
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2018

OR

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

For the transition period from _____ to _____

Commission file number: 1-6003



FEDERAL SIGNAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

36-1063330

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

**1415 West 22nd Street,
Oak Brook, Illinois**

(Address of principal executive offices)

60523

(Zip code)

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	(Do not check if a smaller reporting company)	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of April 30, 2018, the number of shares outstanding of the registrant's common stock was 60,003,701.

FEDERAL SIGNAL CORPORATION**TABLE OF CONTENTS****PART I. FINANCIAL INFORMATION**

	Page
Item 1. Financial Statements (Unaudited)	2
Condensed Consolidated Statements of Operations for the Three Months Ended March 31, 2018 and 2017	2
Condensed Consolidated Statements of Comprehensive Income for the Three Months Ended March 31, 2018 and 2017	3
Condensed Consolidated Balance Sheets as of March 31, 2018 and December 31, 2017	4
Condensed Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2018 and 2017	5
Condensed Consolidated Statements of Stockholders' Equity for the Three Months Ended March 31, 2018 and 2017	6
Notes to Condensed Consolidated Financial Statements	7
Note 1 – Summary of Significant Accounting Policies	7
Note 2 – Revenue	9
Note 3 – Inventories	12
Note 4 – Debt	12
Note 5 – Income Taxes	13
Note 6 – Pensions	14
Note 7 – Commitments and Contingencies	14
Note 8 – Earnings Per Share	19
Note 9 – Stockholders' Equity	20
Note 10 – Segment Information	21
Note 11 – Fair Value Measurements	22
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	24
Item 3. Quantitative and Qualitative Disclosures About Market Risk	30
Item 4. Controls and Procedures	30

PART II. OTHER INFORMATION

Item 1. Legal Proceedings	31
Item 1A. Risk Factors	31
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	31
Item 3. Defaults Upon Senior Securities	31
Item 4. Mine Safety Disclosures	31
Item 5. Other Information	31
Item 6. Exhibits	32
Signatures	33

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (“Form 10-Q”) is being filed by Federal Signal Corporation and its subsidiaries (referred to collectively as the “Company,” “we,” “our” or “us” herein, unless the context otherwise indicates) with the United States (“U.S.”) Securities and Exchange Commission (the “SEC”), and includes comments made by management that may contain words such as “may,” “will,” “believe,” “expect,” “anticipate,” “intend,” “plan,” “project,” “estimate” and “objective” or similar terminology, or the negative thereof, concerning the Company’s future financial performance, business strategy, plans, goals and objectives. These expressions are intended to identify forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the Private Securities Litigation Reform Act of 1995. Forward-looking statements include information concerning the Company’s possible or assumed future performance or results of operations and are not guarantees. While these statements are based on assumptions and judgments that management has made in light of industry experience as well as perceptions of historical trends, current conditions, expected future developments and other factors believed to be appropriate under the circumstances, they are subject to risks, uncertainties and other factors that may cause the Company’s actual results, performance or achievements to be materially different.

These risks and uncertainties, some of which are beyond the Company’s control, include the risk factors described under Part I, Item 1A, *Risk Factors*, of the Company’s Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on February 28, 2018. 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 results of operations, financial condition or cash flow. 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-Q.

ADDITIONAL INFORMATION

The Company is subject to the reporting and information requirements of the Exchange Act and, as a result, is obligated to file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other reports and information with the SEC, as well as amendments to those reports. The Company makes these filings available free of charge through our website at www.federalsignal.com as soon as reasonably practicable after such materials are filed with, or furnished to, the SEC. Information on our website does not constitute part of this Form 10-Q. In addition, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically. All materials that we file with, or furnish to, the SEC may also be read or copied at the SEC’s Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330.

PART I. FINANCIAL INFORMATION

Item 1. *Financial Statements (Unaudited).*

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

(in millions, except per share data)	Three Months Ended March 31,	
	2018	2017
Net sales	\$ 249.7	\$ 177.8
Cost of sales	187.8	134.2
Gross profit	61.9	43.6
Selling, engineering, general and administrative expenses	41.8	31.4
Acquisition and integration-related expenses	0.5	0.5
Restructuring	—	0.3
Operating income	19.6	11.4
Interest expense	2.5	0.6
Other expense (income), net	0.1	(0.2)
Income before income taxes	17.0	11.0
Income tax expense	4.1	3.8
Income from continuing operations	12.9	7.2
Gain from discontinued operations and disposal, net of income tax expense of \$0.0 and \$0.1, respectively	—	0.1
Net income	\$ 12.9	\$ 7.3
Basic earnings per share:		
Earnings from continuing operations	\$ 0.22	\$ 0.12
Earnings from discontinued operations and disposal, net of tax	—	—
Net earnings per share	\$ 0.22	\$ 0.12
Diluted earnings per share:		
Earnings from continuing operations	\$ 0.21	\$ 0.12
Earnings from discontinued operations and disposal, net of tax	—	—
Net earnings per share	\$ 0.21	\$ 0.12
Weighted average common shares outstanding:		
Basic	59.8	59.6
Diluted	60.8	60.3
Cash dividends declared per common share	\$ 0.07	\$ 0.07

See notes to condensed consolidated financial statements.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Unaudited)

(in millions)	Three Months Ended March 31,	
	2018	2017
Net income	\$ 12.9	\$ 7.3
Other comprehensive income:		
Change in foreign currency translation adjustment	2.0	1.2
Change in unrecognized net actuarial losses related to pension benefit plans, net of income tax expense of \$0.2 and \$0.2, respectively	0.1	0.2
Change in unrealized net gain on derivatives, net of income tax expense of \$0.2 and \$0.0, respectively	0.8	—
Total other comprehensive income	2.9	1.4
Comprehensive income	<u>\$ 15.8</u>	<u>\$ 8.7</u>

See notes to condensed consolidated financial statements.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2018	December 31, 2017
(in millions, except per share data)	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 35.4	\$ 37.5
Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively	124.5	118.2
Inventories	152.9	137.2
Prepaid expenses and other current assets	8.4	10.9
Total current assets	321.2	303.8
Properties and equipment, net of accumulated depreciation of \$112.0 and \$108.9, respectively	60.2	60.1
Rental equipment, net of accumulated depreciation of \$18.9 and \$20.0, respectively	85.9	87.2
Goodwill	378.2	377.3
Intangible assets, net of accumulated amortization of \$7.5 and \$5.5, respectively	149.6	151.8
Deferred tax assets	5.7	6.2
Deferred charges and other assets	6.8	5.4
Long-term assets of discontinued operations	0.5	0.5
Total assets	<u>\$ 1,008.1</u>	<u>\$ 992.3</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term borrowings and capital lease obligations	\$ 0.3	\$ 0.3
Accounts payable	64.0	51.5
Customer deposits	8.4	6.5
Accrued liabilities:		
Compensation and withholding taxes	17.9	22.2
Other current liabilities	40.1	36.1
Current liabilities of discontinued operations	0.5	0.5
Total current liabilities	131.2	117.1
Long-term borrowings and capital lease obligations	267.0	277.4
Long-term pension and other postretirement benefit liabilities	55.5	56.6
Deferred gain	8.3	8.7
Deferred tax liabilities	46.1	45.4
Other long-term liabilities	28.6	28.2
Long-term liabilities of discontinued operations	1.5	1.5
Total liabilities	538.2	534.9
Stockholders' equity:		
Common stock, \$1 par value per share, 90.0 shares authorized, 66.1 and 66.1 shares issued, respectively	66.1	66.1
Capital in excess of par value	208.8	207.7
Retained earnings	355.3	346.6
Treasury stock, at cost, 6.1 and 6.1 shares, respectively	(86.3)	(86.1)
Accumulated other comprehensive loss	(74.0)	(76.9)
Total stockholders' equity	469.9	457.4
Total liabilities and stockholders' equity	<u>\$ 1,008.1</u>	<u>\$ 992.3</u>

See notes to condensed consolidated financial statements.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

(in millions)	Three Months Ended March 31,	
	2018	2017
Operating activities:		
Net income	\$ 12.9	\$ 7.3
Adjustments to reconcile net income to net cash provided by operating activities:		
Gain from discontinued operations and disposal	—	(0.1)
Depreciation and amortization	8.6	5.7
Deferred financing costs	0.1	0.1
Deferred gain	(0.4)	(0.5)
Stock-based compensation expense	0.8	0.4
Pension expense, net of funding	(1.1)	(1.0)
Changes in fair value of contingent consideration and deferred payment	0.3	0.2
Deferred income taxes	0.7	4.0
Changes in operating assets and liabilities	(11.6)	(2.4)
Net cash provided by continuing operating activities	10.3	13.7
Net cash provided by discontinued operating activities	—	—
Net cash provided by operating activities	10.3	13.7
Investing activities:		
Purchases of properties and equipment	(3.0)	(1.1)
Proceeds from sales of properties and equipment	0.1	—
Proceeds from acquisition-related activity	3.0	—
Net cash provided by (used for) continuing investing activities	0.1	(1.1)
Net cash used for discontinued investing activities	—	(1.1)
Net cash provided by (used for) investing activities	0.1	(2.2)
Financing activities:		
Decrease in revolving lines of credit, net	(8.6)	—
Redemptions of common stock to satisfy withholding taxes related to stock-based compensation	(0.1)	(1.9)
Cash dividends paid to stockholders	(4.2)	(4.2)
Proceeds from stock-based compensation activity	0.1	0.6
Other, net	0.1	(0.1)
Net cash used for continuing financing activities	(12.7)	(5.6)
Net cash used for discontinued financing activities	—	—
Net cash used for financing activities	(12.7)	(5.6)
Effects of foreign exchange rate changes on cash and cash equivalents	0.2	0.2
(Decrease) increase in cash and cash equivalents	(2.1)	6.1
Cash and cash equivalents at beginning of year	37.5	50.7
Cash and cash equivalents at end of period	\$ 35.4	\$ 56.8

See notes to condensed consolidated financial statements.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Unaudited)

(in millions)	Common Stock	Capital in Excess of Par Value	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total
Balance at January 1, 2018	\$ 66.1	\$ 207.7	\$ 346.6	\$ (86.1)	\$ (76.9)	\$ 457.4
Net income			12.9			12.9
Total other comprehensive income					2.9	2.9
Cash dividends declared			(4.2)			(4.2)
Stock-based payments:						
Stock-based compensation		0.9				0.9
Stock option exercises and other		0.2		(0.2)		—
Balance at March 31, 2018	<u>\$ 66.1</u>	<u>\$ 208.8</u>	<u>\$ 355.3</u>	<u>\$ (86.3)</u>	<u>\$ (74.0)</u>	<u>\$ 469.9</u>
(in millions)	Common Stock	Capital in Excess of Par Value	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total
Balance at January 1, 2017	\$ 65.4	\$ 200.3	\$ 301.8	\$ (81.4)	\$ (92.0)	\$ 394.1
Net income			7.3			7.3
Total other comprehensive income					1.4	1.4
Cash dividends declared			(4.2)			(4.2)
Stock-based payments:						
Stock-based compensation		0.4				0.4
Stock option exercises and other	0.1	0.5				0.6
Performance share unit transactions	0.2	(0.2)		(1.9)		(1.9)
Balance at March 31, 2017	<u>\$ 65.7</u>	<u>\$ 201.0</u>	<u>\$ 304.9</u>	<u>\$ (83.3)</u>	<u>\$ (90.6)</u>	<u>\$ 397.7</u>

See notes to condensed consolidated financial statements.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Description of the Business

Federal Signal Corporation was founded in 1901 and was reincorporated as a Delaware corporation in 1969. References herein to the “Company,” “we,” “our” or “us” refer collectively to Federal Signal Corporation and its subsidiaries.

Products manufactured and supplied, and services rendered by the Company are divided into two major operating segments: the Environmental Solutions Group and the Safety and Security Systems Group. The individual operating businesses are organized as such because they share certain characteristics, including technology, marketing, distribution and product application, which create long-term synergies. The Company’s reportable segments are consistent with its operating segments. These segments are discussed in Note 10 – Segment Information.

Basis of Presentation and Consolidation

The accompanying unaudited condensed consolidated financial statements represent the consolidation of Federal Signal Corporation and its subsidiaries included herein and have been prepared by the Company pursuant to the rules and regulations of the United States (“U.S.”) Securities and Exchange Commission (the “SEC”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) have been condensed or omitted pursuant to such rules and regulations, although the Company believes that the disclosures are adequate to ensure the information presented is not misleading. Except as otherwise noted, these condensed consolidated financial statements have been prepared in accordance with the Company’s accounting policies described in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017, and should be read in conjunction with those consolidated financial statements and the notes thereto.

These condensed consolidated financial statements include all normal and recurring adjustments that we considered necessary to present a fair statement of our results of operations, financial condition and cash flow. Intercompany balances and transactions have been eliminated in consolidation. In addition, certain prior year amounts have been reclassified to conform to current year presentation.

The results reported in these condensed consolidated financial statements should not be regarded as necessarily indicative of results that may be expected for the entire year. While we label our quarterly information using a calendar convention whereby our first, second and third quarters are labeled as ending on March 31, June 30 and September 30, respectively, it is our longstanding practice to establish interim quarterly closing dates based on a 13-week period ending on a Saturday, with our fiscal year ending on December 31. The effects of this practice are not material and exist only within a reporting year.

Recent Accounting Pronouncements and Accounting Changes

In May 2014, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers* (“Topic 606”), which supersedes the revenue recognition requirements in Accounting Standards Codification (“ASC”) 605, *Revenue Recognition*. Topic 606 is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Topic 606 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. The Company adopted this guidance effective January 1, 2018 using the modified retrospective transition method. See Note 2 – Revenue Recognition for further details.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (“Topic 842”), which supersedes the lease accounting requirements in ASC 840, *Leases*. Topic 842 requires organizations that are lessees in operating lease arrangements to recognize right-of-use assets and lease liabilities on the balance sheet and requires disclosure of key qualitative and quantitative information about leasing arrangements by both lessors and lessees. For a lease to meet the requirements for accounting under a sale-leaseback transaction, it must meet the criteria for a sale in Topic 606. Entities are required to recognize and measure operating leases at the beginning of the earliest period presented using a modified retrospective approach. Topic 842 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. In preparation for the adoption of the new standard, the Company has established a project management team

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

responsible for analyzing the impact of Topic 842. The project management team is currently evaluating the impact that the adoption of this guidance will have on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Payments*, which provides additional guidance on the financial statement presentation of certain activities in the statement of cash flows. The activities addressed by this guidance that may be relevant to the Company include cash payments for debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims and proceeds from the settlement of corporate-owned life insurance policies, and the application of the predominance principle. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. The amendments in this ASU should be applied using a retrospective transition method to each period presented. If it is impracticable to apply the amendments retrospectively for some of the issues, the amendments for those issues would be applied prospectively as of the earliest date practicable. The Company adopted this guidance effective January 1, 2018 and concluded that it did not have a material impact on its historical cash flow presentation.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory*. This guidance requires the income tax consequences of an intra-entity transfer of an asset other than inventory to be recognized when the transfer occurs, instead of when the asset is sold to an outside party. The pronouncement is effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within those annual reporting periods, with early adoption permitted. The amendments in this ASU should be applied on a modified retrospective basis, with an adjustment reflecting the cumulative effect of adoption being recorded directly to retained earnings as of the beginning of the period of adoption. The Company adopted this guidance effective January 1, 2018 and concluded that it did not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles – Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment*, which eliminates the second step of the two-step quantitative approach for testing goodwill for potential impairment. An entity will therefore perform the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and recognize an impairment charge for the amount by which the carrying amount exceeds the fair value, not to exceed the total amount of goodwill allocated to the reporting unit. An entity still has the option to perform a qualitative assessment to determine if the quantitative impairment test is necessary. ASU 2017-04 is effective for fiscal years beginning after December 15, 2019 on a prospective basis, with early adoption permitted. The Company adopted this guidance effective January 1, 2018, and will apply the revised guidance prospectively to its future goodwill impairment tests.

In March 2017, the FASB issued ASU No. 2017-07, *Compensation – Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This guidance requires that entities present the service cost component of net periodic pension expense in the same income statement line items as other employee compensation costs. All other components of net periodic pension cost should be reported separately from the service cost component and outside a subtotal of operating income. The Company adopted this guidance effective January 1, 2018 following the retrospective method of adoption. The Condensed Consolidated Statements of Operations have been recast to present components of net periodic pension cost other than service cost within Other expense (income), net.

The following table summarizes the impact of ASU 2017-07 on the Company's previously reported Condensed Consolidated Statements of Operations:

(in millions)	Three Months Ended March 31, 2017		
	As Reported	Impact of Adoption	As Adjusted
Selling, engineering, general and administrative expenses	\$ 31.5	\$ (0.1)	\$ 31.4
Other expense (income), net	(0.3)	0.1	(0.2)

In August 2017, the FASB issued ASU No. 2017-12, *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities*, which intends to better align risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and presentation of hedge results. The amendments also make certain targeted improvements to simplify the application of the hedge accounting guidance by easing certain documentation and assessment requirements. ASU 2017-12 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The amendments in this ASU should be applied on a modified retrospective or prospective basis, depending on the area covered by

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

the update. The Company adopted this guidance effective January 1, 2018 and concluded that it did not have a material impact on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, that permits entities to reclassify tax effects stranded in accumulated other comprehensive income as a result of the Tax Cuts and Jobs Act (the “2017 Tax Act”) to retained earnings. ASU 2018-12 is effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The amendments in this ASU may be applied retrospectively or in the period of adoption. The Company is currently evaluating the impact that the adoption of this guidance will have on its consolidated financial statements.

In March 2018, the FASB issued ASU No. 2018-05, *Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118 (“SAB 118”)*, which provides guidance on the accounting for the tax impact of the 2017 Tax Act. Under SAB 118, a company that has not completed its accounting for the effects of the 2017 Tax Act by its financial reporting deadline may report provisional amounts based on reasonable estimates for items for which the accounting is incomplete. Those amounts will be subject to adjustment during a measurement period of up to one year. As discussed in Note 5 – Income Taxes, the condensed consolidated financial statements for the three months ended March 31, 2018 include the Company’s provisional estimates of the impact of the 2017 Tax Act, in accordance with SAB 118.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect (i) the reported amounts of assets and liabilities, (ii) the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and (iii) the reported amounts of revenues and expenses during the reporting period. Significant estimates and assumptions are used for, but are not limited to, revenue recognition, workers’ compensation and product liability reserves, asset impairment, pension and other post-retirement benefit obligations, income tax contingency accruals and valuation allowances, and litigation-related accruals. Actual results could differ from those estimates.

Significant Accounting Policies

As described in Note 2 – Revenue Recognition, the Company’s revenue recognition accounting policy has been updated to reflect the adoption of Topic 606 on January 1, 2018. There have been no other changes to the Company’s significant accounting policies as disclosed in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017.

NOTE 2 – REVENUE RECOGNITION

Impact of the Adoption of Topic 606

On January 1, 2018, the Company adopted Topic 606 following the modified retrospective method of adoption applied to those contracts which were not completed as of the date of adoption. In accordance with the Topic 606 transition guidance, the financial information in the comparative periods presented herein has not been restated and continues to be reported under the accounting standards in effect for those periods.

The adoption of Topic 606 did not have a material impact on the Company’s financial position, results of operations or cash flows. While the impact of adoption was not material, the Company’s Condensed Consolidated Statements of Operations for the three months ended March 31, 2018 include a reduction in Net sales of approximately 1% within the Environmental Solutions Group based on a revised “Principal vs. Agent” analysis resulting in a change from gross to net presentation, with a corresponding reduction in Cost of sales.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

The following table summarizes the impact of the adoption of Topic 606 on the Company's Condensed Consolidated Statements of Operations for the three months ended March 31, 2018:

(in millions)	Three Months Ended March 31, 2018		
	As Reported	Balances Without Adoption of Topic 606	Effect of Change
Net sales	\$ 249.7	\$ 252.9	\$ (3.2)
Cost of sales	187.8	191.0	(3.2)
Gross profit	<u>\$ 61.9</u>	<u>\$ 61.9</u>	<u>\$ —</u>

Revenue Recognition

Revenue is recognized when performance obligations under the terms of a contract with the customer are satisfied; generally this occurs at a point in time, with the transfer of control of the Company's products or services to customers. For most of the Company's product sales, these criteria are met at the time the product is shipped; however, occasionally control passes later or earlier than shipment due to customer contract or letter of credit terms. In circumstances where credit is extended, payment terms generally range from 30 to 120 days and customer deposits may be required.

Revenue is measured as the amount of consideration the Company expects to be entitled to in exchange for transferring products or providing services. Expected returns and allowances are estimated and recognized based primarily on an analysis of historical experience, with Net sales presented net of such returns and allowances.

The Company enters into sales arrangements that may provide for multiple performance obligations to a customer. These arrangements may include software and non-software components that function together to deliver the products' essential functionality. The Company identifies all performance obligations that are to be delivered separately under the sales arrangement and allocates revenue to each performance obligation based on its relative standalone selling price. The Company uses an observable price to determine the standalone selling price or a cost plus margin approach when one is not available. In general, performance obligations include hardware, integration and installation services. The allocated revenue for each performance obligation is recognized as such performance obligations are satisfied.

Net sales include sales of products and billed freight related to product sales. Freight has not historically comprised a material component of Net sales. The Company has elected to account for such shipping and handling activities as a fulfillment cost and not as a separate performance obligation. Taxes collected from customers and remitted to governmental authorities are recorded on a net basis and are excluded from Net sales.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

The following table presents the Company's Net sales disaggregated by geographic region, based on the location of the end customer, and by major product line:

(in millions)	Three Months Ended March 31, 2018
Geographic Region:	
U.S.	\$ 196.6
Canada	32.4
Europe/Other	20.7
Total net sales	<u>\$ 249.7</u>
Major Product Line:	
<i>Environmental Solutions</i>	
Vehicles and equipment ^(a)	\$ 155.6
Parts	29.8
Rental income ^(b)	7.8
Other ^(c)	3.4
Total	<u>\$ 196.6</u>
<i>Safety and Security Systems</i>	
Public safety and security equipment	\$ 30.6
Industrial signaling equipment	13.2
Warning systems	9.3
Total	<u>\$ 53.1</u>
Total net sales	<u>\$ 249.7</u>

^(a) Includes net sales from the sale of new and used vehicles and equipment, including sales of rental equipment.

^(b) Represents income from vehicle and equipment lease arrangements with customers, recognized in accordance with Topic 840.

^(c) Primarily includes revenues from services such as maintenance and repair work and the sale of extended warranty contracts.

Contract Balances

The Company recognizes contract liabilities when cash payments, such as customer deposits, are received in advance of the Company's satisfaction of the related performance obligations. Contract liabilities are recognized as Net sales when the related performance obligations are satisfied, which generally occurs within three to six months of the cash receipt. Contract liability balances are not materially impacted by any other factors. The Company's contract liabilities were \$10.7 million and \$8.9 million, as of March 31, 2018 and December 31, 2017, respectively. Contract assets, such as unbilled receivables, were not material as of any of the periods presented herein.

Practical Expedients

As the Company's standard payment terms are less than a year, the Company has elected the practical expedient under ASC 606-10-32-18 to not assess whether a contract has a significant financing component.

The Company has also elected the practical expedient under ASC 340-40-25-4 and recognizes the incremental costs of obtaining a contract, such as sales commissions, as expense when incurred as the amortization period of the asset that otherwise would have been recognized is one year or less.

Further, as permitted by ASC 606-10-50-14, the Company does not disclose the value of its remaining performance obligations for contracts with an original expected duration of one year or less.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

NOTE 3 – INVENTORIES

The following table summarizes the components of Inventories:

(in millions)	March 31, 2018	December 31, 2017
Finished goods	\$ 85.0	\$ 74.3
Raw materials	55.4	52.6
Work in process	12.5	10.3
Total inventories	<u>\$ 152.9</u>	<u>\$ 137.2</u>

NOTE 4 – DEBT

The following table summarizes the components of Long-term borrowings and capital lease obligations:

(in millions)	March 31, 2018	December 31, 2017
Amended 2016 Credit Agreement ^(a)	\$ 266.5	\$ 277.0
Capital lease obligations	0.8	0.7
Total long-term borrowings and capital lease obligations, including current portion	267.3	277.7
Less: Current capital lease obligations	0.3	0.3
Total long-term borrowings and capital lease obligations	<u>\$ 267.0</u>	<u>\$ 277.4</u>

(a) Defined as the Amended and Restated Credit Agreement, dated January 27, 2016, as amended on June 2, 2017.

As more fully described within Note 11 – Fair Value Measurements, the Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The fair value of long-term debt is based on interest rates that we believe are currently available to us for issuance of debt with similar terms and remaining maturities (Level 2 input).

The following table summarizes the carrying amounts and estimated fair values of the Company's long-term borrowings:

(in millions)	March 31, 2018		December 31, 2017	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Long-term borrowings ^(a)	\$ 267.3	\$ 267.3	\$ 277.7	\$ 277.7

(a) Long-term borrowings includes current portions of long-term debt and current portions of capital lease obligations of \$0.3 million and \$0.3 million as of March 31, 2018 and December 31, 2017, respectively.

Borrowings under the Amended 2016 Credit Agreement bear interest, at the Company's option, at a base rate or a LIBOR rate, plus, in each case, an applicable margin. The applicable margin ranges from 0.00% to 1.25% for base rate borrowings and 1.00% to 2.25% for LIBOR borrowings. The Company must also pay a commitment fee to the lenders ranging between 0.15% to 0.30% per annum on the unused portion of the \$400.0 million revolving credit 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 subject to certain leverage ratio and interest coverage ratio financial covenants under the Amended 2016 Credit Agreement that are to be measured at each fiscal quarter-end. The Company was in compliance with all such covenants as of March 31, 2018.

As of March 31, 2018, there was \$266.5 million of cash drawn and \$12.7 million of undrawn letters of credit under the Amended 2016 Credit Agreement, with \$120.8 million of net availability for borrowings. As of December 31, 2017, there was \$277.0 million cash drawn and \$17.1 million of undrawn letters of credit under the Amended 2016 Credit Agreement, with \$105.9 million of net availability for borrowings.

As of March 31, 2018 and December 31, 2017, there were no borrowings against the Company's non-U.S. lines of credit which provide for borrowings of up to \$0.2 million.

For the three months ended March 31, 2018, gross borrowings under the Amended 2016 Credit Agreement were \$8.0 million, while there were \$16.6 million of gross payments. For the three months ended March 31, 2017, there were no gross borrowings or gross payments under the 2016 Credit Agreement.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

Interest Rate Swap

On June 2, 2017, the Company entered into an interest rate swap (the “Swap”) with a notional amount of \$150.0 million, as a means of fixing the floating interest rate component on \$150.0 million of its variable-rate debt. The Swap is designated as a cash flow hedge, with a termination date of June 2, 2020. As a result of the application of hedge accounting treatment, all unrealized gains and losses related to the derivative instrument are recorded in Accumulated other comprehensive loss and are reclassified into operations in the same period in which the hedged transaction affects earnings. Hedge effectiveness is tested quarterly. We do not use derivative instruments for trading or speculative purposes.

As more fully described within Note 11 – Fair Value Measurements, the Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The fair value of the Swap is derived from a discounted cash flow analysis based on the terms of the contract and the interest rate curve (Level 2 inputs) and measured on a recurring basis in our Consolidated Balance Sheet. At March 31, 2018, the fair value of the Swap, included in Deferred charges and other assets on the Condensed Consolidated Balance Sheets, was \$2.6 million. During the three months ended March 31, 2018, an unrealized pre-tax gain of \$1.0 million was recorded in Accumulated other comprehensive income.

NOTE 5 – INCOME TAXES

The Company recognized income tax expense of \$4.1 million and \$3.8 million for the three months ended March 31, 2018 and 2017, respectively. The increase in tax expense in the current-year quarter is largely due to higher pre-tax income levels, offset by the impact of the lower U.S. federal corporate tax rate following the enactment of the 2017 Tax Act. The effective tax rate for the three months ended March 31, 2018 was 24.1%, compared to 34.5% in the prior-year quarter, reflecting the lower U.S. federal corporate tax rate.

As discussed in Note 1 – Summary of Significant Accounting Policies, the condensed consolidated financial statements for the three months ended March 31, 2018 include the Company’s provisional estimates of the impact of the 2017 Tax Act, in accordance with SAB 118. The Company may adjust the provisional amounts throughout the measurement period as the Company’s calculations are refined and additional interpretive guidance becomes available. During the three months ended March 31, 2018, there have been no significant adjustments to the provisional amounts recorded at December 31, 2017.

Effective January 1, 2018, the 2017 Tax Act subjects a U.S. entity to tax on global intangible low-taxed income (“GILTI”) earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income, states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. Given the complexity of the GILTI provisions, the Company is continuing to evaluate the effects of the GILTI provisions and has not yet determined its related accounting policy. As of March 31, 2018, the Company has included a provisional estimate of the GILTI related to current-year operations in its estimated annual effective tax rate.

The 2017 Tax Act also provides a one-time “transition tax” on untaxed post-1986 accumulated earnings and profits (“E&P”) of a company’s controlled foreign corporations (“CFC”) determined as of November 2, 2017 or December 31, 2017 (whichever date on which there is more deferred E&P). Cash and cash equivalents are taxed at an effective rate of 15.5% and earnings in excess of the cash position are taxed at an effective rate of 8%. The 2017 Tax Act permits the netting of positive earnings of one CFC against deficits of others. At both November 2, 2017 and December 31, 2017, the accumulated undistributed earnings of the Company’s foreign subsidiaries aggregated to an overall E&P deficit. Therefore, the Company estimates that no transition tax will be payable under the provisions of the 2017 Tax Act. As with other tax calculations surrounding the 2017 Tax Act, the Company’s estimate of its transition tax liability as of March 31, 2018 is provisional due to complexities inherent in the computations that it expects to be addressed in whole, or in part, by regulations issued during 2018.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

NOTE 6 – PENSIONS

The following table summarizes the components of net postretirement pension expense:

(in millions)	U.S. Benefit Plan		Non-U.S. Benefit Plan	
	Three Months Ended March 31,		Three Months Ended March 31,	
	2018	2017	2018	2017
Service cost	\$ —	\$ —	\$ 0.1	\$ —
Interest cost	1.6	1.9	0.3	0.3
Amortization of actuarial loss	0.8	0.6	0.2	0.2
Expected return on plan assets	(2.2)	(2.4)	(0.6)	(0.5)
Net postretirement pension expense	<u>\$ 0.2</u>	<u>\$ 0.1</u>	<u>\$ —</u>	<u>\$ —</u>

NOTE 7 – COMMITMENTS AND CONTINGENCIES*Financial Commitments*

The Company provides indemnifications and other guarantees in the ordinary course of business, the terms of which range in duration and often are not explicitly defined. Specifically, the Company is occasionally required to provide letters of credit and bid and performance bonds to various customers, principally to act as security for retention levels related to casualty insurance policies and to guarantee the performance of subsidiaries that engage in export and domestic transactions. At March 31, 2018, the Company had outstanding performance and financial standby letters of credit, as well as outstanding bid and performance bonds, aggregating to \$16.7 million. If any such letters of credit or bonds are called, the Company would be obligated to reimburse the issuer of the letter of credit or bond. The Company believes the likelihood of any currently outstanding letter of credit or bond being called is remote.

The Company has transactions involving the sale of equipment to certain of its customers which include (i) guarantees to repurchase the equipment for a fixed price at a future date and (ii) guarantees to repurchase the equipment from the third-party lender in the event of default by the customer. As of March 31, 2018, the single year and maximum potential cash payments the Company could be required to make to repurchase equipment under these agreements were \$4.8 million and \$6.0 million, respectively. The Company's risk under these repurchase arrangements would be partially mitigated by the value of the products repurchased as part of the transaction. Further, pursuant to the terms of the June 3, 2016 acquisition of substantially all of the assets and operations of Joe Johnson Equipment, Inc. and Joe Johnson Equipment (USA), Inc. (collectively, "JJE"), the former owners of JJE have agreed to reimburse the Company for certain losses incurred resulting from the requirement to repurchase equipment that was sold prior to the acquisition date. Any such reimbursement would be withheld from the C\$8.0 million deferred payment to be made to the former owners of JJE on the third anniversary of the acquisition date. The Company has recorded an immaterial accrual for potential losses related to the repurchase exposures, which represents the expected losses that could result from obligations to repurchase products, after giving effect to proceeds anticipated to be received from the resale of those products to alternative customers, as well as to the reimbursement of any losses incurred. The Company has recorded its estimated net liability associated with losses from these guarantee and repurchase obligations on its Consolidated Balance Sheets based on historical experience and current facts and circumstances. Historical cash requirements and losses associated with these obligations have not been significant, but could increase if customer defaults exceed current expectations.

Product Warranties

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

During the year ended December 31, 2017, the Company recognized an estimated liability within the Environmental Solutions Group in connection with a specific warranty matter. Although there were no significant changes to the liability during the three months ended March 31, 2018, it is reasonably possible that the Company's estimate may change in the near term as more

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

information becomes available; however, the ultimate resolution of this matter is not expected to have a material adverse effect on the Company's results of operations, financial position or liquidity.

The following table summarizes the changes in the Company's warranty liabilities during the three months ended March 31, 2018 and 2017:

(in millions)	2018	2017
Balance at January 1	\$ 8.4	\$ 6.4
Provisions to expense	1.5	1.1
Payments	(1.5)	(1.4)
Balance at March 31	<u>\$ 8.4</u>	<u>\$ 6.1</u>

Liabilities of Discontinued Operations

The Company retains certain liabilities for operations discontinued in prior periods, primarily for environmental remediation and product liability. Included in liabilities of discontinued operations on the Condensed Consolidated Balance Sheets as of both March 31, 2018 and December 31, 2017, were reserves of \$0.5 million related to environmental remediation at the Pearland, Texas facility previously used by the Company's discontinued Pauluhn business, and \$1.4 million related to estimated product liability obligations of the discontinued North American refuse truck body business.

Legal Proceedings

The Company is subject to various claims, including pending and possible legal actions for product liability and other damages, and other matters arising in the ordinary course of the Company's business. On a quarterly basis, the Company reviews uninsured material legal claims against the Company and accrues for the costs of such claims as appropriate in the exercise of management's best judgment and experience. However, due to a lack of factual information available to the Company about a claim, or the procedural stage of a claim, it may not be possible for the Company to reasonably assess either the probability of a favorable or unfavorable outcome of the claim or to reasonably estimate the amount of loss should there be an unfavorable outcome. Therefore, for many claims, the Company cannot reasonably estimate a range of loss.

The Company believes, based on current knowledge and after consultation with counsel, that the outcome of such claims and actions will not have a material adverse effect on the Company's results of operations or financial condition. However, in the event of unexpected future developments, it is possible that the ultimate resolution of such matters, if unfavorable, could have a material adverse effect on the Company's results of operations, financial condition or cash flow.

Hearing Loss Litigation

The Company has been sued for monetary damages by firefighters who claim that exposure to the Company's sirens has impaired their hearing and that the sirens are therefore defective. There were 33 cases filed during the period of 1999 through 2004, involving a total of 2,443 plaintiffs, in the Circuit Court of Cook County, Illinois. These cases involved more than 1,800 firefighter plaintiffs from locations outside of Chicago. In 2009, six additional cases were filed in Cook County, involving 299 Pennsylvania firefighter plaintiffs. During 2013, another case was filed in Cook County involving 74 Pennsylvania firefighter plaintiffs.

The trial of the first 27 of these plaintiffs' claims occurred in 2008, whereby a Cook County jury returned a unanimous verdict in favor of the Company.

An additional 40 Chicago firefighter plaintiffs were selected for trial in 2009. Plaintiffs' counsel later moved to reduce the number of plaintiffs from 40 to nine. The trial for these nine plaintiffs concluded with a verdict against the Company and for the plaintiffs in varying amounts totaling \$0.4 million. The Company appealed this verdict. On September 13, 2012, the Illinois Appellate Court rejected this appeal. The Company thereafter filed a petition for rehearing with the Illinois Appellate Court, which was denied on February 7, 2013. The Company sought further review by filing a petition for leave to appeal with the Illinois Supreme Court on March 14, 2013. On May 29, 2013, the Illinois Supreme Court issued a summary order declining to accept review of this case. On July 1, 2013, the Company satisfied the judgments entered for these plaintiffs, which has resulted in final dismissal of these cases.

A third consolidated trial involving eight Chicago firefighter plaintiffs occurred during November 2011. The jury returned a unanimous verdict in favor of the Company at the conclusion of this trial.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

Following this trial, on March 12, 2012 the trial court entered an order certifying a class of the remaining Chicago Fire Department firefighter plaintiffs for trial on the sole issue of whether the Company's sirens were defective and unreasonably dangerous. The Company petitioned the Illinois Appellate Court for interlocutory appeal of this ruling. On May 17, 2012, the Illinois Appellate Court accepted the Company's petition. On June 8, 2012, plaintiffs moved to dismiss the appeal, agreeing with the Company that the trial court had erred in certifying a class action trial in this matter. Pursuant to plaintiffs' motion, the Illinois Appellate Court reversed the trial court's certification order.

Thereafter, the trial court scheduled a fourth consolidated trial involving three firefighter plaintiffs, which began in December 2012. Prior to the start of this trial, the claims of two of the three firefighter plaintiffs were dismissed. On December 17, 2012, the jury entered a complete defense verdict for the Company.

Following this defense verdict, plaintiffs again moved to certify a class of Chicago Fire Department plaintiffs for trial on the sole issue of whether the Company's sirens were defective and unreasonably dangerous. Over the Company's objection, the trial court granted plaintiffs' motion for class certification on March 11, 2013 and scheduled a class action trial to begin on June 10, 2013. The Company filed a petition for review with the Illinois Appellate Court on March 29, 2013 seeking reversal of the class certification order.

On June 25, 2014, a unanimous three-judge panel of the First District Illinois Appellate Court issued its opinion reversing the class certification order of the trial court. Specifically, the Appellate Court determined that the trial court's ruling failed to satisfy the class-action requirements that the common issues of the firefighters' claims predominate over the individual issues and that there is an adequate representative for the class. During a status hearing on October 8, 2014, plaintiffs represented to the Court that they would again seek to certify a class of firefighters on the issue of whether the Company's sirens were defective and unreasonably dangerous. On January 12, 2015, plaintiffs filed motions to amend their complaints to add class action allegations with respect to Chicago firefighter plaintiffs as well as the approximately 1,800 firefighter plaintiffs from locations outside of Chicago. On March 11, 2015, the trial court granted plaintiff's motions to amend their complaints. On April 24, 2015, the cases were transferred to Cook County chancery court, which will decide all class certification issues. On March 23, 2018, plaintiffs filed a motion to certify as a class all firefighters from the Chicago Fire Department who have filed lawsuits in this matter. The Company intends to continue its objections to any attempt at certification. A further status hearing on class certification issues has been scheduled for May 10, 2018.

The Company has also filed motions to dismiss cases involving firefighters who worked for fire departments located outside of the state of Illinois based on improper venue. On February 24, 2017, the Circuit Court of Cook County entered orders dismissing the cases of 1,770 such firefighter plaintiffs from the jurisdiction of the state of Illinois. Pursuant to these orders, these plaintiffs had six months thereafter to refile their cases in jurisdictions where these firefighters are located. Prior to this six-month deadline, some of the attorneys representing these plaintiffs contacted the Company regarding possible settlement of these cases. During the year ended December 31, 2017, the Company entered into a global settlement agreement with two attorneys who represented approximately 1,090 of these plaintiffs. Under the terms of the settlement agreement, the Company offered \$700 per plaintiff to settle these cases and 717 plaintiffs accepted this offer as a final settlement. The attorneys representing these plaintiffs have agreed to withdraw from representing plaintiffs who have not responded to the settlement offer. It is the Company's position that the non-settling plaintiffs who failed to timely refile their cases following the February 2017 dismissal by the Circuit Court of Cook County are now barred from doing so by the statute of limitations. The Company also has filed a venue motion seeking to transfer to DuPage County cases involving 10 plaintiffs who reside and work in Illinois but outside of Cook County. The Court granted this motion on June 28, 2017.

The Company has also been sued on this issue outside of the Cook County, Illinois venue. Many of these cases have involved lawsuits filed by a single attorney in the Court of Common Pleas, Philadelphia County, Pennsylvania. During 2007 and through 2009, this attorney filed a total of 71 lawsuits involving 71 plaintiffs in this jurisdiction. Three of these cases were dismissed pursuant to pretrial motions filed by the Company. Another case was voluntarily dismissed. Prior to trial in four cases, the Company paid nominal sums to obtain dismissals.

Three trials occurred in Philadelphia involving these cases filed in 2007 through 2009. The first trial involving one of these plaintiffs occurred in 2010, when the jury returned a verdict for the plaintiff. In particular, the jury found that the Company's siren was not defectively designed, but that the Company negligently constructed the siren. The jury awarded damages in the amount of \$0.1 million, which was subsequently reduced to \$0.08 million. The Company appealed this verdict. Another trial, involving nine Philadelphia firefighter plaintiffs, also occurred in 2010 when the jury returned a defense verdict for the Company as to all claims and all plaintiffs involved in that trial. The third trial, also involving nine Philadelphia firefighter plaintiffs, was completed during 2010 when the jury returned a defense verdict for the Company as to all claims and all plaintiffs involved in that trial.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

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

The Settlement Agreement, as amended, provided that the Company pay a total amount of \$3.8 million (the “Settlement Payment”) to settle the Claims (including the costs, fees and other expenses of the law firm in connection with its representation of the Claimants), subject to certain terms, conditions and procedures set forth in the Settlement Agreement. In order for the Company to be required to make the Settlement Payment: (i) each Claimant who agreed to settle his or her claims had to sign a release acceptable to the Company (a “Release”), (ii) each Claimant who agreed to the settlement and who was a plaintiff in a lawsuit, had to dismiss his or her lawsuit with prejudice, (iii) by April 29, 2011, at least 93% of the Claimants identified in the Settlement Agreement must have agreed to settle their claims and provide a signed Release to the Company and (iv) the law firm had to withdraw from representing any Claimants who did not agree to the settlement, including those who filed lawsuits. If the conditions to the settlement were met, but less than 100% of the Claimants agreed to settle their Claims and sign a Release, the Settlement Payment would be reduced by the percentage of Claimants who did not agree to the settlement.

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

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

During April through October 2012, 20 new cases were filed in the Court of Common Pleas, Philadelphia County, Pennsylvania. These cases were filed on behalf of 20 Philadelphia firefighters and involve various defendants in addition to the Company. Five of these cases were subsequently dismissed. The first trial involving these 2012 Philadelphia cases occurred during December 2014 and involved three firefighter plaintiffs. The jury returned a verdict in favor of the Company. Following this trial, all of the parties agreed to settle cases involving seven firefighter plaintiffs set for trial during January 2015 for nominal amounts per plaintiff. In January 2015, plaintiffs’ attorneys filed two new complaints in the Court of Common Pleas, Philadelphia, Pennsylvania on behalf of approximately 70 additional firefighter plaintiffs. The vast majority of the firefighters identified in these complaints are located outside of Pennsylvania. One of the complaints in these cases, which involves 11 firefighter plaintiffs from the District of Columbia, was removed to federal court in the Eastern District of Pennsylvania. Plaintiffs voluntarily dismissed all claims in this case on May 31, 2016. The Company thereafter moved to recover various fees and costs in this case, asserting that plaintiffs’ counsel failed to properly investigate these claims prior to filing suit. The Court granted this motion on April 25, 2017, awarding \$0.1 million to the Company. Plaintiffs’ counsel has appealed this Order. With respect to claims of other out-of-state firefighters involved in these two cases, the Company moved to dismiss these claims as improperly filed in Pennsylvania. The Court granted this motion and dismissed these claims on November 5, 2015. During August through December 2015, another nine new cases were filed in the Court of Common Pleas, Philadelphia County, Pennsylvania. These cases involve a total of 193 firefighters, most of whom are located outside of Pennsylvania. The Company again moved to dismiss all claims filed by out-of-state firefighters in these cases as improperly filed in Pennsylvania. On May 24, 2016, the Court granted this motion and dismissed these claims. Plaintiffs have filed a notice of appeal regarding this decision. On May 13, 2016, four new cases were filed in Philadelphia state court, involving a total of 55 Philadelphia firefighters who live in Pennsylvania. During August 2016, the Company settled a case involving four Philadelphia firefighters that had been set for trial in Philadelphia state court during September 2016. During 2017, plaintiffs filed additional cases in the Court of Common Pleas, Philadelphia County, involving over 100 Philadelphia firefighter plaintiffs. During January 2017, plaintiffs filed a motion to consolidate and bifurcate, similar to a motion filed in the Pittsburgh hearing loss cases, as described below. The Company has filed an opposition to this motion. These cases were then transferred to the mass tort program in Philadelphia for pretrial purposes. Plaintiffs’ counsel thereafter dismissed several plaintiffs. During November 2017, a trial involving one Philadelphia firefighter occurred. The jury returned a verdict in favor of the Company in this trial. As of March 31, 2018, a total of 75 firefighters are involved in cases pending in the Philadelphia mass tort program.

During April through July 2013, additional cases were filed in Allegheny County, Pennsylvania. These cases involve 247 plaintiff firefighters from Pittsburgh and various defendants, including the Company. During May 2016, two additional cases were filed against the Company in Allegheny County involving 19 Pittsburgh firefighters. After the Company filed pretrial

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

motions, the Court dismissed claims of 55 Pittsburgh firefighter plaintiffs. The Court scheduled the first trials of these Pittsburgh firefighters to occur in May, September and November 2016. Each trial will involve eight firefighters. Prior to the first scheduled trial in Pittsburgh, the Court granted the Company's motion for summary judgment and dismissed all claims asserted by plaintiff firefighters involved in this trial. Plaintiffs have appealed this dismissal. The next trial involving six Pittsburgh firefighters started on November 7, 2016. Shortly after this trial began, plaintiffs' counsel moved for a mistrial because a key witness suddenly became unavailable. The Court granted this motion and rescheduled this trial for March 6, 2017. During January 2017, plaintiffs also moved to consolidate and bifurcate trials involving Pittsburgh firefighters. In particular, plaintiffs sought one trial involving liability issues which will apply to all Pittsburgh firefighters who have filed suit against the Company. The Company filed an opposition to this motion. On April 18, 2017, the trial court granted plaintiffs' motion to bifurcate the next Pittsburgh trial. Pursuant to a motion for clarification filed by the Company, the Court ruled that the bifurcation order will only apply to six plaintiffs who are part of the next trial group in Pittsburgh. The Company thereafter sought an interlocutory appeal of the Court's bifurcation order. The appellate court declined to accept the appeal at this time. A bifurcated trial began on September 27, 2017 in Allegheny County, Pennsylvania. Prior to and during trial, two plaintiffs were dismissed, resulting in four plaintiffs remaining for trial. After approximately two weeks of trial, the jury found that the Company's siren product was not defective or unreasonably dangerous and rendered a verdict in favor of the Company. A second trial involving Pittsburgh firefighters began during January 2018. At the outset of this trial, plaintiffs' attorneys requested that the Company consider settlement of various cases. This trial was continued to allow the parties to further discuss possible settlement.

During March 2018, the parties agreed in principle on a framework to resolve hearing loss claims and cases in all jurisdictions except in Cook County and excluding one case involving one firefighter in New York. The firefighters excluded from this settlement framework are represented by different attorneys. Pursuant to this settlement framework, the Company would pay \$700 to each firefighter who has filed a lawsuit and is eligible to be part of the settlement. The Company would pay \$300 to each firefighter who has not yet filed a case and is eligible to be part of the settlement. To be eligible for settlement, among other things, firefighters must provide proof that they have high frequency noise-induced hearing loss. There are approximately 3,700 firefighters whose claims may be considered as part of this settlement, including approximately 1,250 firefighters who have filed lawsuits. The parties are in the process of determining how many of these firefighters will be eligible to participate in the settlement. This framework will require plaintiffs' attorneys to withdraw from representing firefighters who elect not to participate in this settlement. As of March 31, 2018, the Company has recognized an estimated liability for the potential settlement amount. While it is reasonably possible that the ultimate resolution of this matter may result in a loss in excess of the amount accrued, the incremental loss is not expected to be material.

During March 2014, an action also was brought in the Court of Common Pleas of Erie County, Pennsylvania on behalf of 61 firefighters. This case likewise involves various defendants in addition to the Company. After the Company filed pretrial motions, 33 Erie County firefighter plaintiffs voluntarily dismissed their claims. During August 2017, five cases involving 70 firefighter plaintiffs were filed in Lackawanna County, Pennsylvania. These cases involve firefighter plaintiffs who originally filed in Cook County and were dismissed pursuant to the Company's forum nonconveniens motion. As of March 31, 2018 a total of 263 firefighters are involved in cases filed in Allegheny and Lackawanna counties in Pennsylvania.

On September 17, 2014, 20 lawsuits, involving a total of 193 Buffalo Fire Department firefighters, were filed in the Supreme Court of the State of New York, Erie County. All of the cases filed in Erie County, New York have been removed to federal court in the Western District of New York. Plaintiffs have filed a motion to consolidate and bifurcate these cases, similar to the motion filed in the Pittsburgh hearing loss cases, as described above. The Company has filed an opposition to the motion. During February 2015, a lawsuit involving one New York City firefighter plaintiff was filed in the Supreme Court of the State of New York, New York County. The plaintiff named the Company as well as several other parties as defendants. That case subsequently was transferred to federal court in the Northern District of New York and thereafter dismissed. During April 2015 through January 2016, 29 new cases involving a total of 235 firefighters were filed in various counties in the New York City area. During December 2016 through October 2017 additional cases were filed in these jurisdictions. On February 5, 2018, the Company was served with a complaint in an additional case filed in Kings County, New York. This case involves one plaintiff. As of March 31, 2018, a total of 536 firefighters are involved in cases filed in the state of New York.

During November 2015, the Company was served with a complaint filed in Union County, New Jersey state court, involving 34 New Jersey firefighters. This case has been transferred to federal court in the District of New Jersey. During the period from January through May 2016, eight additional cases were filed in various New Jersey state courts. Most of the firefighters in these cases reside in New Jersey and work or worked at New Jersey fire departments. During December 2016, a case involving one New Jersey firefighter was filed in the United States District Court of New Jersey. As of December 31, 2017, a total of 89 firefighters are currently involved in cases filed in New Jersey. On May 2, 2017, plaintiffs filed a motion to consolidate and

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

bifurcate in the pending federal court case in New Jersey. This motion is similar to bifurcation motions filed by plaintiffs in Pittsburgh, Buffalo and Philadelphia. The Court has denied this motion as premature. Pursuant to a petition filed by both parties, all New Jersey state court cases have been consolidated for pretrial purposes.

During May through October 2016, nine cases were filed in Suffolk County, Massachusetts state court, naming the Company as a defendant. These cases involve 194 firefighters who lived and worked in the Boston area. During August 2017, plaintiffs filed additional cases in Suffolk County court. The Company has moved to transfer various cases filed in Suffolk county to other counties in Massachusetts where plaintiffs reside and work. As of March 31, 2018, a total of 218 firefighters are involved in cases filed in Massachusetts.

During August and September 2017, plaintiffs' attorneys filed additional hearing loss cases in Florida. The Company is the only named defendant. These cases have been filed in several different counties in Florida, including Tampa, Miami and Orlando municipalities. Plaintiffs have agreed to stipulate that they will not seek more than \$75,000 in damages in any individual plaintiff case. As of March 31, 2018, a total of 166 firefighters are involved in cases filed in Florida.

From 2007 through 2009, firefighters also brought hearing loss claims against the Company in New Jersey, Missouri, Maryland and Kings County, New York. All of those cases, however, were dismissed prior to trial, including four cases in the Supreme Court of Kings County, New York that were dismissed upon the Company's motion in 2008. On appeal, the New York appellate court affirmed the trial court's dismissal of these cases. Plaintiffs' attorneys have threatened to file additional lawsuits. The Company intends to vigorously defend all of these lawsuits, if filed.

The Company's ongoing negotiations with its insurer, CNA, over insurance coverage on these claims have resulted in reimbursements of a portion of the Company's defense costs. These reimbursements are recorded as a reduction of corporate operating expenses. For the three months ended March 31, 2018 and 2017, the Company recorded \$0.2 million and \$0.3 million of reimbursements from CNA related to legal costs, respectively.

NOTE 8 – EARNINGS PER SHARE

The Company computes earnings per share ("EPS") in accordance with ASC 260, *Earnings per Share*, which requires that non-vested restricted stock containing non-forfeitable dividend rights should be treated as participating securities pursuant to the two-class method. Under the two-class method, net income is reduced by the amount of dividends declared in the period for common stock and participating securities. The remaining undistributed earnings are then allocated to common stock and participating securities as if all of the net income for the period had been distributed. The amounts of distributed and undistributed earnings allocated to participating securities for the three months ended March 31, 2018 and 2017 were insignificant and did not materially impact the calculation of basic or diluted EPS.

Basic EPS is computed by dividing income or loss available to common stockholders by the weighted average number of shares of common stock and non-vested restricted stock awards outstanding for the period.

Diluted EPS is computed using the weighted average number of shares of common stock and non-vested restricted stock awards outstanding for the year plus the effect of dilutive potential common shares outstanding during the period. The dilutive effect of common stock equivalents is determined using the more dilutive of the two-class method or alternative methods. The Company uses the treasury stock method to determine the potentially dilutive impact of our employee stock options and restricted stock units, and the contingently issuable method for our performance-based restricted stock unit awards.

For the three months ended March 31, 2018, options to purchase 0.2 million shares, respectively, of the Company's common stock had an anti-dilutive effect on EPS, and accordingly, are excluded from the calculation of diluted EPS. For the three months ended March 31, 2017, options to purchase 1.0 million shares of the Company's common stock had an anti-dilutive effect on EPS, and accordingly, are excluded from the calculation of diluted EPS.

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

The following table reconciles Net income to basic and diluted EPS:

(in millions, except per share data)	Three Months Ended March 31,	
	2018	2017
Income from continuing operations	\$ 12.9	\$ 7.2
Gain from discontinued operations and disposal, net of tax	—	0.1
Net income	<u>\$ 12.9</u>	<u>\$ 7.3</u>
Weighted average shares outstanding – Basic	59.8	59.6
Dilutive effect of common stock equivalents	1.0	0.7
Weighted average shares outstanding – Diluted	<u>60.8</u>	<u>60.3</u>
Basic earnings per share:		
Earnings from continuing operations	\$ 0.22	\$ 0.12
Earnings from discontinued operations and disposal, net of tax	—	—
Net earnings per share	<u>\$ 0.22</u>	<u>\$ 0.12</u>
Diluted earnings per share:		
Earnings from continuing operations	\$ 0.21	\$ 0.12
Earnings from discontinued operations and disposal, net of tax	—	—
Net earnings per share	<u>\$ 0.21</u>	<u>\$ 0.12</u>

NOTE 9 – STOCKHOLDERS’ EQUITY

Dividends

On February 19, 2018, the Company’s Board of Directors (the “Board”) declared a quarterly cash dividend of \$0.07 per common share. The dividend totaled \$4.2 million and was distributed on March 19, 2018 to holders of record at the close of business on March 5, 2018. During the three months ended March 31, 2017, dividends of \$4.2 million were paid to stockholders.

On May 1, 2018, the Board declared a quarterly cash dividend of \$0.08 per common share payable on May 29, 2018 to holders of record at the close of business on May 15, 2018.

Accumulated Other Comprehensive Loss

The following tables summarize the changes in each component of Accumulated other comprehensive loss, net of tax:

(in millions) ^(a)	Actuarial Losses	Foreign Currency Translation	Unrealized Gain on Derivatives	Total
Balance at January 1, 2018	\$ (75.4)	\$ (2.5)	\$ 1.0	\$ (76.9)
Other comprehensive (loss) income before reclassifications	(0.7)	2.0	0.8	2.1
Amounts reclassified from accumulated other comprehensive loss	0.8	—	—	0.8
Net current-period other comprehensive income	0.1	2.0	0.8	2.9
Balance at March 31, 2018	<u>\$ (75.3)</u>	<u>\$ (0.5)</u>	<u>\$ 1.8</u>	<u>\$ (74.0)</u>

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

(in millions) ^(a)	Actuarial Losses	Foreign Currency Translation	Unrealized Gain on Derivatives	Total
Balance at January 1, 2017	\$ (79.0)	\$ (13.0)	\$ —	\$ (92.0)
Other comprehensive (loss) income before reclassifications	(0.3)	1.2	—	0.9
Amounts reclassified from accumulated other comprehensive loss	0.5	—	—	0.5
Net current-period other comprehensive income	0.2	1.2	—	1.4
Balance at March 31, 2017	\$ (78.8)	\$ (11.8)	\$ —	\$ (90.6)

(a) Amounts in parentheses indicate losses.

The following table summarizes the amounts reclassified from Accumulated other comprehensive loss, net of tax, in the three months ended March 31, 2018 and 2017 and the affected line item in the Condensed Consolidated Statements of Operations:

Details about Accumulated Other Comprehensive Loss Components	Amount Reclassified from Accumulated Other Comprehensive Loss		Affected Line Item in Condensed Consolidated Statements of Operations ^(a)
(in millions) ^(b)	2018	2017	
Amortization of actuarial losses of defined benefit pension plans	\$ (1.0)	\$ (0.8)	Other expense (income), net
Total before tax	(1.0)	(0.8)	
Income tax benefit	0.2	0.3	Income tax expense
Total reclassifications for the period, net of tax	\$ (0.8)	\$ (0.5)	

(a) Continuing operations only.

(b) Amounts in parentheses indicate losses.

NOTE 10 – SEGMENT INFORMATION

The Company has two operating segments, and the Company's reportable segments are consistent with those operating segments. Business units are organized under each segment because they share certain characteristics, such as technology, marketing, distribution and product application, which create long-term synergies. On June 2, 2017, the Company completed the acquisition of all of the shares of capital stock of GenNx/TBEI Intermediate Co. (collectively with its subsidiaries, "TBEI"). The Company expects that the acquisition will enable it to strengthen the Environmental Solutions Group's market position as a specialty vehicle manufacturer in maintenance and infrastructure end-markets, leveraging its expertise in building chassis-based vehicles. The Company has presented the financial statements of TBEI within the Environmental Solutions Group since the closing date and is in the process of determining the impact, if any, that the TBEI acquisition may have on its reportable segments.

The principal activities of the Company's operating segments are as follows:

Environmental Solutions — Our Environmental Solutions Group is a leading manufacturer and supplier of a full range of street sweeper vehicles, sewer cleaner and vacuum loader trucks, hydro-excavation trucks, high-performance waterblasting equipment, dump truck bodies and trailers. The Group manufactures vehicles and equipment in the U.S. and Canada that are sold under the Elgin[®], Vactor[®], Guzzler[®], Westech[™], Jetstream[®], Ox Bodies[®], Crysteel[®], J-Craft[®], Duraclass[®], Rugby[®] and Travis[®] brand names. Product offerings also include certain products manufactured by other companies, such as refuse and recycling collection vehicles, camera systems, ice resurfacing equipment and snow-removal equipment. Products are sold to both municipal and industrial customers either through a dealer network or direct sales to service customers generally depending on the type and geographic location of the customer. In addition to vehicle and equipment sales, the Group also engages in the sale of parts, service and repair, equipment rentals and training as part of a complete offering to its current and potential customers through its service centers located across North America.

Safety and Security Systems — Our Safety and Security Systems Group is a leading manufacturer and supplier of comprehensive systems and products that law enforcement, fire rescue, emergency medical services, campuses, military facilities and industrial sites use to protect people and property. Offerings include systems for campus and community alerting, emergency vehicles, first responder interoperable communications and industrial communications, as well as command and municipal networked security. Specific products include vehicle lightbars and sirens, public warning sirens, general alarm

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

systems, public address systems and public safety software. Products are sold under the Federal Signal™, Federal Signal VAMA® and Victor® brand names. The Group operates manufacturing facilities in the U.S., Europe and South Africa.

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

Net sales by operating segment reflect sales of products and services to external customers, as reported in the Company's Consolidated Statements of Operations. Intersegment sales are insignificant. The Company evaluates performance based on operating income of the respective segment. Operating income includes all revenues, costs and expenses directly related to the segment involved. In determining operating segment income, neither corporate nor interest expenses are included. As described in Note 2 – Revenue Recognition, the Company's revenue recognition accounting policy has been updated to reflect the adoption of Topic 606 on January 1, 2018. The accounting policies of each operating segment are otherwise the same as those described in Note 1 – Summary of Significant Accounting Policies in the Company's Annual Report on Form 10-K for the year ended December 31, 2017. The results for the interim periods are not necessarily indicative of results for a full year.

The following tables summarize the Company's continuing operations by segment, including Net sales, Operating income (loss), and Total assets:

(in millions)	Three Months Ended March 31,	
	2018	2017
Net sales:		
Environmental Solutions	\$ 196.6	\$ 127.8
Safety and Security Systems	53.1	50.0
Total net sales	<u>\$ 249.7</u>	<u>\$ 177.8</u>
Operating income (loss):		
Environmental Solutions	\$ 20.6	\$ 10.3
Safety and Security Systems	6.1	6.4
Corporate and eliminations	(7.1)	(5.3)
Total operating income	<u>19.6</u>	<u>11.4</u>
Interest expense	2.5	0.6
Other expense (income), net	0.1	(0.2)
Income before income taxes	<u>\$ 17.0</u>	<u>\$ 11.0</u>
(in millions)	As of March 31, 2018	As of December 31, 2017
Total assets:		
Environmental Solutions	\$ 768.2	\$ 746.4
Safety and Security Systems	210.5	211.8
Corporate and eliminations	28.9	33.6
Total assets of continuing operations	<u>1,007.6</u>	<u>991.8</u>
Total assets of discontinued operations	0.5	0.5
Total assets	<u>\$ 1,008.1</u>	<u>\$ 992.3</u>

NOTE 11 – FAIR VALUE MEASUREMENTS

The Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy maximizes the use of observable inputs and minimizes the use of unobservable inputs. Observable inputs are developed based on market data obtained from independent sources, while unobservable inputs reflect the Company's assumptions about valuation based on the best information available in the circumstances. The three levels of inputs are classified as follows:

- Level 1 — quoted prices in active markets for identical assets or liabilities;
- Level 2 — observable inputs, other than quoted prices included in Level 1, such as quoted prices for markets that are not active, or other inputs that are observable or can be corroborated by observable market data; and

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

- Level 3 — unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

In determining fair value, the Company uses various valuation approaches within the fair value measurement framework. The valuation methodologies used for the Company's assets and liabilities measured at fair value and their classification in the valuation hierarchy are summarized below:

Cash Equivalents

Cash equivalents primarily consist of time-based deposits and interest-bearing instruments with maturities of three months or less. The Company classified cash equivalents as Level 1 due to the short-term nature of these instruments and measured the fair value based on quoted prices in active markets for identical assets.

Interest Rate Swap

As described in Note 4 – Debt, the Company entered into an interest rate swap as a means of fixing the floating interest rate component on a portion of its floating-rate debt. The Company classified the interest rate swap as Level 2 due to the use of a discounted cash flow model based on the terms of the contract and the interest rate curve (Level 2 inputs) to calculate the fair value of the swap.

Contingent Consideration

The Company has a contingent obligation to transfer cash to the former owners of JJE if specified financial results are met over future reporting periods (i.e., an earn-out). Liabilities for contingent consideration are measured at fair value each reporting period, with the acquisition-date fair value included as part of the consideration transferred. Subsequent changes in fair value are recorded as a component of Acquisition and integration-related expenses on the Condensed Consolidated Statements of Operations.

The Company uses an income approach to value the contingent consideration obligation based on future financial performance, which is determined based on the present value of expected future cash flows. Due to the lack of relevant observable market data over fair value inputs, the Company has classified the contingent consideration liability within Level 3 of the fair value hierarchy outlined in ASC 820, *Fair Value Measurements*. Increases in the expected payout under a contingent consideration arrangement contribute to increases in the fair value of the related liability. Conversely, decreases in the expected payout under a contingent consideration arrangement contribute to decreases in the fair value of the related liability. Changes in assumptions could have an impact on the fair value of the contingent consideration, which has a maximum payout of C\$10.0 million (approximately \$7.8 million).

The following table summarizes the Company's assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2018:

(in millions)	Fair Value Measurement at Reporting Date Using			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	\$ 4.6	\$ —	\$ —	\$ 4.6
Interest rate swap	—	2.6	—	2.6
Liabilities:				
Contingent consideration	—	—	6.4	6.4

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (CONTINUED)
(Unaudited)

The following table provides a roll-forward of the fair value of recurring Level 3 fair value measurements in the three months ended March 31, 2018 and 2017:

(in millions)	2018	2017
Contingent consideration liability, at January 1	\$ 6.3	\$ 5.1
Foreign currency translation	(0.1)	0.1
Total losses included in earnings ^(a)	0.2	0.2
Contingent consideration liability, at March 31	<u>\$ 6.4</u>	<u>\$ 5.4</u>

(a) Changes in the fair value of contingent consideration liabilities are included as a component of Acquisition and integration-related expenses within the Condensed Consolidated Statements of Operations.

Item 2. 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 should be read together with, the condensed consolidated financial statements and the accompanying notes contained in this Form 10-Q, as well as the Company's Annual Report on Form 10-K for the year ended December 31, 2017. Information in MD&A is intended to assist the reader in obtaining an understanding of (i) the condensed consolidated financial statements, (ii) the Company's business segments and how the results of those segments impact the Company's results of operations and financial condition as a whole and (iii) how certain accounting principles affect the Company's condensed consolidated financial statements. The Company's results for interim periods are not necessarily indicative of annual operating results.

Executive Summary

The Company is a leading global manufacturer and supplier of (i) vehicles and equipment for maintenance and infrastructure end-markets, including sewer cleaners, vacuum trucks, street sweepers, dump truck bodies and trailers and (ii) safety, security and communication equipment, such as lights, sirens and warning systems. Following the acquisition of JJE in 2016, the Company also distributes and re-sells products manufactured by other companies, which include refuse and recycling collection vehicles, camera systems, ice resurfacing equipment and snow-removal equipment. In addition, we sell parts and provide service, repair, equipment rentals and training as part of a comprehensive offering to our customer base. We operate 14 manufacturing facilities in five countries around the world and provide products and integrated solutions to municipal, governmental, industrial and commercial customers in all regions of the world.

As described in Note 10 – Segment Information to the accompanying condensed consolidated financial statements, the Company's business units are organized and managed in two operating segments: the Environmental Solutions Group and the Safety and Security Systems Group.

Net sales increased by \$71.9 million, or 40%, in the three months ended March 31, 2018 as compared to the prior-year quarter. Our Environmental Solutions Group reported a net sales increase of \$68.8 million, or 54%, largely due to the addition of \$51.3 million of net sales from TBEI, which was acquired in the second quarter of 2017, and an increase in shipments of sewer cleaners and vacuum trucks in the U.S. Within our Safety and Security Systems Group, net sales increased by \$3.1 million, or 6%, primarily due to higher global sales of public safety products and favorable foreign currency translation effects.

Operating income increased by \$8.2 million, or 72%, to \$19.6 million in the three months ended March 31, 2018 as compared to the prior-year quarter, primarily driven by a \$10.3 million increase within our Environmental Solutions Group associated with increased sales volumes and a \$4.8 million operating income contribution from TBEI. TBEI's operating income contribution in the first quarter included the effects of amortization expense on intangible assets acquired, which contributed to an increase in the Environmental Solutions Group's depreciation and amortization expense of \$3.1 million. Operating income in the three months ended March 31, 2018 within our Safety and Security Systems Group decreased by \$0.3 million, while corporate expenses increased by \$1.8 million. Consolidated operating margin for the three months ended March 31, 2018 was 7.8%, up from 6.4% in the prior-year quarter.

Income before income taxes increased by \$6.0 million, or 55%, to \$17.0 million for the three months ended March 31, 2018 as compared to the prior-year quarter. The increase resulted from the higher operating income, partially offset by a \$1.9 million increase in interest expense, associated with higher average debt levels following the acquisition of TBEI, and a \$0.3 million decrease in other income.

Net income from continuing operations for the three months ended March 31, 2018 was impacted by a \$0.3 million increase in income tax expense, largely due to higher pre-tax income levels, partially offset by the lower effective tax rate following the enactment of the 2017 Tax Act. Primarily due to the recognition of a nominal discrete benefit from the release of tax reserves, our effective tax rate for the three months ended March 31, 2018 was 24.1%, slightly lower than the rate that we expect for the full year, and down from 34.5% in the prior-year quarter. The lower rate in comparison to the prior year reflects the reduction in the U.S. federal corporate tax rate.

Total orders for the three months ended March 31, 2018 were \$329.7 million, an increase of \$115.1 million, or 54%, compared to the prior-year quarter. Our Environmental Solutions Group reported total orders of \$274.4 million in the first quarter of 2018, an increase of \$107.8 million, or 65%, compared to the prior-year quarter, primarily driven by the acquisition of TBEI, which contributed \$63.6 million of orders, and organic order growth of approximately \$44.2 million, or 27%, primarily represented by improved orders for vacuum trucks and sewer cleaners. Orders in the three months ended March 31, 2018 within our Safety and Security Systems Group were up \$7.3 million, primarily due to improved domestic and international orders for public safety products and domestic orders for warning systems.

Our consolidated backlog at March 31, 2018 was \$336.7 million, up \$162.7 million, compared to \$174.0 million at March 31, 2017, largely as a result of the increase in orders for vacuum trucks and sewer cleaners received in the three months ended March 31, 2018, as well as the addition of orders acquired in the TBEI acquisition.

Results of Operations

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

(\$ in millions, except per share data)	Three Months Ended March 31,		
	2018	2017	Change
Net sales	\$ 249.7	\$ 177.8	\$ 71.9
Cost of sales	187.8	134.2	53.6
Gross profit	61.9	43.6	18.3
Selling, engineering, general and administrative expenses	41.8	31.4	10.4
Acquisition and integration-related expenses	0.5	0.5	—
Restructuring	—	0.3	(0.3)
Operating income	19.6	11.4	8.2
Interest expense	2.5	0.6	1.9
Other expense (income), net	0.1	(0.2)	0.3
Income before income taxes	17.0	11.0	6.0
Income tax expense	4.1	3.8	0.3
Income from continuing operations	12.9	7.2	5.7
Gain from discontinued operations and disposal, net of tax	—	0.1	(0.1)
Net income	\$ 12.9	\$ 7.3	\$ 5.6
Operating data:			
Operating margin	7.8%	6.4%	1.4%
Diluted earnings per share – Continuing operations	\$ 0.21	\$ 0.12	\$ 0.09
Total orders	329.7	214.6	115.1
Backlog	336.7	174.0	162.7
Depreciation and amortization	8.6	5.7	2.9

Net sales

Net sales increased by \$71.9 million, or 40%, in the three months ended March 31, 2018 as compared to the prior-year quarter. Our Environmental Solutions Group reported a net sales increase of \$68.8 million, or 54%, largely due to the addition of \$51.3 million of net sales from TBEI, which was acquired in the second quarter of 2017, and an increase in shipments of sewer cleaners and vacuum trucks in the U.S. Within our Safety and Security Systems Group, net sales increased by \$3.1 million, or 6%, primarily due to higher global sales of public safety products and favorable foreign currency translation effects.

Cost of sales

Cost of sales increased by \$53.6 million, or 40%, for the three months ended March 31, 2018 compared to the prior-year quarter, largely due to an increase of \$50.3 million, or 49%, within the Environmental Solutions Group, primarily driven by increased sales volumes, additional cost of sales from the TBEI acquisition and a \$1.0 million increase in depreciation expense. Within the Safety and Security Systems Group, cost of sales increased by \$3.3 million, or 11%, driven by higher sales volumes, as well as unfavorable foreign currency translation and sales mix effects.

Gross profit

Gross profit increased by \$18.3 million, or 42%, for the three months ended March 31, 2018, compared to the prior-year quarter, primarily due to a \$18.5 million improvement within the Environmental Solutions Group, partially offset by a \$0.2 million reduction within the Safety and Security Systems Group. Gross margin for the three months ended March 31, 2018 improved to 24.8%, from 24.5% in the prior-year quarter.

Selling, engineering, general and administrative expenses

SEG&A expenses for the three months ended March 31, 2018 increased by \$10.4 million, or 33%, compared to the prior-year quarter, primarily due to an \$8.1 million increase within the Environmental Solutions Group, largely the result of the addition of expenses associated with the TBEI acquisition, including an increase in amortization expense of \$2.0 million. Corporate SEG&A expenses increased by \$1.9 million, primarily driven by a \$0.6 million increase in expenses associated with hearing loss litigation and increased employee benefit-related costs, partially offset by the absence of \$0.7 million of executive severance costs. SEG&A expenses within the Safety and Security Systems Group increased by \$0.4 million, primarily due to increased expenses associated with new product development and other growth initiatives. As a percentage of net sales, SEG&A expenses decreased from 17.7% in the prior-year quarter, to 16.7% in the current-year quarter.

Operating income

Operating income increased by \$8.2 million, or 72%, to \$19.6 million in the three months ended March 31, 2018 as compared to the prior-year quarter, primarily driven by a \$10.3 million increase within our Environmental Solutions Group associated with increased sales volumes and a \$4.8 million operating income contribution from TBEI. TBEI's operating income contribution in the first quarter included the effects of amortization expense on intangible assets acquired, which contributed to an increase in the Environmental Solutions Group's depreciation and amortization expense of \$3.1 million. Operating income in the three months ended March 31, 2018 within our Safety and Security Systems Group decreased by \$0.3 million, while corporate expenses increased by \$1.8 million. Consolidated operating margin for the three months ended March 31, 2018 was 7.8%, up from 6.4% in the prior-year quarter.

Interest expense

Interest expense for the three months ended March 31, 2018 increased by \$1.9 million compared to the corresponding period of the prior year, largely due to higher average debt levels following the acquisition of TBEI.

Other expense (income), net

For the three months ended March 31, 2018, other expense totaled \$0.1 million and was primarily related to pension expense, whereas in the prior-year period, other income of \$0.2 million was realized, representing foreign currency transaction gains partially offset by \$0.1 million of pension expense.

Income tax expense

The Company recognized income tax expense of \$4.1 million and \$3.8 million for the three months ended March 31, 2018 and 2017, respectively. The increase in tax expense in the current-year quarter is largely due to higher pre-tax income levels, offset by the impact of the lower U.S. federal corporate tax rate following the enactment of the 2017 Tax Act. Primarily due to the recognition of a nominal discrete benefit from the release of tax reserves, the effective tax rate for the three months ended March 31, 2018 was 24.1%, slightly lower than the rate that we expect for the full year, and down from 34.5% in the prior-year quarter. The lower rate in comparison to the prior year reflects the reduction in the U.S. federal corporate tax rate.

Income from continuing operations

Income from continuing operations for the three months ended March 31, 2018 increased by \$5.7 million compared to the prior-year period, largely due to the aforementioned increases in operating income, partially offset by the increase in interest expense, the decrease in other income and the \$0.3 million increase in income tax expense.

Orders

Total orders for the three months ended March 31, 2018 were \$329.7 million, an increase of \$115.1 million, or 54%, compared to the prior-year quarter. Our Environmental Solutions Group reported total orders of \$274.4 million in the first quarter of 2018, an increase of \$107.8 million, or 65%, compared to the prior-year quarter, primarily driven by the acquisition of TBEI, which contributed \$63.6 million of orders, and organic order growth of approximately \$44.2 million, or 27%, primarily represented by improved orders for vacuum trucks and sewer cleaners. Orders in the three months ended March 31, 2018 within our Safety and Security Systems Group were up \$7.3 million, primarily due to improved domestic and international orders for public safety products and domestic orders for warning systems.

U.S. municipal and governmental orders increased by \$29.7 million, or 38%, primarily due to a \$27.9 million increase within the Environmental Solutions Group, associated with increased sewer cleaner orders and the effects of the TBEI acquisition, which added \$10.6 million of municipal and governmental orders. Within the Safety and Security Systems Group, municipal orders increased by \$1.8 million, largely driven by higher orders for public safety products.

U.S. industrial orders increased by \$82.2 million, or 114%, primarily due to an \$81.0 million increase within the Environmental Solutions Group, largely driven by the acquisition of TBEI, which added \$52.4 million of industrial orders, and increases in orders for vacuum trucks, waterblasting equipment and sewer cleaners of \$24.4 million, \$2.1 million and \$1.8 million, respectively. The Safety and Security Systems Group reported a \$1.2 million increase in industrial orders.

Non-U.S. orders increased by \$3.2 million, or 5%. Within the Environmental Solutions Group, non-U.S. orders decreased by \$1.1 million, primarily attributable to reductions in Canadian orders for refuse trucks and sewer cleaners, which were primarily timing related. Within the Safety and Security Systems Group, non-U.S. orders increased by \$4.3 million, largely driven by an increase in orders for public safety products from European markets, as well as favorable foreign currency effects.

Backlog

Backlog was \$336.7 million at March 31, 2018 compared to \$174.0 million at March 31, 2017. The increase of \$162.7 million, or 94%, was primarily due to an \$152.5 million increase in backlog within the Environmental Solutions Group, largely due to the TBEI acquisition, whose backlog at March 31, 2018 was \$54.8 million, and the increase in orders for vacuum trucks and sewer cleaners received in the three months ended March 31, 2018. Backlog within the Safety and Security Systems Group was also up \$10.2 million, primarily due to an increase in domestic and international orders for public safety products.

Environmental Solutions

The following table summarizes the Environmental Solutions Group's operating results as of and for the three months ended March 31, 2018 and 2017:

(\$ in millions)	Three Months Ended March 31,		
	2018	2017	Change
Net sales	\$ 196.6	\$ 127.8	\$ 68.8
Operating income	20.6	10.3	10.3
Operating data:			
Operating margin	10.5%	8.1%	2.4%
Total orders	\$ 274.4	\$ 166.6	\$ 107.8
Backlog	307.9	155.4	152.5
Depreciation and amortization	7.7	4.6	3.1

Total orders increased by \$107.8 million, or 65%, for the three months ended March 31, 2018. U.S. orders increased by \$108.9 million, or 91%, largely due to improvements in orders for vacuum trucks, sewer cleaners, waterblasters and street sweepers of \$24.4 million, \$15.4 million, \$2.1 million and \$1.5 million, respectively, as well as the prior-year acquisition of TBEI which contributed \$63.0 million of orders. Non-U.S. orders decreased by \$1.1 million, or 2%, primarily attributable to reductions in Canadian orders for refuse trucks and sewer cleaners, which were primarily timing related.

Net sales increased by \$68.8 million, or 54%, for the three months ended March 31, 2018. U.S. sales increased by \$64.8 million, primarily due to the acquisition of TBEI which contributed \$50.7 million of sales in the current-year quarter, as well as an increase in sales of sewer cleaners and vacuum trucks of \$9.2 million and \$6.9 million, respectively. Non-U.S. sales increased by \$4.0 million, primarily as a result of increases in sales of vacuum trucks and waterblasters of \$2.8 million and \$1.9 million, respectively. In addition, parts sales and rental income increased by \$2.7 million and \$1.0 million, respectively. These

improvements were partially offset by decreases in sales of refuse vehicles and sewer cleaners of \$3.0 million and \$2.7 million, respectively.

Cost of sales increased by \$50.3 million, or 49%, for the three months ended March 31, 2018, primarily attributable to higher sales volumes, additional cost of sales from the TBEI acquisition and a \$1.0 million increase in depreciation expense. Gross margin increased to 21.8% from 19.1% in the prior-year quarter, due to improved operating leverage and a favorable sales mix, with higher sales into industrial markets.

SEG&A expenses increased by \$8.1 million for the three months ended March 31, 2018, largely due to the addition of expenses associated with the TBEI acquisition, including an increase in amortization expense of \$2.0 million.

Operating income for the three months ended March 31, 2018 increased by \$10.3 million, largely due to a \$18.5 million increase in gross profit, partially offset by the \$8.1 million increase in SEG&A expenses and a \$0.1 million increase in acquisition-related expenses.

Backlog was \$307.9 million at March 31, 2018, up 98.1% compared to \$155.4 million at March 31, 2017. The increase is primarily due to the contribution of \$54.8 million of backlog from TBEI, as well as the effects of improved demand for sewer cleaners, vacuum trucks, and street sweepers in the U.S.

Safety and Security Systems

The following table summarizes the Safety and Security Systems Group's operating results as of and for the three months ended March 31, 2018 and 2017:

(\$ in millions)	Three Months Ended March 31,		
	2018	2017	Change
Net sales	\$ 53.1	\$ 50.0	\$ 3.1
Operating income	6.1	6.4	(0.3)
Operating data:			
Operating margin	11.5%	12.8%	(1.3)%
Total orders	\$ 55.3	\$ 48.0	\$ 7.3
Backlog	28.8	18.6	10.2
Depreciation and amortization	0.9	1.0	(0.1)

Total orders increased by \$7.3 million or 15%, for the three months ended March 31, 2018. In the aggregate, U.S. orders increased by \$3.0 million compared to the prior-year quarter, primarily due to increases in orders for public safety products and warning systems of \$2.7 million and \$0.7 million, respectively. Non-U.S. orders increased by \$4.3 million, largely driven by an increase in orders for public safety products from European markets and a \$1.9 million favorable foreign currency translation effect.

Net sales increased by \$3.1 million, or 6%, for the three months ended March 31, 2018. U.S. sales increased by \$1.8 million, primarily due to improvements in sales of public safety products and warning systems, which were each up \$1.5 million compared to the prior-year quarter. These improvements were partially offset by a \$1.0 million reduction in sales of industrial signaling products. Non-U.S. sales increased by \$1.3 million, primarily due to a \$1.4 million favorable foreign currency translation impact.

Cost of sales increased by \$3.3 million, or 11%, for the three months ended March 31, 2018, largely due to higher sales volumes, unfavorable sales mix and an unfavorable foreign currency translation impact of \$1.1 million. Gross margin for the three months ended March 31, 2018 was 35.8%, compared to 38.4% in the first quarter of last year, driven by unfavorable mix in comparison to the prior-year quarter.

SEG&A expenses for the three months ended March 31, 2018 increased by \$0.4 million, or 3%, primarily due to increased expenses associated with new product development and other growth initiatives.

Operating income decreased by \$0.3 million for the three months ended March 31, 2018. The decrease was primarily attributable to the \$0.2 million reduction in gross profit and the \$0.4 million increase in SEG&A expenses, partially offset by a \$0.3 million reduction in restructuring charges.

Backlog was \$28.8 million at March 31, 2018, up from \$18.6 million at March 31, 2017, primarily due to increased orders for public safety products in both international and domestic markets.

Corporate Expenses

Corporate operating expenses for the three months ended March 31, 2018 were \$7.1 million, compared to \$5.3 million in the prior-year quarter. The increase was primarily driven by a \$0.6 million increase in expenses associated with hearing loss litigation and increased employee benefit-related costs, partially offset by the absence of \$0.7 million of executive severance costs.

Seasonality of Company's Business

Certain of the Company's businesses are susceptible to the influences of seasonal factors, including buying patterns, delivery patterns and productivity influences from holiday periods and weather. In general, the Company tends to have lower sales in the first calendar quarter of each year compared to other quarters as a result of these factors.

Financial Condition, Liquidity and Capital Resources

The Company uses its cash flow from operations to fund growth and to make capital investments that sustain its operations, reduce costs, or both. Beyond these uses, remaining cash is used to pay down debt, repurchase shares, fund dividend payments and make pension contributions. The Company is also committed to pursuing additional strategic acquisitions of businesses. In the absence of significant unanticipated cash demands, we believe that the Company's existing cash balances, cash flow from operations and borrowings available under the Amended 2016 Credit Agreement, will provide funds sufficient for these purposes. The net cash flows associated with the Company's rental equipment transactions are included in cash flow from operating activities.

The Company's cash and cash equivalents totaled \$35.4 million and \$37.5 million as of March 31, 2018 and December 31, 2017, respectively. As of March 31, 2018, \$19.3 million of cash and cash equivalents was held by foreign subsidiaries. Cash and cash equivalents held by subsidiaries outside the U.S. typically are held 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. However, in the event that these funds were needed to fund U.S. operations or to satisfy U.S. obligations, they generally could be repatriated. The repatriation of these funds may then cause us to incur additional U.S. income tax expense, which would be dependent on income tax laws and other circumstances at the time any such amounts were repatriated. The 2017 Tax Act provides a one-time "transition tax" on untaxed post-1986 accumulated earnings and profits ("E&P") of a company's controlled foreign corporations ("CFC") determined as of November 2, 2017 or December 31, 2017 (whichever date on which there is more deferred E&P). The Company's accumulated undistributed earnings of foreign subsidiaries aggregated to an overall E&P deficit. Therefore, the Company estimates that no transition tax will be payable under the provisions of the 2017 Tax Act. As with other tax calculations surrounding the 2017 Tax Act, the Company's estimate of its transition tax liability as of March 31, 2018 is provisional due to complexities inherent in the computations that it expects to be addressed in whole, or in part, by regulations issued during 2018. The Company will continue to evaluate its U.S. and foreign cash needs and, as circumstances change, may change its assertion related to all or a portion of its undistributed foreign earnings.

Net cash of \$10.3 million was generated by continuing operating activities in the three months ended March 31, 2018, down from \$13.7 million in the prior-year period, largely due to increased incentive compensation payments in comparison to the prior-year quarter.

Net cash of \$0.1 million was provided by continuing investing activities in the three months ended March 31, 2018, compared with a net cash usage of \$1.1 million in the prior-year period. During the three months ended March 31, 2018, the Company received \$3.0 million as part of the finalization of certain post-closing adjustments in connection with the acquisition of TBEL. Capital expenditures in the three months ended March 31, 2018 and 2017 were \$3.0 million and \$1.1 million, respectively.

Net cash of \$12.7 million and \$5.6 million and was used for continuing financing activities in the three months ended March 31, 2018 and 2017, respectively. In the three months ended March 31, 2018, the Company paid down \$8.6 million of debt and funded cash dividends of \$4.2 million. In the three months ended March 31, 2017, the Company funded cash dividends of \$4.2 million and redeemed \$1.9 million of stock in order to remit funds to tax authorities to satisfy employees' tax withholdings following the vesting of stock-based compensation.

The Company is subject to certain leverage ratio and interest coverage ratio financial covenants under the Amended 2016 Credit Agreement that are to be measured at each fiscal quarter-end. The Company was in compliance with all such covenants as of March 31, 2018.

As of March 31, 2018, there was \$266.5 million of cash drawn and \$12.7 million of undrawn letters of credit under the Amended 2016 Credit Agreement, with \$120.8 million of net availability for borrowings. As of March 31, 2018, there were no borrowings against the Company's non-U.S. lines of credit which provide for borrowings of up to \$0.2 million.

The Company anticipates that capital expenditures for 2018 will in the range of \$15 million to \$20 million.

Contractual Obligations and Off-Balance Sheet Arrangements

During the three months ended March 31, 2018, there have been no material changes in the Company's contractual obligations and off-balance sheet arrangements as described in Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

Item 3. *Quantitative and Qualitative Disclosures about Market Risk.*

See Item 7A, *Quantitative and Qualitative Disclosures about Market Risk*, of the Company's Annual Report on Form 10-K for the year ended December 31, 2017. During the three months ended March 31, 2018, there have been no significant changes in our exposure to market risk.

Item 4. *Controls and Procedures.*

As required by Rule 13a-15 under the Exchange Act, the Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Exchange Act) as of March 31, 2018. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of March 31, 2018.

As a matter of practice, the Company's management continues to review and document internal control and procedures for financial reporting. From time to time, the Company may make changes aimed at enhancing the effectiveness of the controls and ensuring that the systems evolve with the business. There were no changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting during the three months ended March 31, 2018.

PART II. OTHER INFORMATION

Item 1. *Legal Proceedings.*

The information set forth under the heading “Legal Proceedings” in Note 7 – Commitments and Contingencies to the accompanying condensed consolidated financial statements as included in Part I of this Form 10-Q is incorporated herein by reference.

Item 1A. *Risk Factors.*

There have been no material changes in the Company’s risk factors as described in Item 1A, *Risk Factors*, of the Company’s Annual Report on Form 10-K for the year ended December 31, 2017.

Item 2. *Unregistered Sales of Equity Securities and Use of Proceeds.*

Restrictions upon the Payment of Dividends

Under the terms of the Company’s Amended 2016 Credit Agreement, restricted payments, including dividends and stock repurchases, shall be permitted if (i) the Company’s leverage ratio is less than or equal to 2.50, (ii) the Company is in compliance with all other financial covenants and (iii) there are no existing defaults under the Amended 2016 Credit Agreement. If the leverage ratio is more than 2.50, the Company is still permitted to fund (i) up to \$30.0 million of dividend payments, (ii) stock repurchases sufficient to offset dilution created by the issuance of equity as compensation to its officers, directors, employees and consultants and (iii) an incremental \$30.0 million of other cash payments.

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

Purchases of Equity Securities

The following table provides a summary of the Company’s repurchase activity for its common stock during the three months ended March 31, 2018:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs ^(a)
January 2018 (1/1/18 – 2/3/18)	—	\$ —	—	\$ 31,395,802
February 2018 (2/4/18 – 3/3/18)	—	—	—	31,395,802
March 2018 (3/4/18 – 3/31/18)	—	—	—	31,395,802

(a) On November 4, 2014, the Board authorized a stock repurchase program of up to \$75.0 million of the Company’s common stock.

Item 3. *Defaults upon Senior Securities.*

None.

Item 4. *Mine Safety Disclosures.*

Not applicable.

Item 5. *Other Information.*

Other Events

On May 8, 2018, the Company issued a press release announcing its financial results for the three months ended March 31, 2018. The presentation slides for the first quarter 2018 earnings call were also posted on the Company’s website at that time. The full text of the first quarter financial results press release and earnings presentation are attached hereto as Exhibits 99.1 and 99.2, respectively, to this Form 10-Q.

Item 6. Exhibits.

- 3.1 [Restated Certificate of Incorporation of the Company. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed April 30, 2010.](#)
- 3.2 [Amended and Restated By-laws of the Company. Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed February 9, 2016.](#)
- 10.1* [Amended and Restated Non-Competition and Severance Agreement between the Crysteel Manufacturing, Inc. and Robert Fines dated September 30, 2015.](#)
- 10.2* [First Amendment to the Amended and Restated Non-Competition and Severance Agreement between Crysteel Manufacturing, Inc. and Robert Fines dated November 10, 2017.](#)
- 31.1 [CEO Certification under Section 302 of the Sarbanes-Oxley Act.](#)
- 31.2 [CFO Certification under Section 302 of the Sarbanes-Oxley Act.](#)
- 32.1 [CEO Certification of Periodic Report under Section 906 of the Sarbanes-Oxley Act.](#)
- 32.2 [CFO Certification of Periodic Report under Section 906 of the Sarbanes-Oxley Act.](#)
- 99.1 [First Quarter Financial Results Press Release, Dated May 8, 2018.](#)
- 99.2 [First Quarter Earnings Call Presentation Slides.](#)
- 101.INS XBRL Instance Document.
- 101.SCH XBRL Taxonomy Extension Schema Document.
- 101.CAL XBRL Taxonomy Calculation Linkbase Document.
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document.
- 101.LAB XBRL Taxonomy Label Linkbase Document.
- 101.PRE XBRL Taxonomy Presentation Linkbase Document.

* Management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(a)(3) of Form 10-K.

SIGNATURE

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

Federal Signal Corporation

Date: May 8, 2018

/s/ Ian A. Hudson

Ian A. Hudson

*Senior Vice President and Chief Financial Officer
(Principal Financial Officer)*

EXECUTION VERSION

**AMENDED AND RESTATED
NON-COMPETITION AND SEVERANCE AGREEMENT**

This Amended and Restated Non-Competition and Severance Agreement (this “*Agreement*”), dated September 30, 2015, (the “*Effective Date*”) is by and between Crysteel Manufacturing, Inc. (“*Crysteel*”) and Robert Fines (“*Executive*”), together, the “Parties” to the Agreement.

The Parties are party to that certain Non-Competition and Severance Agreement (the “*Original Non-Compete and Severance Agreement*”), dated April 7, 2015, by and between Crysteel and Executive, and the Parties desire to amend and restate the Original Non-Compete and Severance Agreement in its entirety and to enter into this Agreement, all on the terms and conditions set forth herein. In consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Certain Definitions. Certain words or phrases used herein with initial capital letters shall have the meanings set forth in paragraph 4 hereof or as otherwise defined within this Agreement.

2. Post-Employment Payments.

(a) At the end of Executive’s employment with the Company for any reason, Executive shall cease to have any rights to salary, equity awards, expense reimbursements or other benefits, except that Executive shall be entitled to (i) any base salary which has accrued but is unpaid, with respect to the fiscal year of the termination, a pro rata portion of any performance bonus which has accrued for such fiscal year (as of the date of termination) but is unpaid, any reimbursable expenses which have been incurred but are unpaid, and any unexpired vacation days which have accrued under Crysteel’s vacation policy but are unused, as of the termination date of the Executive’s employment with the Company, (ii) any rights under profits interest grants and other equity incentive grants or plan benefits which by their terms extend beyond termination of Executive’s employment (but only to the extent provided in any profits interest grants and other equity incentive grants theretofore granted to Executive or any other benefit plan in which Executive has participated as an employee of the Company), (iii) any benefits to which Executive is entitled under Part 6 of Subtitle B of Title I of the Employee Retirement Income Security Act of 1974, as amended, and (iv) any payments contemplated by paragraph 2(b).

(b) If the Company terminates Executive’s employment with the Company without Cause or Executive voluntarily terminates his employment with the Company with Good Reason at any time during the Entitlement Period, Crysteel shall (i) pay Executive his base salary in effect at the time of such termination for a period of twelve (12) months following such termination in accordance with the Company’s normal payroll practices and (ii) provide Executive with the opportunity to continue to participate in Crysteel’s health and dental plans for a period of twelve (12) months following such termination on the same basis and with the same costs as are applicable from time to time to other officers of Crysteel. Executive agrees that the period of coverage under such plan pursuant to this paragraph shall count against such plan’s obligation to provide continuation coverage pursuant to COBRA.

(c) It is expressly understood that the Company's payment obligations under paragraph 2(b) shall cease in the event Executive breaches any of his obligations under this Agreement. Executive shall not be required to mitigate the amount of any payment or benefit provided for in this Agreement by seeking other employment or otherwise. Executive shall not be eligible to participate in any other severance pay program or policy of the Company, except for the payments described in this Agreement. Notwithstanding anything herein to the contrary, the Company shall not be obligated to make any payment or provide any benefit under paragraph 2(b) hereof unless (i) Executive executes a release of all current or future claims, known or unknown, arising on or before the date of the release against the Company and each of its directors, officers, employees and affiliates in a reasonable and customary form approved by Crysteel and (ii) Executive does not revoke such release during any applicable revocation period. The Company will provide Executive with the form of release no later than seven (7) days following termination. If the Executive does not execute the release or if the Executive revokes the release, in each case, within the required period as specified within the release, then the payments under paragraph 2(b) shall be discontinued.

3. Non-Competition; Confidentiality; Non-Solicitation, Non-Disparagement

(a) Non-Competition. During Executive's employment with the Company and for the period of twelve (12) months following the termination of Executive's employment with the Company for any reason (whether by the Company or by the Executive), Executive will not:

(i) enter into or engage in any business which competes with the Company's Business within the Restricted Territory;

(ii) solicit customers, business, patronage or orders for, or sell, any products and services in competition with, or for any business, wherever located, that competes with the Company's Business within the Restricted Territory;

(iii) divert, entice or otherwise take away any customers, business, patronage or orders of the Company within the Restricted Territory, or attempt to do so; or

(iv) promote or assist, financially or otherwise, any person, firm, association, partnership corporation or other entity engaged in any business which competes with the Company's Business within the Restricted Territory.

(b) Indirect Competition. Executive will be in violation of paragraph 3(a) if Executive engages in any or all of the activities set forth therein directly as an individual on Executive's own account, or indirectly as a partner, joint venturer, employee, agent, salesperson, consultant, officer and/or director any firm, association, partnership, corporation or other entity, or as an owner of any entity in which Executive or Executive's spouse, child or parent owns, directly or indirectly, individually or in the aggregate, more than five percent (5%) of the outstanding stock or other ownership interest.

(c) Non-Solicitation. Executive will not directly or indirectly at any time solicit or induce or attempt to solicit or induce any employee(s), sales representative(s), agent(s) or consultant(s) of the Company to terminate their employment, representation or other association with the Company.

(d) Confidential Information and Trade Secrets.

(i) Executive will keep in strict confidence, and will not, directly or indirectly, at any time during or after Executive's employment with the Company, disclose, furnish, disseminate, make available or, except in the course of performing Executive's duties of employment, use any trade secrets or confidential business and technical information of the Company its customers or vendors, regardless of when or how Executive may have acquired such information. Such confidential information shall include, without limitation, the Company's design, manufacturing, sales and service methods and business techniques; training, service and business manuals, promotional materials, training courses and other training and instructional materials; engineering drawings and plans; supplier and source information; vendor and product information; customer and prospective customer lists, specifications and other customer and prospective customer information; and the Company's business plans, marketing strategies, market analysis and research and development plans and information. Executive specifically acknowledges that all such confidential information, whether reduced to writing, maintained on any form of electronic media or maintained in Executive's mind or memory and whether compiled by the Company and/or Executive, gives the Company an advantage over its competitors and derives independent economic value from not being readily known to or ascertainable by proper means by others who can obtain substantial economic value from its disclosure or use. Executive further acknowledges and agrees that any retention and use of such information by Executive during Executive's employment with the Company (except in the course of performing Executive's duties and obligations to the Company) or after the termination of Executive's employment shall constitute a misappropriation of the Company's trade secrets.

(ii) Executive agrees that upon termination of Executive's employment with the Company for any reason, Executive shall return to the Company, in good condition, all property of the Company, including without limitation, the originals and all copies of any materials which contain, reflect, summarize, describe, analyze or refer or relate to any items of information of this Agreement. In the event that it is determined by a court of competent jurisdiction that the Executive has failed to comply with this subparagraph, the Company will have the right to recover from Executive for all reasonable damages, costs, attorneys' fees and other expenses incurred in searching for, taking, removing and/or recovering such property.

(e) Non-Disparagement. The Company agrees not to make any statement, written or oral, or make any posting on a website, blog or by any other electronic means, that disparages or

criticizes Executive or that is intended to, or that does in fact, damage his professional or personal reputation. Executive agrees not to make any statement, written or oral, or make any posting on a website, blog or by any other electronic means, that disparages or criticizes the Company or any of its respective executive officers, directors, shareholders or affiliates, or the business of the Company, or that is intended to, or that does in fact, damage any of its business, professional or personal reputation. Nothing in this paragraph is intended to or will limit your rights under applicable law to assist in an investigation or proceeding by a governmental authority or to provide an authorized governmental authority with information concerning conduct that you reasonably believe to be unlawful. Nothing contained in this paragraph shall be construed as a limitation on the right of the Parties to enforce this Agreement.

(f) Communication of Contents of Agreement.

(i) During the Executive's employment with the Company and for the period of twelve (12) months following the termination of Executive's employment, Executive will communicate the contents of this paragraph 3 to any person, firm, association, partnership, corporation or other entity which Executive intends to be employed by, associated with, or represent and which is engaged in a business that is competitive to the Company's Business.

(ii) The Parties further agree that this Agreement and all matters relating to the existence, terms and contents of this Agreement, including any and all discussions leading to this Agreement ("Agreement-Related Information"), shall be and remain confidential and shall not be disclosed by the Parties or on their behalf in any manner, form or media without the prior written consent of the other Parties; *provided*, however, that (i) Executive may disclose Agreement-Related Information to members of his immediate family or as required under paragraph (f)(i) above, (ii) Crysteel may disclose Agreement-Related Information to its Boards of Directors and for any reasonable business purpose, and (iii) the Parties are permitted to disclose Agreement-Related Information to their attorneys, financial or tax advisors, to state and federal taxing authorities and other governmental authorities and to enforce this Agreement as required by law or legal process.

(g) Relief. Executive acknowledges and agrees that the remedy at law available to Crysteel for breach of any of Executive's obligations under this Agreement would be inadequate. Executive therefore agrees that, in addition to any other rights or remedies that the Company may have at law or in equity, temporary and permanent injunctive relief may be granted in any proceeding which may be brought to enforce this Agreement.

(h) Reasonableness. Executive acknowledges and agrees that the Executive's obligations under this paragraph 3 are reasonable in the context of the nature of the Company's Business and the competitive injuries likely to be sustained by the Company if Executive were to violate such obligations. Executive further acknowledges that this Agreement is made in consideration of, and is adequately supported by the obligations of Crysteel to perform its obligations under this Agreement and by other consideration, all of which Executive acknowledges constitute a real benefit to him and good, valuable and sufficient consideration for this Agreement.

4. Definitions.

(a) “**Cause**” means the termination by the Company of Executive’s employment with the Company as a result of (i) the commission by Executive of a felony or a fraud, (ii) conduct by Executive that brings the Company into substantial public disgrace or disrepute, (iii) gross negligence or gross misconduct by Executive with respect to the Company, (iv) repudiation by Executive of this Agreement or Executive’s abandonment of Executive’s employment with the Company, (v) Executive’s insubordination or failure to follow the directions of the Board of Directors of the Company or the individual to whom Executive reports, which is not cured within three (3) business days after written notice thereof to Executive, (vi) Executive’s violation of paragraph 3 of this Agreement, (vii) Executive’s breach of a material employment policy of the Company, which is not cured within three (3) business days after written notice thereof to Executive, or (viii) any other material breach by Executive of this Agreement or any other agreement with the Company which is not cured within thirty (30) days after written notice thereof to Executive.

(b) “**Company**” shall include Crysteel, Rugby Manufacturing Company (“**Rugby**”), Ox Bodies, Inc. (“**Ox Bodies**”), the Duraclass brand, Tishomingo Acquisition, LLC (“**Tishomingo**”), Truck Bodies & Equipment International, Inc. (the “**Parent**”) and any and all direct and indirect subsidiaries, parents, affiliates and related companies of Crysteel, Rugby, Tishomingo, the Duraclass brand, Ox Bodies or the Parent to the extent such related entity(s) are engaged in the Company’s Business.

(c) “**Company’s Business**” is defined to be designing, manufacturing, and supplying light-duty, medium-duty and heavy-duty dump bodies, dump trailer bodies, rancher flats, flat dumps, steel flats, trash bodies (excluding refuse environmental bodies such as front, rear, side loaders and recyclers), landscape truck bodies, roll-off containers, hydraulic hoists for dump body application, specialized truck and trailer equipment, installing and integrating hydraulics, lift axles, cab controls, tarp systems, and other functionally-enhancing accessories.

(d) “**Entitlement Period**” means the period commencing on the date hereof and ending on September 30, 2018, or as earlier terminated in accordance with the terms of this Agreement or otherwise by the Parties.

(e) “**Good Reason**” means, subject to the Company’s right to cure as described below, the occurrence of any material diminution in the Executive’s duties, authority and/or responsibility with the Company or his base salary or the target amount of his annual performance bonus or his package of employee benefits (other than changes to benefits that also affect other employees of Crysteel), in each case without his consent; *provided*, that in the event of such occurrence the Executive shall give the Company thirty (30) days prior written notice of his intent to terminate his employment and specify the event or events (which shall be of the type described in this paragraph (c)) that have triggered Executive’s intent to terminate his employment and Executive shall provide the Company with an opportunity to cure such triggering event or events during such thirty (30) day period.

(f) “***Restricted Territory***” is defined as and limited to:

(i) the geographic area(s) within a one hundred (100) mile radius of any and all Company location(s) in, to, or for which Executive worked, to which Executive was assigned or for which Executive had any responsibility (either direct or supervisory) as of the date hereof or at the time of termination of Executive’s employment and at any time during the one (1) year period prior to such termination; and

(ii) all of the specific customer accounts, whether within or outside of the geographic area described in (i) above, with which Executive had any contact at any time during the two (2) year period prior to the termination.

5. Executive Representations. Executive represents and warrants to Crysteel that Executive has read, fully understands and voluntarily agrees to the terms and conditions of this Agreement and that upon the execution and delivery of this Agreement by Crysteel, this Agreement shall be the valid and binding obligation of Executive, enforceable in accordance with its terms.

6. Withholding of Taxes. The Company may withhold from any amounts payable under this Agreement all federal, state, city or other taxes as the Company is required to withhold pursuant to any applicable law, regulation or ruling.

7. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and enforceable under applicable law, but if any provision of this Agreement is held to be ineffective or unenforceable in any respect, such ineffectiveness or unenforceability shall not affect any other provision, and this Agreement shall be reformed, construed and enforced as if such ineffective or unenforceable provision had never been contained herein to the fullest extent possible under applicable law.

8. Counterparts; Facsimile. This Agreement may be executed in separate counterparts, each of which shall be deemed to be an original and both of which taken together shall constitute one and the same agreement. The signature pages of any party or copies or facsimiles thereof may be appended to any counterpart of this Agreement and when so appended shall constitute an original.

9. Amendment and Waiver. The provisions of this Agreement may be amended or waived only with the prior written consent of Crysteel and Executive, and no course of conduct or failure or delay in enforcing the provisions of this Agreement shall affect the validity, binding effect or enforceability of this Agreement.

10. No Assignment by Executive; Third Party Beneficiaries. Executive’s rights and obligations under this Agreement may not be assigned. Crysteel, however, may, without the consent of the Executive, assign its rights and obligations under this Agreement and this Agreement shall be fully enforceable by any such assignee. Each of the entities that are part of the definition of the “Company” shall be deemed to be third party beneficiaries of this Agreement.

11. Notices. All notices and other communications required or permitted under this Agreement must be in writing and will be deemed to have been duly given (a) when delivered in person, (b) when dispatched by electronic facsimile transfer (if confirmed in writing by mail simultaneously dispatched), (c) one business day after having been dispatched by a nationally recognized overnight courier service or (d) five business days after being sent by registered or certified mail, return receipt requested, postage prepaid, to the appropriate party at the address or facsimile number specified below:

If to Executive:

Robert Fines
24 Pepper Creek Drive
Pepper Pike, Ohio

If to the Company:

Crysteel Manufacturing, Inc.
52182 Ember Road
Lake Crystal, MN 56055
Attention: Chief Executive Officer

with a copy to:

Truck Bodies & Equipment International, Inc.
c/o GenNx360 Management Company, LLC
590 Madison Avenue, 27th Floor
New York, NY 10022
Attention: Ronald E. Blaylock

Any party may change its address for the purposes of this paragraph 11 by giving notice as provided in this Agreement.

12. Headings. The headings contained in this Agreement are included for the purposes of convenience only and do not affect the meaning or interpretation of this Agreement.

13. Survival. Subject to any limits on applicability contained therein, paragraph 3 hereof shall survive and continue in full force in accordance with its terms notwithstanding any termination of the Executive's employment.

14. Governing Law. This Agreement will be governed by and construed and enforced in accordance with the laws of the State of Minnesota without regard to principles of conflicts of law. Any action arising from or regarding the validity or construction of this Agreement shall be brought in the state or federal courts for Blue Earth County Minnesota. Executive hereby consents to the jurisdiction of such courts and waives all objections based on venue and/or forum non conveniens.

15. Fees and Costs. In any action seeking enforcement of this agreement, including the restrictive covenants contained herein, the court shall award fees and costs to the prevailing party.

16. Integration. This Agreement represents the complete agreement and understanding between the Parties with respect to the subject matters addressed herein and effective as of its date supersedes and preempts any and all prior negotiations, agreements, representations and communications by or between the Parties, written or oral, including, but not limited to, (i) the Offer of Employment Letter, dated December 19, 2014, between TBEI and Executive, and (ii) the Original Non-Compete and Severance Agreement, which may have related to the subject matter hereof in any way.

[Signatures on the following page.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written.

CRYSTEEL MANUFACTURING, INC.

By: /s/ Tina Albright

Name: Tina Albright

Title: Secretary

Robert Fines

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written.

CRYSTEEL MANUFACTURING, INC.

By: _____

Name: Tina Albright

Title: Secretary

/s/ Robert Fines

Robert Fines

**FIRST AMENDMENT TO THE AMENDED AND
RESTATED NON-COMPETITION AND SEVERANCE AGREEMENT**

This First Amendment to the Amended and Restated Non-Competition and Severance Agreement (this "**First Amendment**"), is dated to be effective November 10, 2017 (the "**Effective Date**"), and is by and between Crysteel Manufacturing, Inc. ("**Crysteel**") and Robert Fines ("**Executive**"), together the "**Parties**" to this First Amendment.

WHEREAS, the Parties entered into that certain Amended and Restated Non- Competition and Severance Agreement, dated September 30, 2015 (the "**Agreement**");

WHEREAS, the terms of this Amendment were agreed to contingent upon the closing of the transaction contemplated in the Stock Purchase Agreement between Federal Signal Corporation and GenNx/TBEI Holdings, LLC, pursuant to which Federal Signal Corporation agreed to acquire all the outstanding shares of capital stock of GenNx/TBEI Intermediate Co., a Delaware corporation and the parent company of Crysteel (the "**Transaction**");

WHEREAS, the Transaction closed on June 2, 2017, Federal Signal is now the parent company of Crysteel, and Executive is employed pursuant to an offer letter between Federal Signal and Executive dated May 4, 2017; and

WHEREAS, this First Amendment is made by and between the Parties, as contemplated in paragraph 10 of the offer letter between Federal Signal and Executive dated May 4, 2017 and pursuant to Section 9 of the Agreement.

NOW THEREFORE, in consideration of the mutual covenants and promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by both Parties, the Parties hereby agree as follows:

1. All the terms of the Agreement shall remain in full force and effect except as expressly amended by this First Amendment.

2. Paragraph 2 of the Agreement entitled "Post-Employment Payments" is hereby modified to add new paragraphs 2(d), (e), and (f) as follows:

"2(d) For the avoidance of any doubt, during the Entitlement Period, Executive shall not be a participant in either the Federal Signal Corporation Executive General Severance Plan or the Federal Signal Corporation General Severance Pay Plan and Executive is not entitled to any post-employment or severance payments other than as expressly set forth in this Agreement."

"2(e) The severance benefits provided for in paragraph 2(b) of this Agreement shall be paid as a continuation of pay, less taxes and withholdings. Such benefits shall commence on the first regular payroll date on or after the sixtieth (60th) day after Executive's separation from service, as defined in Section 409A of the Internal Revenue Code of 1986, as amended ("**Section 409A**"), provided Executive has signed the release required by paragraph 2(c) of this Agreement without revocation, and be paid in equal installments in accordance with the regular payroll practices of the Company. Notwithstanding the foregoing, the first installment payment shall

include all amounts of base salary that would otherwise have been paid to Executive during the sixty-day delay."

"2(f) This Agreement is intended to comply with Section 409A or an exemption thereunder and shall be construed and administered in accordance with Section 409A. Notwithstanding any other provision of this Agreement, payments provided under this Agreement may only be made upon an event and in a manner that complies with Section 409A or an applicable exemption and the Parties agree to revise this Agreement as necessary to comply with Section 409A or an exemption therefrom to fulfill the purpose of the voided provision. Any payments under this Agreement that may be excluded from Section 409A either as separation pay due to an involuntary separation from service, as a short-term deferral, or as a settlement payment pursuant to a bona fide legal dispute shall be excluded from Section 409A to the maximum extent possible. For purposes of Section 409A, any installment payments provided under this Agreement shall each be treated as a separate payment. To the extent required under Section 409A, any payments to be made under this Agreement upon a termination of employment shall only be made upon a "separation from service" under Section 409A. To the extent that payments provided under this Agreement are not exempt from Section 409A, and to the extent that Executive is a "specified employee," payments due Executive shall begin no sooner than six (6) months after Executive's separation from service (other than for death); provided, however, that any payments not made due to the 6-months delay period required under Treasury Regulation Section 1.409A-3(i)(2) shall be made in a single lump sum as soon as administratively practicable after the expiration of such six (6) month period, with interest thereon, and the balance of all other payments required under this Agreement shall be made as otherwise scheduled under this Agreement. For purposes of this Agreement, the term "Specified employee" shall have the meaning set forth in Treasury Regulation Section 1.409A-1(i). The determination of whether Executive is a "specified employee" shall be made by the Company in good faith applying the applicable Treasury regulations. Notwithstanding the foregoing, the Company makes no representations that the payments and benefits provided under this Agreement comply with Section 409A and in no event shall the Company be liable for all or any portion of any taxes, penalties, interest, or other expenses that may be incurred by Executive on account of non-compliance with Section 409A."

3. Paragraph 4(d) of the Agreement is stricken in its entirety and replaced with the following paragraph 4(d):

"4(d) ***Entitlement Period***" means the period commencing on June 2, 2017 and ending on June 2, 2020, or as earlier terminated in accordance with the terms of this Agreement or otherwise by the Parties."

4. Paragraph 11 of the Agreement is stricken in its entirety and replaced with the following paragraph 11:

"11. Notices. All notices and other communications required or permitted under this Agreement must be in writing and will be deemed to have been duly given (a) when delivered in person, (b) when dispatched by electronic facsimile transfer (if confirmed in writing by mail simultaneously dispatched), (c) one business day after having been dispatched by a nationally recognized overnight courier service, or (d) five (5)

business days after being sent by registered or certified mail, return receipt requested, postage prepaid, to the appropriate party at the address or facsimile number below:

If to the Executive:

Robert Fines
2305 English Village Lane
Mountain Brook, AL 35223
bfines@tbei.com

If to the Company:

Crysteel Manufacturing Company
52182 Ember Road
Lake Crystal, MN 56055
Attn: H.R. Director

with a copy to:

Federal Signal Corporation
1415 W. 22nd Street
Oak Brook, IL 60523
Attention: President/CEO

Any party may change its address for the purposes of this paragraph 11 by giving notice as provided in this Agreement."

5. Paragraph 16 of the Agreement is stricken in its entirety and replaced with the following paragraph 16:

"16. Integration. Together with the First Amendment, this Agreement represents the complete agreement and understanding between the Parties with respect to the subject matters addressed herein and effective as of its dates supersedes and preempts any and all prior negotiations, agreements, representations, and communications by or between the Parties, written or oral, including, but not limited to, the offer of employment letter dated December 19, 2014, between TBEI and Executive and the offer of employment letter dated May 4, 2017, between Federal Signal Corporation and Executive. Notwithstanding the foregoing and for the avoidance of any doubt, nothing in this paragraph or this Agreement supersedes or preempts any written agreements between Federal Signal Corporation and Executive."

***** SIGNATURE PAGE FOLLOWS*****

IN WITNESS WHEREOF, the Parties have duly executed this First Amendment to the Amended and Restated Non-Competition and Severance Agreement as of the day and year first above written.

ROBERT FINES

/s/ Robert Fines

Robert Fines

4/20/2018

Date

CRYSTEEL MANUFACTURING, INC.

/s/ Daniel A. DuPre'

By: Daniel A. DuPre'

Vice President & Secretary

4/20/2018

Date

CEO Certification under Section 302 of the Sarbanes-Oxley Act

I, Jennifer L. Sherman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Federal Signal Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2018

/s/ Jennifer L. Sherman

Jennifer L. Sherman

President and Chief Executive Officer

(Principal Executive Officer)

CFO Certification under Section 302 of the Sarbanes-Oxley Act

I, Ian A. Hudson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Federal Signal Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2018

/s/ Ian A. Hudson

Ian A. Hudson

*Senior Vice President and Chief Financial Officer
(Principal Financial Officer)*

**CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)**

In connection with the Quarterly Report of Federal Signal Corporation (the "Company") on Form 10-Q for the period ended March 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jennifer L. Sherman, President and Chief Executive Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78m or 78o (d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2018

/s/ Jennifer L. Sherman

Jennifer L. Sherman

President and Chief Executive Officer

(Principal Executive Officer)

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. This certification shall also not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.

**CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)**

In connection with the Quarterly Report of Federal Signal Corporation (the “Company”) on Form 10-Q for the period ended March 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Ian A. Hudson, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78m or 78o (d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2018

/s/ Ian A. Hudson

Ian A. Hudson

*Senior Vice President and Chief Financial Officer
(Principal Financial Officer)*

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. This certification shall also not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.

News From



REGENCY TOWERS, 1415 W. 22ND ST., OAK BROOK, ILLINOIS 60523

FOR IMMEDIATE RELEASE**Federal Signal Raises Full-Year Outlook after Reporting Strong First Quarter Earnings and Record Orders, Up 54%**

Oak Brook, Illinois, May 8, 2018 — Federal Signal Corporation (NYSE:FSS), a leader in environmental and safety solutions, today reported results for the first quarter ended March 31, 2018.

- Net sales of \$250 million, up \$71.9 million, or 40% compared to last year
- Record first quarter orders of \$330 million, up \$115 million, or 54%, from last year
- GAAP EPS of \$0.21, up 75% from \$0.12 last year
- Adjusted EPS of \$0.23, up 64% from \$0.14 last year
- Raising full-year adjusted EPS* outlook to a range of \$1.15 to \$1.22, from a range of \$1.10 to \$1.20

Consolidated net sales for the first quarter were \$249.7 million, up \$71.9 million, or 40% versus the same quarter a year ago. First quarter income from continuing operations was \$12.9 million, equal to \$0.21 per diluted share, compared to \$7.2 million, equal to \$0.12 per share, in the prior-year quarter.

The Company also reported adjusted net income from continuing operations for the first quarter of \$14.0 million, equal to \$0.23 per diluted share, compared to \$8.5 million, or \$0.14 per diluted share, in the same quarter a year ago. The Company is reporting adjusted results to facilitate comparisons of underlying performance on a year-over-year basis. A reconciliation of these and other non-GAAP measures is provided at the conclusion of this news release.

Q1 Results Reflect Significant Increases in Orders, Sales and Income, Driven by Organic Growth and M&A

“We are off to a strong start in 2018, with first quarter results reflecting significant year-over-year growth in both the top and bottom line,” commented Jennifer L. Sherman, President and Chief Executive Officer. “Our first quarter orders were at record levels, surpassing the previous high established in the fourth quarter of last year. Similar to last quarter, we saw some pull-forward of orders from customers seeking to secure availability of certain product lines with extended lead times, or to manage the procurement of their chassis. We estimate that this resulted in the acceleration of an additional \$25 million of orders into the first quarter that we had anticipated receiving later in the year.”

Consolidated orders were \$329.7 million for the quarter, up \$115.1 million, or 54%, compared to the prior-year quarter. The Environmental Solutions Group reported orders of \$274.4 million in the first quarter of 2018, an increase of \$107.8 million, or 65%, compared to the prior-year quarter. The improvement was driven by organic order growth of approximately \$44 million, or 27%, primarily represented by higher orders for vacuum trucks and sewer cleaners, and the acquisition of TBEI. Orders within our Safety and Security Systems Group were up \$7.3 million. Consolidated backlog at March 31, 2018 was \$337 million, up \$163 million, or 94%, compared to last year.

In the Environmental Solutions Group, net sales were up \$68.8 million, or 54%, due to the addition of \$51.3 million in net sales from the TBEI acquisition and organic sales improvement of \$17.5 million, or 14%, driven by higher domestic shipments of sewer cleaners and vacuum trucks. Sales in the Safety and Security Systems Group increased by \$3.1 million, or 6%.

Consolidated first quarter operating income was \$19.6 million, up \$8.2 million, or 72%, compared to the prior-year quarter, primarily driven by a \$10.3 million increase within the Environmental Solutions Group. Consolidated operating margin was 7.8%, up from 6.4% in the prior-year quarter.

Consolidated adjusted earnings before interest, tax, depreciation and amortization (“adjusted EBITDA”) for the first quarter of 2018 was \$29.5 million, up \$10.5 million, or 55%, compared to the prior-year quarter, and consolidated adjusted EBITDA margin was 11.8% compared to 10.7% last year.

Adjusted EBITDA in the Environmental Solutions Group was up \$13.5 million, or 87%, to \$29.0 million, and its adjusted EBITDA margin was 14.8%, up from 12.1% last year. Within the Safety and Security Systems Group, adjusted EBITDA was \$7.0 million, compared to \$7.7 million last year, and its adjusted EBITDA margin was 13.2%, compared to 15.4% last year.

Strong Financial Position and Healthy Cash Flow Support Additional Debt Reduction and Cash Returns to Shareholders

Net cash of \$10.3 million was provided by continuing operating activities in the first quarter of 2018, which facilitated additional debt repayments of \$8.6 million. At March 31, 2018, consolidated debt was \$267 million, total cash and cash equivalents were \$35 million and the Company had \$121 million of availability for borrowings under its credit facility.

“Our debt leverage ratio at the end of the quarter was down to 2.1 times adjusted EBITDA,” said Sherman. “With our strong financial position, we continue to pursue strategic acquisitions, invest in new product development initiatives, and fund cash returns to shareholders.”

The Company also funded dividends of \$4.2 million during the first quarter, and as recently announced, the Board of Directors increased the dividend that will be payable in the second quarter to \$0.08 per share, up 14%.

Outlook

“The strategic initiatives implemented in recent years continue to gain traction, and our recent acquisitions are performing well,” Sherman noted. “The strength of our backlog, the aggressive actions we have taken to minimize the impact of increased commodity costs and the favorable conditions in our end markets provide us with increased confidence for the rest of the year. At this time, we are raising our full-year 2018 adjusted EPS* outlook to a new range of \$1.15 to \$1.22, from a range of \$1.10 to \$1.20.”

* Adjusted EPS is a non-GAAP measure, which includes certain adjustments to reported GAAP net income and diluted EPS. Our outlook assumes certain adjustments to exclude the impact of acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges, where applicable. In 2017, we also made adjustments to exclude the impact of restructuring activity, executive severance costs, pension settlement charges, and special tax items, where applicable. Should any similar items occur during 2018, we would expect to exclude them from the determination of adjusted EPS. However, because of the underlying uncertainty in quantifying amounts which may not yet be known, a reconciliation of our Adjusted EPS outlook to the most applicable GAAP measure is excluded based on the unreasonable efforts exception in Item 10(e)(1)(i)(B).

CONFERENCE CALL

Federal Signal will host its first quarter conference call on Tuesday, May 8, 2018 at 10:00 a.m. Eastern Time. The call will last approximately one hour. The call may be accessed over the internet through Federal Signal’s website at <http://www.federsignal.com> or by dialing phone number 1-866-548-4713 and entering the pin number 3053595. A replay will be available on Federal Signal’s website shortly after the call.

About Federal Signal

Federal Signal Corporation (NYSE: FSS) provides products and services to protect people and our planet. Founded in 1901, Federal Signal is a leading global designer, manufacturer and supplier of products and total solutions that serve municipal, governmental, industrial and commercial customers. Headquartered in Oak Brook, Ill., with manufacturing facilities worldwide, the Company operates two groups: Environmental Solutions and Safety and Security Systems. For more information on Federal Signal, visit: <http://www.federsignal.com>.

“Safe Harbor” Statement under the Private Securities Litigation Reform Act of 1995

This release contains unaudited financial information and various forward-looking statements as of the date hereof and we undertake no obligation to update these forward-looking statements regardless of new developments or otherwise. Statements in this release that are not historical are forward-looking statements. Such statements are subject to various risks and uncertainties that could cause actual results to vary materially from those stated. Such risks and uncertainties include but are not limited to: economic conditions in various regions; product and price competition; supplier and raw material prices; risks associated with acquisitions such as integration of operations and achieving anticipated revenue and cost benefits; foreign currency exchange rate changes; interest rate changes; increased legal expenses and litigation results; legal and regulatory developments and other risks and uncertainties described in filings with the Securities and Exchange Commission.

Contact: Ian Hudson, Chief Financial Officer, +1-630-954-2000, ihudson@federsignal.com

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

(in millions, except per share data)	Three Months Ended March 31,	
	2018	2017
Net sales	\$ 249.7	\$ 177.8
Cost of sales	187.8	134.2
Gross profit	61.9	43.6
Selling, engineering, general and administrative expenses	41.8	31.4
Acquisition and integration-related expenses	0.5	0.5
Restructuring	—	0.3
Operating income	19.6	11.4
Interest expense	2.5	0.6
Other expense (income), net	0.1	(0.2)
Income before income taxes	17.0	11.0
Income tax expense	4.1	3.8
Income from continuing operations	12.9	7.2
Gain from discontinued operations and disposal, net of income tax expense of \$0.0 and \$0.1, respectively	—	0.1
Net income	\$ 12.9	\$ 7.3
Basic earnings per share:		
Earnings from continuing operations	\$ 0.22	\$ 0.12
Earnings from discontinued operations and disposal, net of tax	—	—
Net earnings per share	\$ 0.22	\$ 0.12
Diluted earnings per share:		
Earnings from continuing operations	\$ 0.21	\$ 0.12
Earnings from discontinued operations and disposal, net of tax	—	—
Net earnings per share	\$ 0.21	\$ 0.12
Weighted average common shares outstanding:		
Basic	59.8	59.6
Diluted	60.8	60.3
Cash dividends declared per common share	\$ 0.07	\$ 0.07
Operating data:		
Operating margin	7.8%	6.4%
Adjusted EBITDA	\$ 29.5	\$ 19.0
Adjusted EBITDA margin	11.8%	10.7%
Total orders	\$ 329.7	\$ 214.6
Backlog	336.7	174.0
Depreciation and amortization	8.6	5.7

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)	March 31, 2018 (Unaudited)	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 35.4	\$ 37.5
Accounts receivable, net of allowances for doubtful accounts of \$1.3 and \$1.1, respectively	124.5	118.2
Inventories	152.9	137.2
Prepaid expenses and other current assets	8.4	10.9
Total current assets	<u>321.2</u>	<u>303.8</u>
Properties and equipment, net of accumulated depreciation of \$112.0 and \$108.9, respectively	60.2	60.1
Rental equipment, net of accumulated depreciation of \$18.9 and \$20.0, respectively	85.9	87.2
Goodwill	378.2	377.3
Intangible assets, net of accumulated amortization of \$7.5 and \$5.5, respectively	149.6	151.8
Deferred tax assets	5.7	6.2
Deferred charges and other assets	6.8	5.4
Long-term assets of discontinued operations	0.5	0.5
Total assets	<u>\$ 1,008.1</u>	<u>\$ 992.3</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term borrowings and capital lease obligations	\$ 0.3	\$ 0.3
Accounts payable	64.0	51.5
Customer deposits	8.4	6.5
Accrued liabilities:		
Compensation and withholding taxes	17.9	22.2
Other current liabilities	40.1	36.1
Current liabilities of discontinued operations	0.5	0.5
Total current liabilities	<u>131.2</u>	<u>117.1</u>
Long-term borrowings and capital lease obligations	267.0	277.4
Long-term pension and other postretirement benefit liabilities	55.5	56.6
Deferred gain	8.3	8.7
Deferred tax liabilities	46.1	45.4
Other long-term liabilities	28.6	28.2
Long-term liabilities of discontinued operations	1.5	1.5
Total liabilities	<u>538.2</u>	<u>534.9</u>
Stockholders' equity:		
Common stock, \$1 par value per share, 90.0 shares authorized, 66.1 and 66.1 shares issued, respectively	66.1	66.1
Capital in excess of par value	208.8	207.7
Retained earnings	355.3	346.6
Treasury stock, at cost, 6.1 and 6.1 shares, respectively	(86.3)	(86.1)
Accumulated other comprehensive loss	(74.0)	(76.9)
Total stockholders' equity	<u>469.9</u>	<u>457.4</u>
Total liabilities and stockholders' equity	<u>\$ 1,008.1</u>	<u>\$ 992.3</u>

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

(in millions)	Three Months Ended March 31,	
	2018	2017
Operating activities:		
Net income	\$ 12.9	\$ 7.3
Adjustments to reconcile net income to net cash provided by operating activities:		
Gain from discontinued operations and disposal	—	(0.1)
Depreciation and amortization	8.6	5.7
Deferred financing costs	0.1	0.1
Deferred gain	(0.4)	(0.5)
Stock-based compensation expense	0.8	0.4
Pension expense, net of funding	(1.1)	(1.0)
Changes in fair value of contingent consideration and deferred payment	0.3	0.2
Deferred income taxes	0.7	4.0
Changes in operating assets and liabilities	(11.6)	(2.4)
Net cash provided by continuing operating activities	10.3	13.7
Net cash provided by discontinued operating activities	—	—
Net cash provided by operating activities	10.3	13.7
Investing activities:		
Purchases of properties and equipment	(3.0)	(1.1)
Proceeds from sales of properties and equipment	0.1	—
Proceeds from acquisition-related activity	3.0	—
Net cash provided by (used for) continuing investing activities	0.1	(1.1)
Net cash used for discontinued investing activities	—	(1.1)
Net cash provided by (used for) investing activities	0.1	(2.2)
Financing activities:		
Decrease in revolving lines of credit, net	(8.6)	—
Redemptions of common stock to satisfy withholding taxes related to stock-based compensation	(0.1)	(1.9)
Cash dividends paid to stockholders	(4.2)	(4.2)
Proceeds from stock-based compensation activity	0.1	0.6
Other, net	0.1	(0.1)
Net cash used for continuing financing activities	(12.7)	(5.6)
Net cash used for discontinued financing activities	—	—
Net cash used for financing activities	(12.7)	(5.6)
Effects of foreign exchange rate changes on cash and cash equivalents	0.2	0.2
(Decrease) increase in cash and cash equivalents	(2.1)	6.1
Cash and cash equivalents at beginning of year	37.5	50.7
Cash and cash equivalents at end of period	<u>\$ 35.4</u>	<u>\$ 56.8</u>

FEDERAL SIGNAL CORPORATION AND SUBSIDIARIES

GROUP RESULTS (Unaudited)

The following tables summarize group operating results as of and for the three months ended March 31, 2018 and 2017:

Environmental Solutions Group

(\$ in millions)	Three Months Ended March 31,		
	2018	2017	Change
Net sales	\$ 196.6	\$ 127.8	\$ 68.8
Operating income	20.6	10.3	10.3
Adjusted EBITDA	29.0	15.5	13.5
Operating data:			
Operating margin	10.5%	8.1%	2.4%
Adjusted EBITDA margin	14.8%	12.1%	2.7%
Total orders	274.4	166.6	107.8
Backlog	307.9	155.4	152.5
Depreciation and amortization	7.7	4.6	3.1

Safety and Security Systems Group

(\$ in millions)	Three Months Ended March 31,		
	2018	2017	Change
Net sales	\$ 53.1	\$ 50.0	\$ 3.1
Operating income	6.1	6.4	(0.3)
Adjusted EBITDA	7.0	7.7	(0.7)
Operating data:			
Operating margin	11.5%	12.8%	(1.3)%
Adjusted EBITDA margin	13.2%	15.4%	(2.2)%
Total orders	55.3	48.0	7.3
Backlog	28.8	18.6	10.2
Depreciation and amortization	0.9	1.0	(0.1)

Corporate Expenses

Corporate operating expenses were \$7.1 million and \$5.3 million for the three months ended March 31, 2018 and 2017, respectively.

SEC REGULATION G NON-GAAP RECONCILIATION

The financial measures presented below are unaudited and are not in accordance with U.S. generally accepted accounting principles (“GAAP”). The non-GAAP financial information presented herein should be considered supplemental to, and not a substitute for, or superior to, financial measures calculated in accordance with GAAP. The Company has provided this supplemental information to investors, analysts, and other interested parties to enable them to perform additional analyses of operating results, to illustrate the results of operations giving effect to the non-GAAP adjustments shown in the reconciliations below, and to provide an additional measure of performance which management considers in operating the business.

Adjusted net income and earnings per share from continuing operations (“EPS”):

The Company believes that modifying its 2018 and 2017 net income and diluted EPS provides additional measures which are representative of the Company’s underlying performance and improves the comparability of results across reporting periods. During the three months ended March 31, 2018 and 2017 adjustments were made to reported GAAP net income and diluted EPS to exclude the impact of restructuring activity, executive severance costs, acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges, where applicable.

(in millions)	Three Months Ended March 31,	
	2018	2017
Income from continuing operations	\$ 12.9	\$ 7.2
Add:		
Income tax expense	4.1	3.8
Income before income taxes	17.0	11.0
Add:		
Restructuring	—	0.3
Executive severance costs	—	0.7
Acquisition and integration-related expenses	0.5	0.5
Purchase accounting effects ^(a)	0.6	0.5
Hearing loss settlement charges	0.4	—
Adjusted income before income taxes	18.5	13.0
Adjusted income tax expense ^(b)	(4.5)	(4.5)
Adjusted net income from continuing operations	\$ 14.0	\$ 8.5

(dollars per diluted share)	Three Months Ended March 31,	
	2018	2017
EPS, as reported	\$ 0.21	\$ 0.12
Add:		
Income tax expense	0.07	0.06
Income before income taxes	0.28	0.18
Add:		
Restructuring	—	0.00
Executive severance costs	—	0.01
Acquisition and integration-related expenses	0.01	0.01
Purchase accounting effects ^(a)	0.01	0.01
Hearing loss settlement charges	0.01	—
Adjusted income before income taxes	0.31	0.21
Adjusted income tax expense ^(b)	(0.08)	(0.07)
Adjusted EPS	\$ 0.23	\$ 0.14

(a) Purchase accounting effects relate to adjustments to exclude the step-up in the valuation of equipment acquired in connection with current and prior-year acquisitions that was sold subsequent to the acquisition dates in the three months ended March 31, 2018 and 2017, as well as to exclude the depreciation of the step-up in the valuation of the rental fleet acquired in the JJE transaction.

(b) Adjusted income tax expense for the three months ended March 31, 2018 and 2017 was recomputed after excluding the impact of restructuring activity, executive severance costs, acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges, where applicable.

Adjusted EBITDA:

The Company uses adjusted EBITDA and the ratio of adjusted EBITDA to net sales (“adjusted EBITDA margin”), at both the consolidated and segment level, as additional measures which are representative of its underlying performance and to improve the comparability of results across reporting periods. We believe that investors use versions of these metrics in a similar manner. For these reasons, the Company believes that adjusted EBITDA and adjusted EBITDA margin, at both the consolidated and segment level, are meaningful metrics to investors in evaluating the Company’s underlying financial performance.

Consolidated adjusted EBITDA is a non-GAAP measure that represents the total of income from continuing operations, interest expense, hearing loss settlement charges, acquisition and integration-related expenses, restructuring activity, executive severance costs, purchase accounting effects, other income/expense, income tax expense, and depreciation and amortization expense. Consolidated adjusted EBITDA margin is a non-GAAP measure that represents the total of income from continuing operations, interest expense, hearing loss settlement charges, acquisition and integration-related expenses, restructuring activity, executive severance costs, purchase accounting effects, other income/expense, income tax expense, and depreciation and amortization expense divided by net sales for the applicable period(s).

Segment adjusted EBITDA is a non-GAAP measure that represents the total of segment operating income, acquisition and integration-related expenses, restructuring activity, purchase accounting effects and depreciation and amortization expense, as applicable. Segment adjusted EBITDA margin is a non-GAAP measure that represents the total of segment operating income, acquisition and integration-related expenses, restructuring activity, purchase accounting effects and depreciation and amortization expense, as applicable, divided by net sales for the applicable period(s). Segment operating income includes all revenues, costs and expenses directly related to the segment involved. In determining segment income, neither corporate nor interest expenses are included. Segment depreciation and amortization expense relates to those assets, both tangible and intangible, that are utilized by the respective segment.

Other companies may use different methods to calculate adjusted EBITDA and adjusted EBITDA margin.

Consolidated

The following table summarizes the Company’s consolidated adjusted EBITDA and adjusted EBITDA margin and reconciles income from continuing operations to consolidated adjusted EBITDA for the three months ended March 31, 2018 and 2017:

(\$ in millions)	Three Months Ended March 31,	
	2018	2017
Income from continuing operations	\$ 12.9	\$ 7.2
Add:		
Interest expense	2.5	0.6
Hearing loss settlement charges	0.4	—
Acquisition and integration-related expenses	0.5	0.5
Restructuring	—	0.3
Executive severance costs	—	0.7
Purchase accounting effects *	0.4	0.4
Other expense (income), net	0.1	(0.2)
Income tax expense	4.1	3.8
Depreciation and amortization	8.6	5.7
Consolidated adjusted EBITDA	\$ 29.5	\$ 19.0
Net sales	\$ 249.7	\$ 177.8
Consolidated adjusted EBITDA margin	11.8%	10.7%

* Excludes purchase accounting expenses reflected in depreciation and amortization of \$0.2 million and \$0.1 million for the three months ended March 31, 2018 and 2017, respectively

Environmental Solutions Group

The following table summarizes the Environmental Solutions Group’s adjusted EBITDA and adjusted EBITDA margin and reconciles operating income to adjusted EBITDA for the three months ended March 31, 2018 and 2017:

(\$ in millions)	Three Months Ended March 31,	
	2018	2017
Operating income	\$ 20.6	\$ 10.3
Add:		
Acquisition and integration-related expenses	0.3	0.2
Purchase accounting effects*	0.4	0.4
Depreciation and amortization	7.7	4.6
Adjusted EBITDA	\$ 29.0	\$ 15.5
Net sales	\$ 196.6	\$ 127.8
Adjusted EBITDA margin	14.8%	12.1%

* Excludes purchase accounting expenses reflected in depreciation and amortization of \$0.2 million and \$0.1 million for the three months ended March 31, 2018 and 2017, respectively

Safety and Security Systems Group

The following table summarizes the Safety and Security Systems Group's adjusted EBITDA and adjusted EBITDA margin and reconciles operating income to adjusted EBITDA for the three months ended March 31, 2018 and 2017:

(\$ in millions)	Three Months Ended March 31,	
	2018	2017
Operating income	\$ 6.1	\$ 6.4
Add:		
Restructuring	—	0.3
Depreciation and amortization	0.9	1.0
Adjusted EBITDA	\$ 7.0	\$ 7.7
Net sales	\$ 53.1	\$ 50.0
Adjusted EBITDA margin	13.2%	15.4%