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

þ 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	**36-1063330**
(State or other jurisdiction of	*(I.R.S. Employer*
incorporation or organization)	*Identification No.)*
1415 West 22nd Street, **Oak Brook, Illinois**	**60523**
(Address of principal executive offices)	*(Zip Code)*

The Company s telephone number, including area code

(630) 954-2000

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $1.00 per share	New York Stock Exchange

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No þ

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 þ

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 þ 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 þ 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. þ

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 þ	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 þ

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® 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® 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®, Vactor®, Guzzler® 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®, 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 cyclicality.

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 cyclicality, 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 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, 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 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.

	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.

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Item 6. ***Selected Financial Data.***

	2011	2010	2009	2008	2007
Operating Results ($ in millions):					
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%
Common Stock Data (per share):					
(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
Market price range:					
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
Financial Position at Year-End ($ in millions):					
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%
Other ($ in millions):					
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,

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® 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®, Vactor®, Guzzler® 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 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
Other data:			
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

Year Ended December 31, 2011 vs. December 31, 2010

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.

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 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 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 manufacturers warranty. Such manufacturers 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.