10-K for the year ended December 31, 2008.(1)
- l. Form of 2008 Executive Change-In-Control Severance Agreement (Tier 2) with and certain executive officers. Incorporated by reference to Exhibit 10.II to the Company's Form 10-K for the year ended December 31, 2008.(1)
- m. Employment Letter Agreement between the Company and William G. Barker, III dated November 10, 2008. Incorporated by reference to Exhibit 10.JJ to the Company's Form 10-K for the year ended December 31, 2008.(1)
- n. Forms of Equity Award Agreements. Incorporated by reference to Exhibit 10.LL to the Company's Form 10-K for the year ended December 31, 2008, Exhibit 10.2 to the Company's Form 10-Q for the quarter ended March 31, 2009 and Exhibit 10 to the Company's Form 10-Q for the quarter ended June 30, 2010.(1)
- o. Short Term Incentive Bonus Plan. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on February 26, 2009.(1)
- p. Share Purchase Agreement among Fayat, Federal Signal of Europe B.V. and the Company, dated July 16, 2009. Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended June 30, 2009.
- q. Arrangement Agreement between the Company and 1815315 Ontario Limited and Sirit Inc., dated January 13, 2010. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed January 15, 2010.
- r. Release and Severance Agreement between the Company and David R. McConnaughey, dated January 20, 2010. Incorporated by reference to Exhibit 10.00 of the Company's Form 10-K filed February 26, 2010.(1)
- s. Release and Severance Agreement by and between the Company and William H. Osborne. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed November 3, 2010.(1)
- t. Global Settlement Agreement between and among the Company and the law firm of Cappelli Mustin LLC, including each attorney with Cappelli Mustin. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed January 10, 2011.
- u. Form of 2010 Executive Change-In-Control Severance Agreement with certain executive officers (Tier 1). Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended March 31, 2010.(1)
- v. Form of 2010 Executive Change-In-Control Severance Agreement with certain executive officers (Tier 2). Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended March 31, 2010.(1)
- w. Employment Agreement between the Company and Manfred Rietsch, dated 2010. Incorporated by reference to Exhibit 10.3 to the Company's Form 10-Q for the Company's Form 10-Q for the quarter ended March 31, 2010.(1)
- x. 2005 Executive Incentive Compensation Plan (2010 Restatement). Incorporated by reference to Appendix B to the Company's Definitive Proxy statement filed on Schedule 14A filed March 25, 2010.(1)
- y. Federal Signal Corporation Executive Incentive Performance Plan, as amended and restated. Incorporated by reference to Appendix C to the Company's Definitive Proxy Statement filed on Schedule 14A filed March 25, 2010.(1)
- z. Release and Severance Agreement by and between the Company and Jennifer M. Erfurth, dated January 7, 2011. Incorporated by reference to Exhibit 10.z to the Company's Form 10-K for the year ended December 31, 2011.(1)
- aa. Release and Severance Agreement by and between the Company and Fred H. Lietz dated January 7, 2011. Incorporated by reference to Exhibit 10.aa to the Company's Form 10-K for the year ended December 31, 2011.(1)

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bb.	Credit Agreement, dated as of February 22, 2012, by and among the Company, the lenders identified on the signature pages thereof, General Electric Capital Corporation, as a co-collateral agent and Wells Fargo Capital Finance, LLC, as administrative agent and a co-collateral agent. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed February 28, 2012.
cc.	Financing Agreement, dated as of February 22, 2012, by and among the Company, certain Subsidiaries of the Company, as Guarantors, the Lenders from time to time party thereto, and TPG Specialty Lending, Inc., as administrative agent, collateral agent and sole lead arranger. Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed February 28, 2012.
dd.	Intercreditor Agreement, dated as of February 22, 2012, among Wells Fargo Capital Finance, LLC, as the ABL Agent, and TPG Specialty Lending, Inc., as the Term Agent. Incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed February 28, 2012.
12.	Statement re Computation of Ratio of Earnings to Fixed Charges. Incorporated by reference to Exhibit 12.1 to the Company's Form S-3 filed March 18, 2010.
14.	Code of Ethics for Chief Executive Officer and Senior Financial Officers, as amended. Incorporated by reference to Exhibit 14 to the Company's Form 10-K for the year ended December 31, 2003.
21.	Subsidiaries of the Company.*
23.	Consent of Independent Registered Public Accounting Firm.*
31.1	CEO Certification under Section 302 of the Sarbanes-Oxley Act.*
31.2	CFO Certification under Section 302 of the Sarbanes-Oxley Act.*
32.1	CEO Certification of Periodic Report under Section 906 of the Sarbanes-Oxley Act.*
32.2	CFO Certification of Periodic Report under Section 906 of the Sarbanes-Oxley Act.*
99.1	Press Release*
99.2	Q4 Earnings Call Presentation Slides.*
101.INS	XBRL Instance Document(2)
101.SCH	XBRL Taxonomy Extension Schema Document(2)
101.CAL	XBRL Taxonomy Calculation Linkbase Document(2)
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document(2)
101.LAB	XBRL Taxonomy Label Linkbase Document(2)
101.PRE	XBRL Taxonomy Presentation Linkbase Document(2)

\* Filed herewith.

- (1) Management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(a)(3) of Form 10-K.
- (2) In accordance with Rule 406T of Regulation S-T, these interactive data files are deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise are not subject to liability under that section.