



# Disciplined Growth

# Safe Harbor Statement

This presentation contains unaudited financial information and forward-looking statements. Statements that are not historical are forward-looking statements and may contain words such as “may”, “will”, “believe”, “expect”, “anticipate”, “intend”, “plan”, “project”, “estimate”, and “objective” or similar terminology, concerning the company’s future financial performance, business strategy, plans, goals and objectives. These expressions are intended to identify forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include information concerning the Company’s possible or assumed future performance or results of operations and are not guarantees. While these statements are based on assumptions and judgments that management has made in light of industry experience as well as perceptions of historical trends, current conditions, expected future developments and other factors believed to be appropriate under the circumstances, they are subject to risks, uncertainties and other factors that may cause the Company’s actual results, performance or achievements to be materially different. Such risks and uncertainties include, but are not limited to: direct and indirect impacts of the coronavirus pandemic and the associated government response, economic conditions in various regions, product and price competition, supply chain disruptions, work stoppages, availability and pricing of raw materials, 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. Such forward-looking statements are made as of the date hereof and we undertake no obligation to update these forward-looking statements regardless of new developments or otherwise.

This presentation also contains certain measures that 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, and to provide an additional measure of performance which management considers in operating the business. A reconciliation of these items to the most comparable GAAP measures is provided in our filings with the SEC and/or in the Appendix to this presentation.



# Federal Signal at a Glance

- Founded in 1901, joined NYSE in 1969 (“FSS”)
- Diversified industrial manufacturer of specialized vehicles for maintenance and infrastructure markets such as street sweepers, sewer cleaners, vacuum/hydro-excavators (“safe-digging trucks”), industrial vacuum loaders, waterblasting equipment, dump bodies and trailers and road-marking and line-removal equipment; as well as safety and security products including audible and visual warning devices
- Leading brands of premium, value-adding products and systems, with growing aftermarket business
- Headquartered in Oak Brook, Illinois with 15 manufacturing facilities worldwide
- First quarter results represent a strong start to 2020, with year-over-year improvement in sales, income and orders

**STRONG  
CASH  
FLOW**

**NYSE  
SYMBOL  
FSS**

**\$1.2B  
REVENUE**  
TTM 3/31/2020

**Market  
capitalization  
~\$1.7B**



**CRAIN'S CHICAGO BUSINESS 2020  
NOTABLE  
WOMEN IN MANUFACTURING**





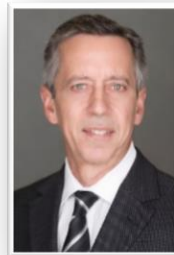
# An Experienced Leadership Team



**Jennifer Sherman**

**President and Chief Executive Officer**

- Appointed January, 2016
- Previously Chief Operating Officer, Chief Administrative Officer, Secretary and General Counsel, with operating responsibilities for the Company's Safety and Security Systems Group
- Joined Federal Signal in 1994 as Corporate Counsel



**Mark D. Weber**

**Senior Vice President and Chief Operating Officer**

- Appointed January, 2018
- Previously served as President and Chief Executive Officer of Supreme Industries, Inc.
- Prior to joining Supreme, Mr. Weber spent 17 years at Federal Signal, initially as Vice President of Operations, Elgin Sweeper, before progressing through multiple roles of increasing responsibility, serving as President of the Environmental Solutions Group for over a decade



**Ian Hudson**

**Senior Vice President and Chief Financial Officer**

- Appointed October, 2017
- Joined Federal Signal in August 2013 as Vice President and Corporate Controller
- Previously served as Director of Accounting – Latin America and Asia Pacific at Groupon, Inc.
- 13+ years public accounting experience with Ernst & Young, LLP



**Svetlana Vinokur**

**Vice President, Treasurer and Corporate Development**

- Appointed April, 2015
- Previously served as Assistant Treasurer for Illinois Tool Works Inc., Finance Head of M&A Strategy at Mead Johnson Nutrition Company, and Senior Associate for Robert W. Baird & Company's Consumer and Industrial Investment Banking group

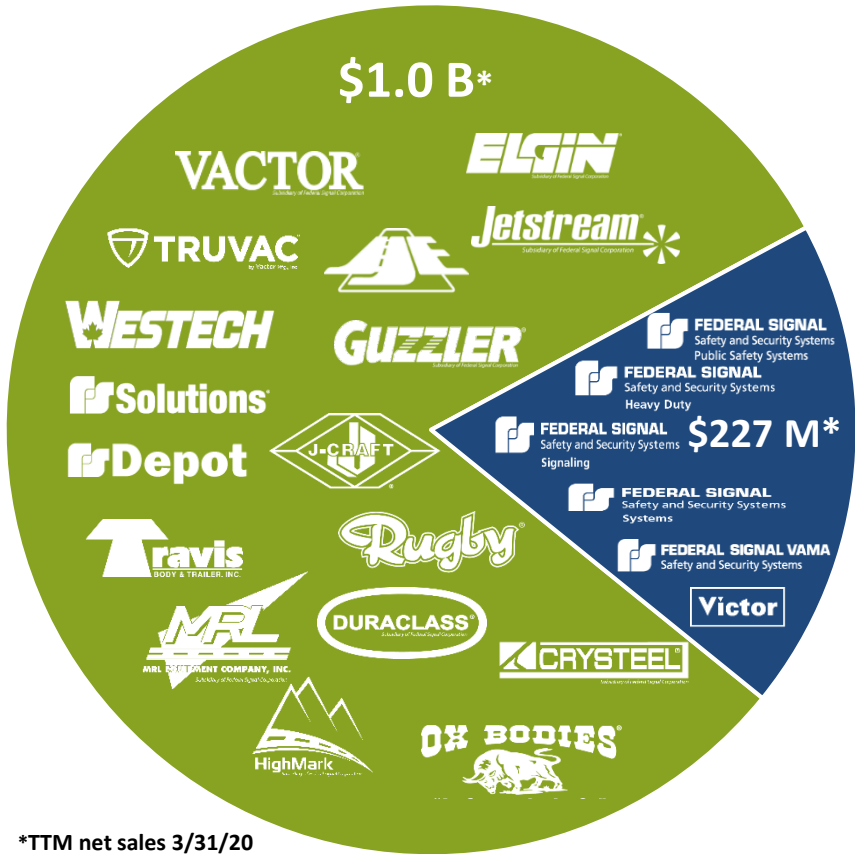


# Federal Signal Today vs. Prior Downturns

|  | Today   | Prior Downturns   |
|--|---|---|
| <b>Composition of Businesses</b>       | <ul style="list-style-type: none"> <li>Clearly-defined strategy, with two groups – ESG and SSG – each of which have <u>strong growth potential</u> through a combination of organic initiatives and M&amp;A</li> </ul>  | <ul style="list-style-type: none"> <li>Composition of our current groups, in addition to <u>low-margin</u> or <u>loss-making</u> FSTech, Refuse and Fire Rescue groups</li> </ul> |
| <b>End Market Exposures</b>            | <ul style="list-style-type: none"> <li>~50% municipal / ~50% industrial</li> <li>Within industrial, <u>markets at different points in the cycle</u> such as construction, utility, oil and gas, infrastructure, waste, rendering, landscaping, military</li> </ul>  | <ul style="list-style-type: none"> <li>60%+ municipal / 40% industrial</li> <li>Within industrial, <u>heavy reliance on oil and gas</u></li> </ul>                                |
| <b>Revenue Streams</b>                 | <ul style="list-style-type: none"> <li><u>Balanced portfolio</u> of new and used equipment sales and other aftermarket offerings including parts, rentals and service</li> <li>Aftermarket revenues represented ~24% of ESG sales in Q1</li> </ul>                  | <ul style="list-style-type: none"> <li>Predominantly new equipment sales, with <u>limited</u> aftermarket revenues</li> </ul>   |
| <b>Financial Position</b>              | <ul style="list-style-type: none"> <li><u>Low debt leverage</u>; Strong balance sheet</li> <li><u>Healthy</u> cash flow generation</li> </ul>   | <ul style="list-style-type: none"> <li><u>High debt leverage</u>; Weak balance sheet</li> <li><u>Mixed</u> cash flow generation</li> </ul>  |
| <b>Opportunity for M&amp;A</b>         | <ul style="list-style-type: none"> <li><u>Ample</u> due to strong financial position, active M&amp;A pipeline and clear view of what we are looking for in acquisition candidates</li> </ul>  | <ul style="list-style-type: none"> <li><u>Limited</u> due to weak financial position and need to prioritize restructuring over pipeline development</li> </ul>                    |
| <b>Operational Performance</b>         | <ul style="list-style-type: none"> <li><u>Consistent</u> performance within target EBITDA margin ranges</li> <li>Focus on <u>operational excellence</u>, with Eighty-Two Improvement (“ETI”) initiatives the cornerstone of our operational philosophies</li> </ul> | <ul style="list-style-type: none"> <li><u>Inconsistent</u> performance with certain businesses incurring losses</li> </ul>  |
| <b>New Product Development (“NPD”)</b> | <ul style="list-style-type: none"> <li>Revamped, <u>customer-focused</u> NPD process, introducing more new products at a faster pace</li> </ul>   | <ul style="list-style-type: none"> <li><u>Limited</u> focus on NPD given due to ongoing cost constraints</li> </ul>   |



# Two Attractive Platforms

|          |   |   |   |
|----------|---|---|---|
| Segment  | Environmental Solutions Group (ESG)   |  <p>\$1.0 B*</p> <p>\$227 M*</p> <p>*TTM net sales 3/31/20</p> | Safety and Security Systems Group (SSG)   |
| Markets  | Serves municipal, industrial, and utility markets for surface and sub-surface cleaning, safe-digging, road marking, infrastructure maintenance and material hauling   |   | Serves the needs of municipalities and industrial verticals for audible and visual safety and security notification devices and systems |
| Products | <ul style="list-style-type: none"> <li>Street Sweeping</li> <li>Sewer Cleaning</li> <li>Safe Digging</li> <li>Industrial Cleaning</li> <li>Dump Bodies and Trailers</li> <li>Road-Marking and Line-Removal</li> </ul> |   | <ul style="list-style-type: none"> <li>Lights &amp; Sirens</li> <li>Signaling Devices</li> <li>Warning Systems</li> </ul>               |



# Environmental Solutions Group (ESG)

Have established a platform serving maintenance and infrastructure markets to provide customers with a comprehensive suite of products and services



Routes to Market

**Rental/Aftermarket**

**Depot Solutions**   
Provide parts / service / refurbishment / rental offering through the network of 20+ locations in US and Canada

**Dealer Network**

**US Dealer Network**

+   
Largest Canadian distributor of maintenance equipment to municipalities

**Distribution**

**US Distribution Network**










+   
For ESG products and other OEM's products such as snow equipment and garbage trucks



\*Management estimates

# Safety and Security Systems Group (SSG)

Serves the needs of government and industrial verticals for audible and visual safety and security notification devices

|                          | Public Safety and Security   | Signaling   | Systems   |
|--------------------------|--|---|---|
| Application              | Lights and siren products for Police, Fire and Heavy Duty (HD) end-markets   | Audible and visual signaling devices  | Warning Systems<br>Public Address General Alarming (PAGA)                           |
| Brands                   |    |   |  |
| Products                 |    |    |  |
| End Markets and Channels | Municipal<br>Industrial<br>Distributor   | Industrial<br>Oil & Gas<br>Commercial<br>Heavy Industry<br>Manufacturing<br>Indirect  | Municipal<br>Oil & Gas<br>Commercial<br>Direct                                      |
| Addressable Market *     | \$1.0 B  | \$600 M   | \$1.0 B   |

\* Management estimates





# COVID-19 Pandemic: How we are Responding

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## Protecting our Employees

- As “essential” businesses, our operations have to date remained largely operational
- Key area of focus has been on the safety and wellbeing of our employees; with that in mind, we were proactive in taking a number of important measures
- Following CDC and WHO guidelines to maintain safe working conditions

## Helping our Communities

- Educating customers on the ways our equipment can be used to clean and sanitize outdoor spaces
- Supporting local food banks in areas where we work and live
- Producing protective face shields for first responder customers and our employees

## Supporting our Customers

- Committed to supporting our “essential” customers with critical products, supplies and services
- Manufacturing facilities and service centers remain open with only limited, temporary closures

## Optimizing our Businesses

- Continued focus on effective working capital management; implementing measures to reduce costs
- Launching series of “offensive” strategies to accelerate future growth



# Reclaiming Tomorrow, Together

- Recently launched *Reclaiming Tomorrow, Together* initiative, which targets growth strategies during the various phases of the pandemic, in four primary areas:
  - Improving digital customer experience
  - Focusing NPD efforts on ways to make our products and the way we conduct business safer for employees, customers and end users
  - Identifying opportunities to gain market share
  - Repositioning our equipment to clean and sanitize outdoor spaces
- Visit [www.fedsigresponse.com](http://www.fedsigresponse.com)



Vector equipment being used to clean and sanitize streets on "Skid Row", Los Angeles, CA



Vector equipment being used to clean and sanitize grocery carts



**CORONAVIRUS (COVID-19) CLEANING AND SANITIZING CAPABILITIES**  
with Largest Installed Base and Rental Network In North America

Professional cleaning and sanitizing of our cities, states, and communities has never been more critical than today due to the coronavirus pandemic.

Existing Federal Signal equipment and our rental fleet can quickly be mobilized and/or modified, if needed per CDC guidance, to clean and sanitize outdoor surfaces such as sidewalks, streets, bridges, subways and other common public areas where germs can spread. As a strong partner with governments and municipalities, Federal Signal is uniquely positioned to rapidly support.



Vector®, TRUVAC®, Jetstream®, and Elgin® products are mobile machines that incorporate liquid storage and liquid pumping systems that can safely provide pressurized liquid flows to single or multiple hand-held devices or fixed nozzles for spraying. In addition, on-board hydraulic systems can be tapped to power other tools in brands 1-3 below.

- 1 **VACTOR** products also provide vacuum systems that can collect and convey materials from great distances from the machine. They can store up to 800 feet of large diameter hose allowing them to conduct liquids to remote or hard-to-reach areas like subway or elevated platforms or behind large structures.
- 2 **TRUVAC** products also provide vacuum systems that can collect and convey materials from great distances from the machine. They normally incorporate the ability to heat the liquid to temperatures near 200°F.
- 3 **ELGIN** sweepers often provide vacuum systems that can collect materials. They can pump liquids while the machine is moving at any speed.
- 4 **JETSTREAM** units are normally trailer-mounted and can be towed while pumping liquids on or off-road.

The Coronavirus (COVID-19) pandemic is a fluid and ever changing global challenge. We are committed to the health and safety of our employees, our customers, and our communities. We will all get through this together.

For more information, visit: [fedsigresponse.com](http://fedsigresponse.com)

**FEDERAL SIGNAL**  
Moves. Cleans. Protects.

1415 22nd St #1100, Oak Brook, IL 60523 | [www.federalsignal.com](http://www.federalsignal.com)  
Vector®, TRUVAC®, Jetstream®, and Elgin® are registered marks of Federal Signal Corp.  
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Ways in which our equipment can be used to clean and sanitize



# COVID-19 Pandemic: Challenges Entering Q2

- Although they had a limited impact in Q1, expect the following factors related to the COVID-19 pandemic to have a more significant impact on productivity in Q2:
  - Decrease in availability of labor at several facilities in recent weeks
  - Supply chain disruption and customer delivery challenges
  - Adjusting production processes to comply with safe-distancing guidelines
- We have adjusted production schedules accordingly, but due to these factors, expect production at some of our businesses in Q2 may be down between 20%-40% vs. prior year
- Low oil and gas prices have impacted rental fleet utilization and replenishment sales
- Orders data to date in April is mixed; some businesses continue to have a steady flow of orders, but we have seen recent order softness in other businesses
  - For example, after reporting highest quarterly orders under our ownership in Q1, TBEI has seen softer orders to date in April, with certain customers unable to secure chassis with OEMs temporarily shut down
- Coronavirus restrictions have negatively impacted sales process in some of our businesses
  - Limited ability to perform on-site demos, a critical selling tool for our safe digging equipment
- Managing through challenges, by implementing measures to reduce cost and manage capital prudently
  - Actions expected to drive savings of ~\$10 M in Q2 (*versus original internal plan for 2020*)
- Given ongoing uncertainty, outlook for 2020 was withdrawn; intend to provide update on Q2 earnings call



# Strong Balance Sheet and Financial Flexibility\*

## Strong capital structure

- Cash and cash equivalents of \$69.4 M
- \$279 M of total debt outstanding
- Net debt of ~\$210 M \*\*
- In July 2019, executed a five-year, \$500 M revolving credit facility, with flexibility to increase by additional \$250 M for acquisitions
- No debt maturities until July 2024
- Net debt leverage remains at comfortable level, essentially unchanged from end of 2019
- Compliant with all covenants with significant headroom

## Healthy cash flow and access to cash

- Generated ~\$5 M of cash from operations in Q1 2020, up \$14 M from Q1 2019
- Cash flow to date in April has met expectations, with no material change in customer delinquencies or bad debts
- ~\$211 M of availability under revolving credit facility

## Cash returns to stockholders

- Paid \$4.8 M for dividends in Q1 2020; recently declared \$0.08 per share dividend for Q2 2020
- During Q1 2020, obtained Board authorization to repurchase up to \$75 M of additional shares; spent \$13.5 M buying back ~491,000 shares

## Actions taken to maintain financial flexibility

- To bolster cash position in the short-term, borrowed ~\$64 M during Q1 2020
- Reducing discretionary capital expenditures, without deferring key ongoing initiatives (*2020 capital expenditures expected to be ~\$5 M lower than previous estimate*)
- Suspended additional share repurchases until further notice
- Implemented measures to manage working capital
- Deferring certain tax payments and pension contributions under CARES Act



\* Dollar amounts as of, or for the quarter ending 3/31/2020

\*\* Net debt is a non-GAAP measure and is computed as total debt of \$278.9 M, less total cash and cash equivalents of \$69.4 M



# Key Strategic Initiatives

Areas of  
Focus

Safe Digging



Aftermarket Parts and  
Services



Specialty Vehicles for  
Diverse  
End-Markets



Audible and Visual  
Warning Devices



Supported By

Flexible  
Manufacturing & “ETI”  
Culture

New Product  
Development

Technology as an  
Enabler

Disciplined M&A



# Strategic Initiative– Safe Digging

**Federal Signal is well positioned to establish a leading position in an emerging application for vacuum-excitation technology; increased regulation expected to accelerate growth**

## What is it?

- Vacuum excavation or “Safe Digging” involves the use of pressurized air or water (“hydro-excavation”) to dig (coupled with a vacuum system) as an alternative to the use of traditional equipment such as backhoes and mechanical excavators
- Acceptance of safe-digging applications continues to improve significantly over the last decade
- Application has been widely accepted in Canada; US is behind but great early indicators – 19 states now include vacuum excavation as part of “safe excavation practices”

## Why is it Attractive?

- In many circumstances, vacuum excavation is a safer and more productive means for digging (in comparison to traditional excavation)
- Significantly minimizes chances of damage to underground infrastructure during the digging process
- Less intrusive to the surrounding site at point of digging
- Provides opportunity for the use of our broad range of offerings in new and emerging end markets beyond oil and gas

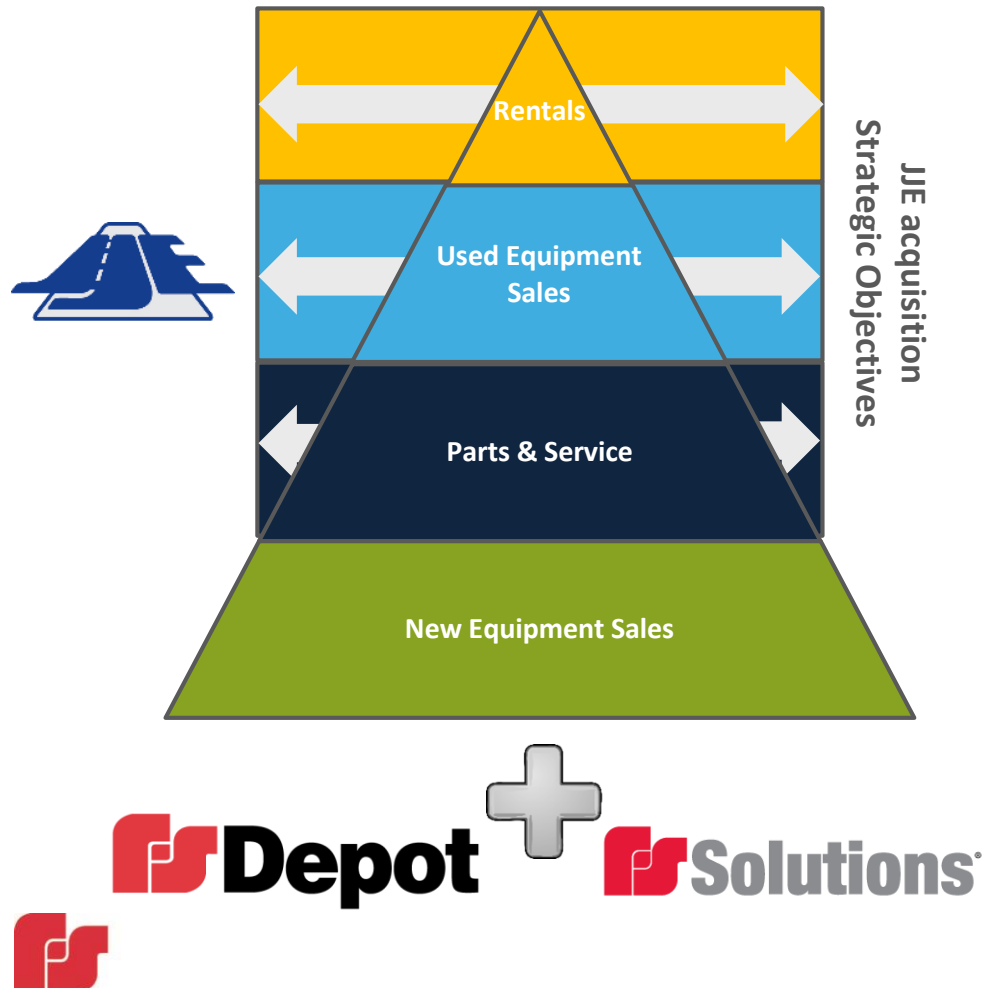
## Why Federal Signal?

- Sole manufacturer of complete range of truck-mounted safe-digging equipment, with applications across a number of end-markets
- 30-year track record of manufacturing leading vacuum-excitation products
- Widest service and support network for vacuum-excitation products
- Best-in-class payload for Ontario market
- Dedicated and experienced sales organization in place to support initiative
- Orders for safe-digging equipment in 2019 were up ~\$29M, or 28%, compared to 2018



# Strategic Initiative– Aftermarket Parts & Services

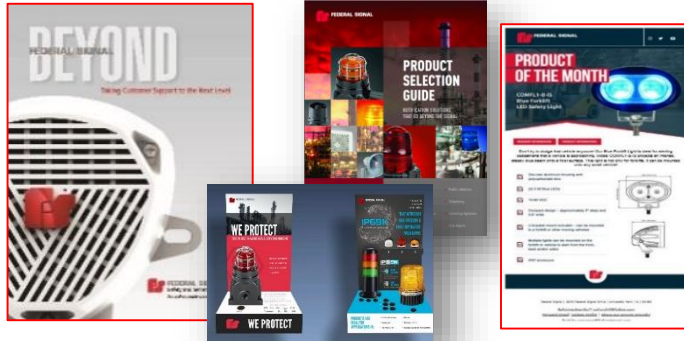
Optimizing platform to transform Federal Signal's aftermarket business into an industry leader of parts and services to maintenance and infrastructure markets



- Unified platform to serve municipal and industrial customers across all ESG businesses
- Undivided focus on growing and optimizing Federal Signal's non-whole goods capabilities
- Areas of focus:
  - E-commerce capability development
  - Joint procurement initiatives to optimize input costs
  - Pricing harmonization across customers
  - Alternative ownership structures – rental and used equipment
- ESG's rental income in 2019 increased by 11% vs. 2018, while total aftermarket revenues grew by 13% over the same period

# Strategic Initiative– Audible & Visual Warning Devices

SSG businesses focused on optimizing their existing channels and expanding product offerings



## Optimize Channel

- Pricing / Promotion strategy
- E-commerce platform development
- New product development focus on addressing adjacent market verticals
- Capitalize on existing installed base
- Strategic geographical expansion and distributor rationalization



## Product Portfolio Expansion

- “Allegiant” – low cost lightbar to expand addressable market
- “Pathfinder” siren – superior product features at lower price point
- Integrated systems managing lights, sirens, automatic license plate recognition (“ALPR”) video, and other critical vehicle functions



## Smart Products

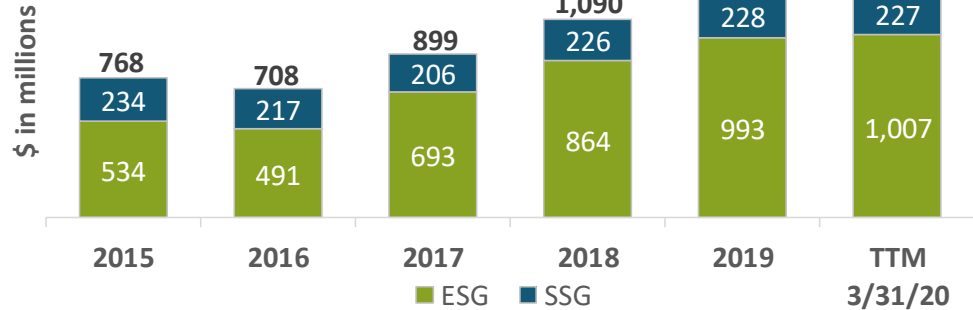
- CommanderOne – monetization of existing installed base for outdoor warning products
- Smart peripheral lights for police, fire, and heavy duty markets
- Multifunction, intelligent and connected industrial signaling products



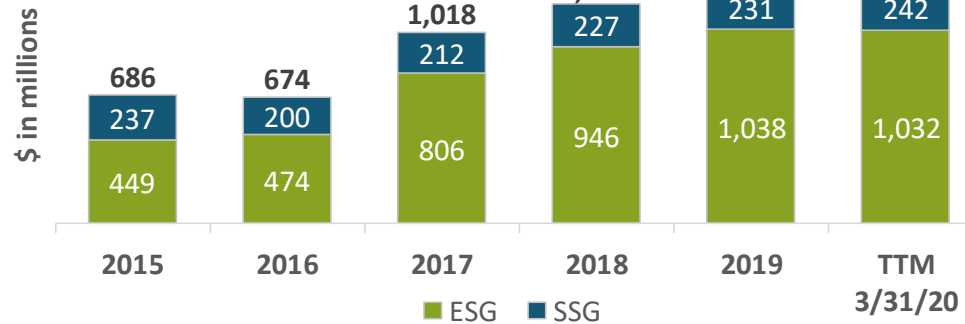


# Profitable Growth Execution

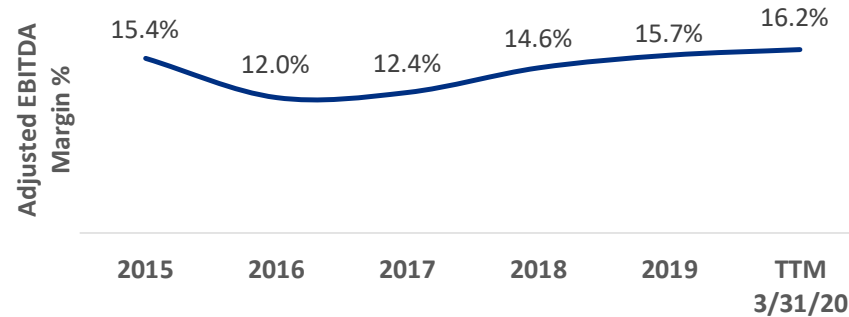
## Net Sales



## Orders



## Adjusted EBITDA Margin\* (Consolidated)



### Target EBITDA Margin ranges<sup>1</sup>

- ESG: 15% - 18%
- SSG: 15% - 18%
- Consolidated: 12% - 16%
  - Historical EBITDA margins and targets place Federal Signal in the top tier of its peer group of specialty vehicle manufacturers

(1) Underlying assumptions: Absence of extraordinary factors affecting demand from end-markets; No unusual hearing loss litigation expenses

## Q1 2020 Highlights<sup>2</sup>:

- Strong start to the year, despite exceptionally difficult circumstances
- Net sales of \$286M, up \$12M, or 4%
- Operating income of \$32.3M, up \$6.5M, or 25%
- Adjusted EBITDA\* of \$43.9M, up \$8.0M, or 22%
- Improved adjusted EBITDA margin\* of 15.3%, up from 13.1%; towards high end of target range
- GAAP EPS of \$0.38, up 31% from \$0.29
- Adjusted EPS\* of \$0.39, up 30% from \$0.30
- Orders of \$304M, up \$5M, or 2%
- Record backlog of \$401M, up \$37M, or 10%, from Q1 last year, and up \$14M, or 4%, from end of 2019

(2) Comparisons to Q1 2019, unless otherwise noted

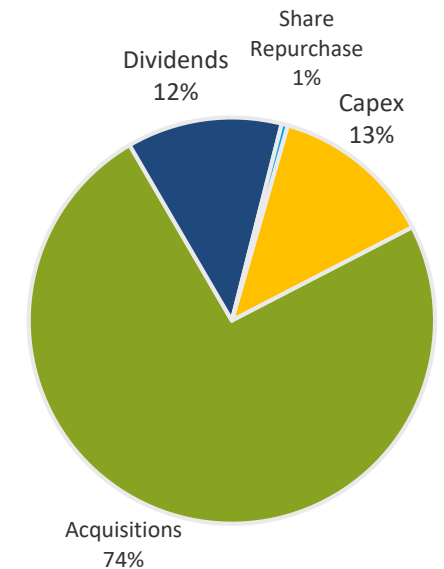


\*Adjusted EBITDA, Adjusted EBITDA Margin and Adjusted EPS are non-GAAP measures. See Appendix V for additional information, including reconciliation to GAAP measures.

# Priority Driven Long-Term Capital Allocation

|                                 |   |
|---------------------------------|---|
| <b>Reinvest in the Business</b> | <ul style="list-style-type: none"> <li>Organic projects leverage existing assets, generally require limited cash investment</li> <li>Innovation R&amp;D efforts target new and updated products</li> <li>Generally, funded within operating results, cash flow and normal cap ex</li> <li>In 2020, anticipating cap ex in the range of \$25M-\$30M, including investments associated with ongoing plant expansions</li> </ul>                             |
| <b>Acquisitions</b>             | <ul style="list-style-type: none"> <li>Completed acquisitions of MRL for initial payment of \$50M (Q3 2019), TBEI for \$270M (Q2 2017), and JJE for initial payment of C\$126M (Q2 2016)</li> <li>Focused primarily on acquisitions that fit closely within our existing products and services, manufacturing competencies, channels and customers</li> <li>In Q3 2019, funded \$13.4M payout associated with JJE earnout and deferred payment</li> </ul> |
| <b>Dividend Policy</b>          | <ul style="list-style-type: none"> <li>Provide a competitive dividend yield while funding business growth</li> <li>At \$0.08 per share, dividend yield is ~1.1%</li> <li>Paid dividends of \$4.8M in Q1 2020 and \$19.3M for full year 2019</li> </ul>  |
| <b>Share Repurchases</b>        | <ul style="list-style-type: none"> <li>Opportunistic share buybacks as a return of cash to our shareholders</li> <li>During Q1 2020, obtained Board authorization to repurchase up to \$75 M of additional shares; spent \$13.5 M buying back ~491,000 shares</li> <li>~\$91 M of repurchase authorization remaining under current programs (~5% of market cap)</li> </ul>  |

## Cash Deployment (2017-19)<sup>1</sup>



1) Chart depicts use of cash for each category, relative to the total cash used on all four activities, for the cumulative period 2017-19; excludes investment in rental fleet, which is reported as part of operating cash flows



# Factors Expected to Drive Long-Term Growth

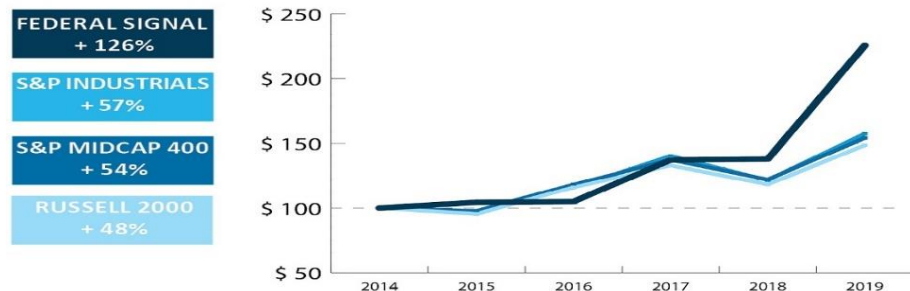
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- ▲ Clearly-defined strategy with history of successful execution against key initiatives
- ▲ Newly-identified offensive strategies, including *Reclaiming Tomorrow, Together* initiative
- ▲ Strong financial position – low net debt leverage and ample liquidity
- ▲ Robust cash flow generation
- ▲ M&A opportunities with potential for more reasonable valuation expectations
- ▲ Track record of strategic acquisitions, which have been immediately accretive
- ▲ Record backlog at end of Q1
- ▲ With diversification of revenue streams, end markets and product offerings, Federal Signal is a different, more stable and more diversified business than it was during prior downturns
- ▲ Healthy “essential” businesses which have to date remained largely operational
- ▲ Most of our businesses would stand to benefit from an expected infrastructure bill
- ▲ Established dealer network providing municipalities with essential services; water tax revenues are also a source of funding
- ▲ Expanded federal funding available to municipalities



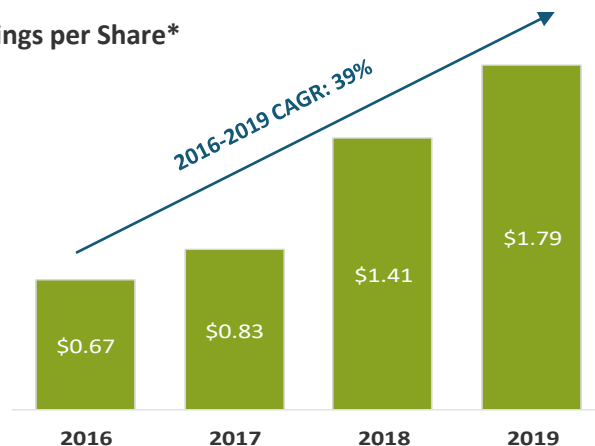
# Positioned for Long-Term Growth

With continued focus on organic growth and M&A, and margin performance above that of many of our peers, our financial framework aims to create long-term shareholder value



This graph assumes that the value of the investment in the Company's common stock, and in each index, was \$100 on December 31, 2014 and assumes reinvestment of all dividends through December 31, 2019.

Adjusted Earnings per Share\*  
(US\$ / share)



\*Adjusted earnings per share is a non-GAAP measure. See Appendix V for additional information, including reconciliation to GAAP measures.

Long-Term Organic  
Revenue Growth

(Couple of % points > GDP)



Value-Added  
Acquisitions

High Single Digit Revenue Growth

EBITDA Margin  
Targets:

ESG: 15-18%  
SSG: 15-18%  
Consolidated: 12-16%

Cash Conversion:  
~100% of net income

ROIC > Cost of  
Capital





# Appendix

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- I. Segments Overview
- II. Eighty-Two Improvement Culture
- III. New Product Development
- IV. Disciplined M&A Process
- V. Non-GAAP Measures
- VI. Executive Compensation
- VII. Investor Information



# Appendix I: ESG Products





# Appendix I: ESG Products (continued)



**CRYSTEEL**  
A subsidiary of Federal Signal Corporation

**DURACLASS**  
A subsidiary of Federal Signal Corporation

**J-CRAFT**

**OX BODIES**  
A subsidiary of Federal Signal Corporation

**Rugby**  
A subsidiary of Federal Signal Corporation

**Travis**  
BODY & TRAILER, INC.

**MRL**  
MRL EQUIPMENT COMPANY, INC.  
A subsidiary of Federal Signal Corporation

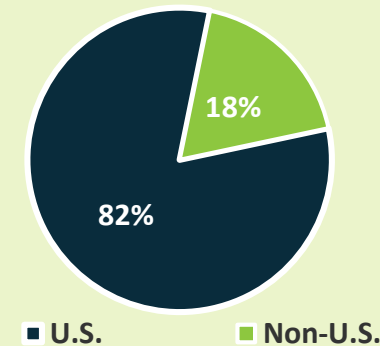


# Appendix I: ESG - Market Influencers & Where We Play

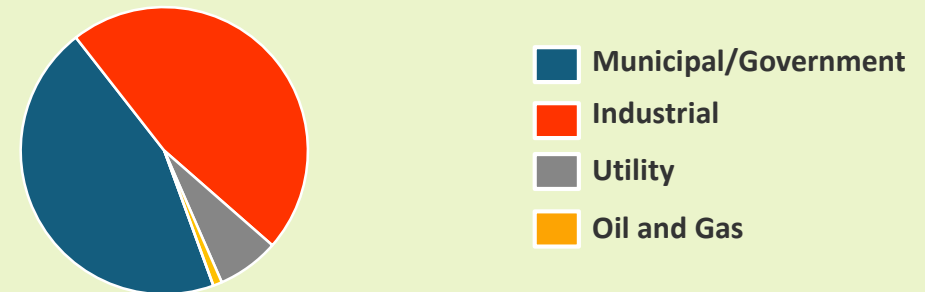
## Market Dynamics

- Economic recovery supports state and local funding for street sweepers and sewer cleaners
  - Funding for sewer cleaners through water tax revenues adds further stability
- Continued recovery in oil & gas markets benefiting hydro-excavation and industrial cleaning business
- Aging infrastructure, pipeline expansion, and increasing urbanization support long-term demand for safe digging products, dump bodies and trailers
- Healthy housing market and improving industrial activity supports growth opportunities for dump bodies and trailers
- Upsides from prospective infrastructure spending, if any approved
- Tracking new housing starts, Class 8 truck chassis, municipal spending, oil rig counts, and overall industrial activity

2019 Sales by Geography



2019 End Markets by Users



Source: Management Estimates







**FEDERAL SIGNAL**  
Safety and Security Systems  
Public Safety Systems

## FEDERAL SIGNAL

Safety and Security Systems  
Heavy Duty

## FEDERAL SIGNAL

## FEDERAL SIGNAL

Safety and Security Systems  
Systems

## FEDERAL SIGNAL VAMA

### Safety and Security Systems

# Victor

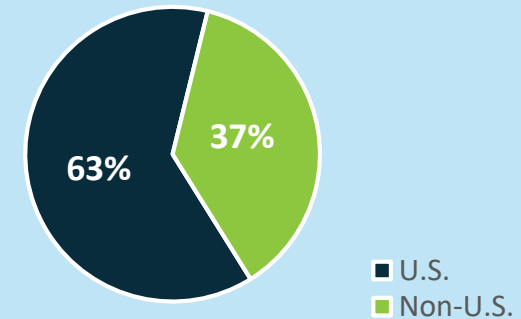


# Appendix I: SSG - Market Influencers & Where We Play

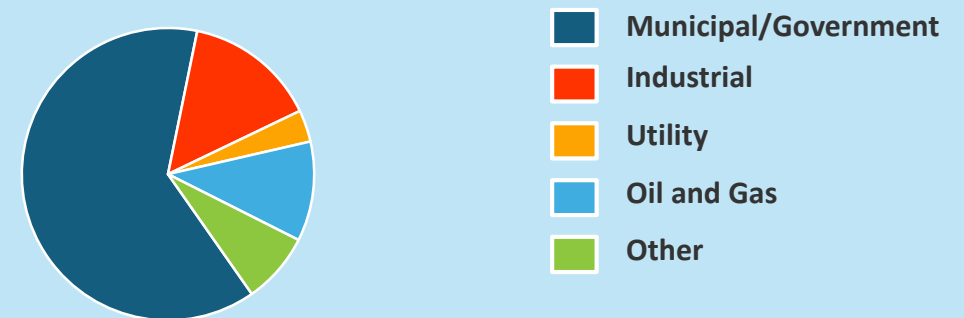
## Market Dynamics

- Increased national focus on issues of public safety and law enforcement, and rising public expectations for transparency and accountability driving demand for safety and security products
- Recovery in oil & gas will benefit signaling products and systems applications for hazardous areas
- Rising occurrence of natural and man-made disasters
- Shift in customer preference towards inter-connected platforms expected to drive demand for security systems integration
- Tracking police data that indicates the number of new police vehicle registrations; 2019 demand temporarily impacted by Ford's model year changeover

2019 Sales by Geography



2019 End Markets by Users



Source: Management Estimates



# Appendix II: Eighty-Two Improvement (“ETI”) Culture

## Material Cost Reduction

- Waste reduction
- SKU rationalization
- Savings through volume aggregation
- Sourcing optimization



## Manufacturing Efficiency

- Lean manufacturing focus
- Throughput flexibility
- Labor pool management
- Flexible manufacturing model
- Recent investments in machinery expected to result in productivity improvements

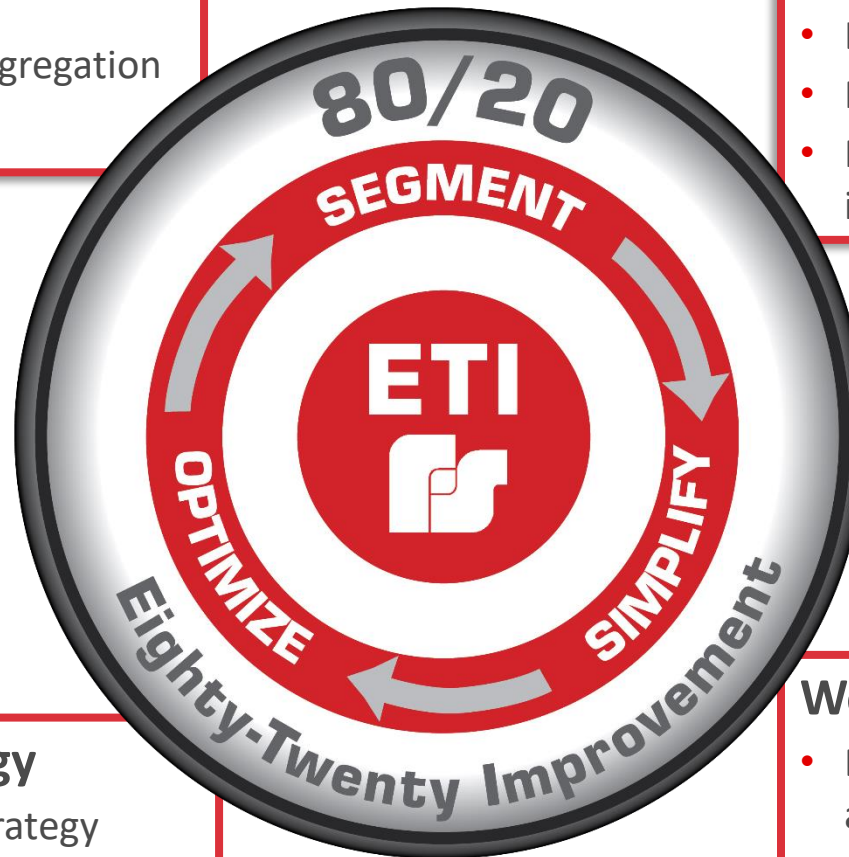


## Pricing Strategy

- Parts pricing strategy
- Effective “options” pricing

## Working Capital Optimization

- Derived benefits from manufacturing efficiencies and SKU rationalization
- Improved cycle times to drive inventory reductions





# Appendix III: New Product Development

## Customer-Focused Process

- Complete change in approach to innovation, starting in 2013
- Current innovation organization has had a number of successes, including the record-breaking launch of the ParaDIGm vacuum excavator
  - Most successful new product launch in over a decade
  - Initial market demand exceeding expectations
- In 2018, announced acceleration of innovation initiatives to drive long-term organic growth; targeting long-term organic revenue growth of a couple percentage points above GDP



## Environmental Solutions Group (ESG)

- Sewer Cleaner productivity improvements such as advanced controls and a new, revolutionary boom design
- All-New Vactor iMPACT™ compact sewer cleaner
- All-New RegenX™ regenerative air sweeper, and new single-engine versions of legacy sweepers
- All-New HXX Vacuum Excavator with improved payload carrying capacity
- Jetstream portfolio of tools and accessories
- All-New TRUVAC™ Coyote Vacuum Excavator
- Street sweeper-based road condition assessment service offering
- Recently released plug-in, hybrid electric sweeper
- World Sweeping Association's 2020 Award of Excellence in Power Sweeping



## Safety and Security Systems Group (SSG)

- Automatic License Plate Recognition (ALPR) Systems
- CommanderOne Direct Messaging (SMS/Phone)
- Smart Police Vehicle Systems
- Next-Generation PAGA
- Global Series Signaling Devices
- Allegiant Police Light Bar
- Pathfinder Siren Suite



# Appendix IV: Disciplined M&A

**Target companies that accelerate our current strategic initiatives or provide a platform for growth in adjacent markets or new geographies**

## Business Characteristics

- Niche market leader (product, geography, end-market)
- Sustainable competitive advantage
- Deep domain expertise (technology, application, manufacturing)
- Strong management team
- Leverages our distribution and manufacturing capabilities

## Financial Characteristics

- Solid growth potential
- Through-the-cycle margins comparable to or higher than our target margins
- Ideally, identifiable synergies and recurring revenue opportunities
- Return on capital greater than our cost of capital, appropriately adjusted for risk





# Appendix V: Non-GAAP Measures

- Impact of 2019 Lease Accounting Standard Adoption on historical non-GAAP measures - Effective January 1, 2019, the Company adopted the new lease accounting standard, which resulted in a change to the Company's recognition of the deferred gain associated with historical sale lease-back transactions. Prior to 2019, approximately \$1.9 M of the deferred gain had been recognized each year since 2008, of which approximately \$1.1 M and \$0.8 M had been recognized within ESG and SSG, respectively. Effective in 2019, the Company no longer recognizes any portion of the gain through the Consolidated Statement of Operations, and recognized the remaining deferred gain balance, net of the related deferred tax asset, as a cumulative effect adjustment to opening retained earnings. To facilitate comparisons with prior periods, we have revised our previously-issued non-GAAP results to exclude the recognition of this deferred gain.
- Adjusted net income, income from continuing operations and earnings per share ("EPS") - The Company believes that modifying its net income, income from continuing operations (where applicable) and diluted EPS provides additional measures which are representative of the Company's underlying performance and improves the comparability of results between reporting periods. During the three months ended March 31, 2020 and 2019, adjustments were made to reported GAAP net income and diluted EPS to exclude the impact of acquisition and integration-related expenses, coronavirus-related expenses, and purchase accounting effects, where applicable. During the years ended December 31, 2016 through December 31, 2019, adjustments were made to reported GAAP income from operations and diluted EPS to exclude the impact of restructuring activity, executive severance costs, acquisition and integration-related expenses, purchase accounting effects, pension settlement charges, hearing loss settlement charges, debt settlement charges and special tax items, where applicable.
- Adjusted EBITDA and adjusted EBITDA margin - The Company uses adjusted earnings before interest, tax, depreciation and amortization ("adjusted EBITDA") and the ratio of adjusted EBITDA to net sales ("adjusted EBITDA margin") 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 are meaningful metrics to investors in evaluating the Company's underlying financial performance. Adjusted EBITDA is a non-GAAP measure that represents the total of net income (or income from continuing operations, where applicable), interest expense, pension settlement charges, hearing loss settlement charges, debt settlement charges, acquisition and integration-related expenses, coronavirus-related expenses, purchase accounting effects, other income/expense, income tax expense and depreciation and amortization expense, where applicable. Consolidated adjusted EBITDA margin is a non-GAAP measure that represents the total of net income (or income from continuing operations, where applicable), interest expense, pension settlement charges, hearing loss settlement charges, debt settlement charges, acquisition and integration-related expenses, coronavirus-related expenses, purchase accounting effects, other income/expense, income tax expense and depreciation and amortization expense, where applicable, divided by net sales for the applicable period(s). Other companies may use different methods to calculate adjusted EBITDA and adjusted EBITDA margin.



# Appendix V: Adjusted Earnings Per Share

| (\$ in millions, except EPS)                 | Three Months Ended March 31, |             |           |             |
|--|------------------------------|-------------|-----------|-------------|
|  | 2020                         |             | 2019      |             |
| Net income                                   | \$                           | 23.4        | \$        | 17.5        |
| <i>Add:</i>                                  |                              |             |           |             |
| Income tax expense                           |                              | 7.2         |           | 5.9         |
| Income before income taxes                   |                              | 30.6        |           | 23.4        |
| <i>Add:</i>                                  |                              |             |           |             |
| Acquisition and integration-related expenses |                              | 0.3         |           | 0.6         |
| Coronavirus-related expenses (1)             |                              | 0.4         |           | -           |
| Purchase accounting effects (2)              |                              | 0.2         |           | 0.1         |
| Adjusted income before income taxes          | \$                           | 31.5        | \$        | 24.1        |
| Adjusted income tax expense (3)              |                              | (7.4)       |           | (6.0)       |
| <b>Adjusted net income</b>                   | <b>\$</b>                    | <b>24.1</b> | <b>\$</b> | <b>18.1</b> |
| Diluted EPS                                  | \$                           | 0.38        | \$        | 0.29        |
| <b>Adjusted diluted EPS</b>                  | <b>\$</b>                    | <b>0.39</b> | <b>\$</b> | <b>0.30</b> |

(1) Coronavirus-related expenses in the three months ended March 31, 2020 relate to direct expenses incurred in connection with the Company's response to the coronavirus pandemic, that are incremental, and separable from, normal operations.

(2) Purchase accounting effects relate to adjustments to exclude the step-up in the valuation of acquired JJE equipment that was sold subsequent to the acquisition in the three months ended March 31, 2020 and 2019, as well as to exclude the depreciation of the step-up in the valuation of the rental fleet acquired.

(3) Adjusted income tax expense for the three months ended March 31, 2020 and 2019 was recomputed after excluding the impact of acquisition and integration-related expenses, coronavirus-related expenses, and purchase accounting effects, where applicable.



# Appendix V: Adjusted Earnings Per Share (cont.)

| (\$ in millions, except EPS)                                  | Year Ended December 31, |                |                |                 |
|---|-------------------------|----------------|----------------|-----------------|
|   | 2016                    | 2017           | 2018           | 2019            |
| Income from continuing operations                             | \$ 39.4                 | \$ 60.5        | \$ 93.7        | \$ 108.4        |
| <u>Add:</u>   |                         |                |                |                 |
| Income tax expense  | 17.4                    | 0.5            | 17.9           | 30.2            |
| Income before income taxes                                    | 56.8                    | 61.0           | 111.6          | 138.6           |
| <u>Add:</u>   |                         |                |                |                 |
| Restructuring   | 1.7                     | 0.6            | -              | -               |
| Executive severance costs                                     | -                       | 0.7            | -              | -               |
| Acquisition and integration-related expenses                  | 1.4                     | 2.7            | 1.5            | 2.5             |
| Purchase accounting effects (1)                               | 3.9                     | 4.8            | 1.2            | 0.8             |
| Pension settlement charges                                    | -                       | 6.1            | -              | -               |
| Hearing loss settlement charges                               | -                       | 1.5            | 0.4            | -               |
| Debt settlement charges                                       | 0.3                     | -              | -              | -               |
| Adjusted income before income taxes                           | \$ 64.1                 | \$ 77.4        | \$ 114.7       | \$ 141.9        |
| Adjusted income tax expense (2)(3)(4)(5)                      | (22.1)                  | (26.3)         | (27.2)         | (31.8)          |
| <b>Adjusted income from continuing operations</b>             | <b>\$ 42.0</b>          | <b>\$ 51.1</b> | <b>\$ 87.5</b> | <b>\$ 110.1</b> |
| <u>Less:</u>  |                         |                |                |                 |
| Deferred gain recognition, net of income tax (6)              | (1.3)                   | (1.3)          | (1.5)          | -               |
| <b>Adjusted income from continuing operations, as revised</b> | <b>\$ 40.7</b>          | <b>\$ 49.8</b> | <b>\$ 86.0</b> | <b>\$ 110.1</b> |
| Diluted EPS   | \$ 0.64                 | \$ 1.00        | \$ 1.53        | \$ 1.76         |
| <b>Adjusted diluted EPS</b>                                   | <b>\$ 0.69</b>          | <b>\$ 0.85</b> | <b>\$ 1.43</b> | <b>\$ 1.79</b>  |
| <b>Adjusted diluted EPS, as revised</b>                       | <b>\$ 0.67</b>          | <b>\$ 0.83</b> | <b>\$ 1.41</b> | <b>\$ 1.79</b>  |

(1) Purchase accounting effects relate to adjustments to exclude the step-up in the valuation of equipment acquired in connection with recent acquisitions that was sold subsequent to the acquisition dates in the years ended December 31, 2019, 2018, 2017, and 2016, as well as to exclude the depreciation of the step-up in the valuation of the rental fleet acquired in the JJE transaction.

(2) Adjusted income tax expense for the year ended December 31, 2019 excludes a \$0.8 million benefit from changes in state deferred tax valuation allowances. Adjusted income tax expense for the year ended December 31, 2019 also excludes the tax effects of acquisition and integration-related expenses and purchase accounting effects.

(3) Adjusted income tax expense for the year ended December 31, 2018 excludes an \$8.6 million net tax benefit associated with tax planning strategies. Adjusted income tax expense for the year ended December 31, 2018 also excludes the tax effects of acquisition and integration-related expenses, purchase accounting effects and hearing loss settlement charges.

(4) Adjusted income tax expense for the year ended December 31, 2017 excludes a \$20.0 million net tax benefit, representing the Company's preliminary estimate of the impact of the 2017 Tax Act, and a \$0.8 million benefit from changes in state deferred tax valuation allowance. Adjusted income tax expense for the year ended December 31, 2017 also excludes \$0.6 million of tax expense associated with a change in the enacted state tax rate in Illinois, and the tax effects of restructuring activity, executive severance costs, acquisition and integration-related expenses, purchase accounting effects, hearing loss settlement charges and pension settlement charges.

(5) Adjusted income tax expense for the year ended December 31, 2016 excludes a \$2.2 million net benefit resulting from changes in deferred tax valuation allowances in Canada and the U.K. Adjusted income tax expense for the year ended December 31, 2016 also excludes the tax effects of restructuring activity, acquisition and integration-related expenses, purchase accounting effects and debt settlement charges.

(6) Adjustment to exclude recognition of deferred gain associated with historical sale lease-back transactions. Effective 2019, the Company no longer recognizes the gain due to the adoption of new lease accounting standard.



# Appendix V: Adjusted EBITDA

*\$ millions, except %*

|  | <u>Q1 2020</u>  | <u>Q1 2019</u>  |
|--|-----------------|-----------------|
| <b>Net income</b>                            | <b>\$ 23.4</b>  | <b>\$ 17.5</b>  |
| <b>Add:</b>                                  |                 |                 |
| Interest expense                             | 1.5             | 2.0             |
| Acquisition and integration-related expenses | 0.3             | 0.6             |
| Coronavirus-related expenses                 | 0.4             | -               |
| Purchase accounting effects *                | 0.1             | -               |
| Other expense, net                           | 0.2             | 0.4             |
| Income tax expense                           | 7.2             | 5.9             |
| Depreciation and amortization                | 10.8            | 9.5             |
| <b>Consolidated adjusted EBITDA</b>          | <b>\$ 43.9</b>  | <b>\$ 35.9</b>  |
| <b>Net Sales</b>                             | <b>\$ 286.1</b> | <b>\$ 273.8</b> |
| <b>Consolidated adjusted EBITDA margin</b>   | <b>15.3%</b>    | <b>13.1%</b>    |

*\* Excludes purchase accounting expense effects included within depreciation and amortization of \$0.1 million and \$0.1 million for the three months ended March 31, 2020 and 2019, respectively*



# Appendix V: Adjusted EBITDA (cont.)

| (\$ in millions)                             | 2015           | 2016           | 2017           | 2018             | 2019             | TTM<br>3/31/20   |
|--|----------------|----------------|----------------|------------------|------------------|------------------|
| <b>Net Sales</b>                             | <b>\$768.0</b> | <b>\$707.9</b> | <b>\$898.5</b> | <b>\$1,089.5</b> | <b>\$1,221.3</b> | <b>\$1,233.6</b> |
| Income from continuing operations            | 65.8           | 39.4           | 60.5           | 93.7             | 108.4            | 114.3            |
| Add:   |                |                |                |                  |                  |                  |
| Interest expense                             | 2.3            | 1.9            | 7.3            | 9.3              | 7.9              | 7.4              |
| Pension settlement charges                   | -              | -              | 6.1            | -                | -                | -                |
| Hearing loss settlement charges              | -              | -              | 1.5            | 0.4              | -                | -                |
| Debt settlement charges                      | -              | 0.3            | -              | -                | -                | -                |
| Acquisition and integration-related expenses | -              | 1.4            | 2.7            | 1.5              | 2.5              | 2.2              |
| Coronavirus-related expenses (a)             | -              | -              | -              | -                | -                | 0.4              |
| Restructuring                                | 0.4            | 1.7            | 0.6            | -                | -                | -                |
| Executive severance costs                    | -              | -              | 0.7            | -                | -                | -                |
| Purchase accounting effects (b)              | -              | 3.6            | 4.4            | 0.7              | 0.2              | 0.3              |
| Other expense (income), net                  | 5.2            | 1.8            | (0.8)          | 0.6              | 0.6              | 0.4              |
| Income tax expense                           | 34.1           | 17.4           | 0.5            | 17.9             | 30.2             | 31.5             |
| Depreciation and amortization                | 12.3           | 19.1           | 30.0           | 36.4             | 41.5             | 42.8             |
| <b>Adjusted EBITDA</b>                       | <b>\$120.1</b> | <b>\$ 86.6</b> | <b>\$113.5</b> | <b>\$ 160.5</b>  | <b>\$ 191.3</b>  | <b>\$ 199.3</b>  |
| Less: Deferred gain recognition (c)          | (1.9)          | (1.9)          | (2.0)          | (1.9)            | -                | -                |
| <b>Adjusted EBITDA, as revised</b>           | <b>\$118.2</b> | <b>\$ 84.7</b> | <b>\$111.5</b> | <b>\$ 158.6</b>  | <b>\$ 191.3</b>  | <b>\$ 199.3</b>  |
| <b>Adjusted EBITDA Margin</b>                | <b>15.6%</b>   | <b>12.2%</b>   | <b>12.6%</b>   | <b>14.7%</b>     | <b>15.7%</b>     | <b>16.2%</b>     |
| <b>Adjusted EBITDA Margin, as revised</b>    | <b>15.4%</b>   | <b>12.0%</b>   | <b>12.4%</b>   | <b>14.6%</b>     | <b>15.7%</b>     | <b>16.2%</b>     |

(a) Coronavirus-related expenses in the trailing twelve months ended March 31, 2020 relate to direct expenses incurred in connection with the Company's response to the coronavirus pandemic, that are incremental to, and separable from, normal operations.

(b) Excludes purchase accounting effects reflected in depreciation and amortization of \$0.3 M, \$0.4 M, \$0.5 M, \$0.6 M, and \$0.6M for 2016, 2017, 2018, 2019, and TTM 3/31/20, respectively.

(c) Adjustment to exclude recognition of deferred gain associated with historical sale lease-back transactions. Effective 2019, the Company no longer recognizes the gain due to the adoption of new lease accounting standard.





# Appendix VI: Executive Compensation Aligned with Long-term Objectives

- The Company continues to focus on executing against a number of key long-term objectives, which include the following:
  - Creating disciplined growth
  - Improving manufacturing efficiencies and costs
  - Leveraging invested capital
  - Diversifying our customer base

| One Year   | Three Years | Ten Years   |
|--|-------------|---|
| Cash Bonus (STIP) <ul style="list-style-type: none"><li>• Earnings (55%)</li><li>• EBITDA Margin (15%)</li><li>• Individual Objectives (30%)</li></ul> |             | <b>Short-Term</b><br><u>Annual Goals</u> <ol style="list-style-type: none"><li>1. Profitability and growth</li><li>2. Market share</li></ol>  |
| Performance Share Units <ul style="list-style-type: none"><li>• EPS (75%)</li><li>• Return on Invested Capital (25%)</li></ul>                         |             | <b>Long-Term</b><br><u>3-year Performance and Vesting Periods</u> <ol style="list-style-type: none"><li>1. Profitability and growth</li><li>2. Shareholder value creation</li><li>3. Facilitates stock ownership</li><li>4. Executive retention</li></ol> |
| Restricted Stock Awards  |             | <b>Long-Term</b><br><u>3-year Cliff Vesting</u> <ol style="list-style-type: none"><li>1. Executive recruitment</li><li>2. Executive retention</li><li>3. Facilitates stock ownership</li></ol>  |
| Share Price Appreciation <ul style="list-style-type: none"><li>• Stock Options</li></ul>   |             | <b>Longer-Term</b><br><u>3-year Ratable Vesting Period and 10 Year Exercise Period</u> <ol style="list-style-type: none"><li>1. Shareholder value creation</li><li>2. Facilitates stock ownership</li><li>3. Executive retention</li></ol>                |



# Appendix VII: Investor Information

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**Stock Ticker:** NYSE:FSS

**Company website:** [federalsignal.com/investors](https://federalsignal.com/investors)

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**FEDERAL SIGNAL**

*Moves. Cleans. Protects.*