



**Federal Signal Corporation**  
**First Quarter 2021 Earnings Call**  
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## CORPORATE PARTICIPANTS

**Ian Hudson**, *Senior Vice President, Chief Financial Officer*

**Jennifer Sherman**, *President, Chief Executive Officer*

## CONFERENCE CALL PARTICIPANTS

**Ken Newman**, *Keybanc*

**Mike Shlisky**, *Collier Securities*

**Felix Boeschen**, *Raymond James*

**Walter Liptak**, *Seaport Global*

**Chris Moore**, *CJS Securities*

**Greg Burns**, *Sidoti & Company*

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## PRESENTATION

### Operator

Greetings and welcome to Federal Signal Corporation's First Quarter Earnings Conference Call.

As a reminder, this conference is being recorded.

I would now like to turn the conference over to your host today, Mr. Ian Hudson, Chief Financial Officer. Thank you sir, you may begin.

### Ian Hudson

Good morning and welcome to Federal Signal's first quarter 2021 conference call. I'm Ian Hudson, the Company's Chief Financial Officer. Also with me on the call today is Jennifer Sherman, our President and Chief Executive Officer.

We will refer to some presentation slides today as well as to the earnings new release, which we issued this morning. The slides can be followed online by going to our website, [federalsignal.com](http://federalsignal.com), clicking on the Investor Call icon, and signing into the webcast. We have also posted the slide presentation and the earnings release under the Investors tab on our website.

Before we begin, I'd like to remind you that some of our comments made today may contain forward-looking statements that are subject to the Safe Harbor language found in today's news release and in Federal Signal's filings with the Securities and Exchange Commission. These documents are available on our website. Our presentation also contains some measures that are not in accordance with U.S. generally accepted accounting principles. In our earnings release and filings, we reconcile these non-GAAP measures to GAAP measures. In addition, we will file our Form 10-Q later today.

I'm going to begin today by providing some detail on our first quarter results before turning the call over to Jennifer to provide her perspective on current market conditions, our progress against strategic initiatives, and our outlook for the remainder of the year. After our prepared comments, Jennifer and I will address your questions.

Our consolidated first quarter financial results are provided in today's earnings release. In summary, we delivered another strong quarter with record orders and operating results exceeding our expectations despite ongoing pandemic-related disruptions. We also had to navigate through the February ice storms in the south which caused us to temporarily close our facilities in Texas, Alabama and Mississippi. Fortunately, we did not experience any significant damage, but we did lose several days of production. Despite these challenges, the team's recovered well with both groups delivering Adjusted EBITDA margins at or above levels achieved in the first quarter of last year. That feat is even more impressive given the strength of the prior year quarter, which included record production at our largest facility and minimal impact from the pandemic.

Turning now to the numbers, where consolidated net sales for the quarter were \$279 million compared to \$286 million last year. Consolidated operating income for the quarter was \$27.8 million compared to \$32.3 million last year. Consolidated Adjusted EBITDA for the quarter was \$41.2 million compared to \$43.9 million last year. That translates to a margin of 14.8% in Q1 this year compared to 15.3% last year.

Net income for the quarter was \$22.2 million compared to \$23.4 million last year. That equates to GAAP EPS for the quarter of \$0.36 per share compared to \$0.38 per share last year. On an adjusted basis, EPS for the quarter was \$0.38 per share compared to \$0.39 per share last year.

Order intake for the quarter was outstanding with orders of \$384 million, representing our highest quarterly orders on record and an increase of \$80 million or 26% compared to Q1 last year. Consolidated backlog at the end of the quarter also set a new Company record at \$410 million - that represents an increase of \$9 million compared to Q1 last year and an increase of \$106 million or 35% from the end of 2020.

In terms of our group results, ESG net sales for the quarter were \$228 million compared to \$233 million last year. ESG's operating income for the quarter was \$27.1 million compared to \$29.4 million last year. ESG's Adjusted EBITDA for the quarter was \$39.3 million compared to \$40 million in the prior year. That translates to an Adjusted EBITDA margin of 17.2%, in line with last year. ESG reported orders of \$324 million in Q1 this year, an improvement of \$87 million or 37% compared to last year.

SSG's net sales for the quarter were \$51 million this year compared to \$53 million last year. Operating income for the quarter was \$7.2 million compared to \$7.4 million last year. SSG's Adjusted EBITDA for the quarter was consistent with the prior year at around \$8.2 million, while its Adjusted EBITDA margin for the quarter improved to 16.2%, up 80 basis points from Q1 last year. SSG's orders for the quarter were \$60 million compared to \$66 million last year.

Corporate and operating expenses for the quarter were \$6.5 million, up from \$4.5 million last year. The increase was primarily due to an unfavorable year-over-year variance of \$2.6 million associated with

changes in mark-to-market adjustments of post-retirement reserves. These market-based adjustments benefited our earnings in Q1 last year by approximately \$0.02 per share but were unfavorable in Q1 this year.

Turning now to the consolidated income statement, where the decrease in sales contributed to a \$6 million reduction in gross profit, consolidated gross margin for the quarter was 24.7% compared to 26.1% last year. As a percentage of sales, our selling, engineering, general and administrative expenses for the quarter were down 20 basis points from Q1 last year despite the unfavorable mark-to-market variance I just mentioned. Other items affecting the quarterly results include a \$700,000 increase in other income and a \$400,000 decrease in interest expense.

Tax expense for the quarter was down \$2.2 million largely due to lower pre-tax income levels and higher excess tax benefits from stock compensation activity. Our effective tax rate for the quarter was 18.4% compared to 23.5% last year. The lower tax rate in Q1 this year was in line with our expectations after we included an estimate of excess tax benefits. At this time, we continue to expect our full year effective tax rate to be approximately 24%.

On an overall GAAP basis, we therefore earned \$0.36 per share in Q1 this year compared to \$0.38 per share in Q1 last year. To facilitate the earnings comparisons, we typically adjust our GAAP earnings per share for unusual items recorded in the current or prior year quarters. In the current year quarter, we made adjustments to GAAP earnings per share to exclude acquisition-related expenses, coronavirus-related expenses, and purchase accounting expense effects. On this basis, our adjusted earnings for the quarter were \$0.38 per share compared with \$0.39 per share last year.

Looking now at cash flow, where we've generated \$26 million of cash from operations during the quarter, an improvement of \$21 million over Q1 last year, we ended the quarter with \$168 million of net debt and availability under our credit facility of \$270 million. Our current net debt leverage ratio remains low, even after funding the acquisition of OSW during the quarter, for approximately \$53 million.

Our strong financial position allows us to continue to invest in organic growth initiatives and pursue strategic acquisitions like OSW. At the same time, we remain committed to pursuing strategic acquisitions and returning cash to stockholders through dividends and opportunistic share repurchases. On that note, we paid dividends of \$5.5 million during the quarter, reflecting an increased dividend of \$0.09 per share, and we recently announced a similar dividend for the second quarter.

That concludes my comments, and I would now like to turn the call over to Jennifer.

### **Jennifer Sherman**

Thank you Ian.

It's been over a year now since the pandemic began, and while there have been many challenges along the way, I remain in awe of how our teams have responded, modifying our work practices to keep employees safe, exercising flexibility in handling uncertain market conditions, and finding new ways to serve our customers.

Our facilities continue to experience some ongoing COVID-related disruptions, but conditions are improving. Our Company-wide efforts to raise awareness about vaccines, assist eligible employees in gaining access to vaccines, and encourage participation levels are paying off, and we are pleased to report that our domestic employee vaccination rates are ahead of the national average. In fact, in Illinois where we have three of our largest facilities and the corporate office, over 60% of our employees are now

fully vaccinated. With that, we've seen an uptick in our sales resources traveling, reinforcing our customer-centric value proposition and contributing to greater order intake.

As in the last two quarters, we again saw improved demand for our products with our first quarter order intake setting a new record for the company, surpassing the previous high by over \$50 million. Our first quarter orders reflect strength in most of our end markets and growing confidence in a post-pandemic recovery, which seems to be further solidified by recent economic stimulus. That sentiment seems to be shared widely by our dealer partners and customers across most of our businesses.

Demand for sewer cleaners remains strong with first quarter orders up 30% year-over-year and almost double the amount recorded last quarter. Safe digging is also continuing to gain acceptance. Over the last couple of years, approximately 70% of our sewer cleaner orders have included an optional safe digging package which allows a sewer cleaner to also be used for hydro or vacuum excavation purposes. We saw similar trends this quarter with customer appreciation for the safety and efficiency benefits of safe digging gaining momentum.

At MRL, our road marking and line removal business, first quarter orders were the highest quarterly level since we acquired the business in 2019, and with its plant expansion now complete, we are well positioned to benefit from potential infrastructure investments. Our road marking services business, HighMark, also won an \$8 million striping contract during the quarter.

Since the fourth quarter of last year, we've also seen an uptick in our industrial end markets with improved orders for our Guzzler and Jetstream products heading into the spring cleaning season. In addition, our dump body and trailer businesses reported strong organic order growth of 28% across our end markets, achieving record backlog. While our backlog is at a record high, there are a few factors that may limit us from realizing the full benefits from the operating leverage that we typically experience with backlog at these levels.

The first factor that many of you will be aware of is the impact of the global semiconductor shortage on chassis availability. We started to see some supply tightness late last year and our teams were proactive in securing additional chassis and recommending to our customers and dealer partners that they do the same for those orders where they supply the chassis. As a reminder, that is about 50% of the time for ESG businesses, excluding TBEI where the customer almost always supplies the chassis.

We were recently notified by one of our chassis suppliers that they are temporarily suspending production of certain chassis for up to 90 days in light of the semiconductor shortage. The issue primarily impacts our sewer cleaners, safe digging trucks, and certain street sweeper models. The situation remains fluid and the teams have been working hard to mitigate the impact of the short term disruption. Based on the data we have received, we expect the situation will be resolved during the third quarter with production expected to ramp back quickly thereafter.

Because we do not rely on any one single chassis manufacturer and with the proactive actions we took, we have been able to pivot quickly to minimize the financial impact. For example, at Elgin our team was able to adjust production schedules so that we built a higher concentration of the three-wheeled Pelican sweepers during the period of the expected impact. As a reminder, for that product line we actually manufacture the chassis ourselves.

At our Streator facility, where we make sewer cleaners and safe digging trucks, we have had an ongoing effort to secure additional chassis from other manufacturers; however, because of lead times on certain chassis, there's a period of approximately two weeks where we have a shortage at Vactor. With the goal of optimizing efficiency, the teams have worked diligently to manage the schedule so that this brief pause

will occur over the July 4th holiday. With the additional chassis supply that we have secured, we are expecting a ramp-up in production thereafter.

Like most companies, we are also experiencing rising commodity costs. As our teams have done in the past, we took proactive measures such as locking in pricing and securing availability of steel based on forecasted need. Our teams are working diligently to mitigate the impacts of rising commodity costs by implementing price increases and surcharges where possible.

As it relates to labor availability, our ongoing commitment to environmental, social and governance continues to benefit our Company. Investment in our employees differentiates us and our ability to attract labor at the majority at our facilities.

I now want to take a few minutes to provide an update on our strategic growth initiatives.

We remain bullish about safe digging prospects and with noted industrial end market recoveries and infrastructure spend optimism throughout the channel, we are confident safe digging trends will continue to improve. Our Truvac safe digging product line portfolio includes a complete range of truck-mounted safe digging equipment with applications across a number of end markets. We were pleased to see that Truvac product demonstrations for the quarter were up 70% from last year. As I just mentioned, these education efforts are also having a positive impact on sewer cleaner demand with the inclusion of the optional safe digging package turning our sewer cleaners into a multi-purpose vehicle.

We also continue to make progress with our aftermarket initiative with aftermarket revenue for the quarter improving by 6% and representing a higher share of EGS's revenues for the quarter at around 27%. We continue to closely monitor rental fleet utilization and remain disciplined in making decisions about the size and composition of our fleet. As part of that process, we have seen healthy used equipment sales in recent months and an uptick in rentals.

We are monitoring the current COVID situation in Canada with Ontario and many other provinces being subject to some of the most extreme stay-at-home measures since the start of the pandemic. While we have not experienced any significant financial impact to date, we may see some impact in our Canadian markets over the next few months, which is typically a seasonally strong period for equipment rentals and parts sales.

On the organic growth front, we have several new product launches in the pipeline, a few of which I'll touch on today.

Within ESG, street sweeper electrification remains a key area of investment. We have previously talked about our first orders for our hybrid electric Broom Bear street sweeper, which are currently expected to ship later this year. This hybrid model uses both battery energy and either CNG or diesel power for sweeping with performance designed to meet or exceed current sweeper performance. The hybrid Broom Bear is now being demonstrated by our dealer channel, primarily on the west coast and then moving to the southeast, and the feedback to date has been encouraging. In addition, development of a hybrid version of our most popular line of street sweepers, the Pelican, is underway. The plug-in hybrid electric Pelican sweeper is assembled and undergoing testing, with product demonstrations planned for the second half of this year.

Within our dump body and trailer product portfolios, we are also realizing benefits from new product introductions. During the quarter, products launched over the last year equated to organic growth of about 4%. Within SSG, based on the nature of its product portfolio, our innovation pipeline typically includes a higher volume of new product introductions and enhancements that while individually may not have a significant financial impact, collectively aggregate to meaningful organic growth. For example, we



launched production of our MicroPulse line during the quarter. The MicroPulse is a low profile, high performance LED lighting product for both first responders and work truck vehicles. The line includes production of both new product models and those that were previously outsourced. In-sourcing this line, which leverages automated laser technology, is estimate to improve the related margins and drive annual savings of over \$1 million. In addition, we are currently on track to launch a low cost light bar in the second quarter.

In addition to these organic growth initiatives, M&A will continue to contribute meaningfully to our future growth. During the quarter, we completed the acquisition of OSW, a leading manufacturer of dump bodies and a custom outfitter of truck equipment and trailers. The acquisition provides considerable opportunity for long term value creation through the application of our 80/20 improvement principles, organic growth initiatives, and additional bolt-on acquisitions.

Last week, we held an initial 80/20 improvement training session at OSW which was well received by the team. Integration is well underway, and while it is still early days, OSW is off to a solid start in the first quarter.

Our M&A pipeline has been active to say the least, and it's been exciting to be back on the road visiting potential targets. As Ian noted in his comments, our financial position and liquidity are strong, enabling us to pursue strategic acquisitions, and there are a number of M&A opportunities that are teams are currently reviewing.

We have also continued to make significant investments in our existing plants to add capacity to support our long term growth and to gain operational efficiencies through automation. As we continue to optimize our manufacturing footprint, we are evaluating our long term strategy with respect to our Elgin and University Park production facilities in Illinois. Both properties are currently leased at above market rates with lease terms ending in 2023. We are currently looking at opportunities and alternative facilities in the surrounding areas as we proactively plan for a potential move.

The American Rescue Plan COVID relief package includes approximately \$1.9 trillion of economic stimulus with approximately \$350 billion going to state, local and territorial governments with the goal of keeping frontline workers employed, distributing the vaccine, increasing testing, reopening schools, and maintaining essential services. We are actively educating our dealer channel about the stimulus program and have distributed the latest estimated allocation of the \$350 billion of state and local government support by jurisdiction to our dealer channel to share with its customer base. As a provider of equipment used for essential services like sewer cleaning and street sweeping, Federal Signal stands to benefit meaningfully from additional aid that may be provided to state and local sources for these purposes.

As was evident with our first quarter order intake, our dealer partners remain optimistic about market conditions in 2021, noting that both corporate and sales tax collections appear to have held up better than originally anticipated, which should add stability to their revenue sources. We expect that a long term infrastructure bill will provide visibility for project planning and could see capital equipment demand increases in areas such as roads, bridges, broadband, clean energy, and public transportation build up. We anticipate that this would provide benefits for the majority of our product offerings, including equipment sales and rentals of dump trucks and trailers, safe digging trucks, road marking equipment, sewer cleaners, and street sweepers. We have positioned Federal Signal in a manner in which we fully participate in the post-pandemic recovery by increasing capacity within our facilities, reducing lead times to a level where we can better respond to customer needs, investing in new product development, and gaining market share.

Turning now to our outlook for the rest of the year, orders so far this year have exceeded our expectations, fueled by a combination of new product launches, ongoing execution against our strategic

initiatives, and strong recovery in our end markets. With certain chassis manufacturers temporarily impacted by the global semiconductor shortage, we are currently encountering some short term production challenges at our largest facility. Our teams are working diligently to navigate through this disruption as they have in the past when faced with similar situations. After factoring in the impact expected over the next couple months, at this time we are maintaining our adjusted EPS outlook for the year of \$1.73 to \$1.85.

With our recently completed capacity expansion at several facilities, we are well positioned once the current chassis uncertainty eases. Demand for our products is at an all-time high with the recent federal stimulus and the possibility of infrastructure investment offering potential for further momentum, which we have not factored into our current outlook.

At this time, I think we're ready for questions. Operator?

**Operator**

Thank you.

Our first question comes from Steve Barger with Keybanc. Please proceed with your question.

**Ken Newman**

Hey, good morning everybody. This is Ken Newman on for Steve.

**Ian Hudson**

Hey Ken.

**Jennifer Sherman**

Good morning Ken.

**Ken Newman**

Morning. I guess the first question here will be on the chassis production, and obviously I think we all understand that supply chains are tight pretty much across all of industrials, especially with the chip shortages going around. Can you just kind of help us quantify the impact of chassis production on guidance, of the maintained guidance? One, how do we think about the lead times for those supply-constrained chassis? I think you said 90 days for certain types, but how do we translate that into whether it's a revenue or a margin impact relative to the full year guidance?

**Jennifer Sherman**

Yes, I think there's a couple things to keep in mind. One of the things that Mark did with our teams that has really benefited us is beginning late last year, early this year, we started to order additional chassis, and again we're chassis agnostic so we've got a lot of different options to choose from. We were recently notified that one of our chassis suppliers is shutting down for up to 90 days, and although that was disappointing to hear, we are in a pretty good position because of the work that we had done late last year and beginning of this year in terms of ordering additional chassis.

Our teams responded by—when we got this news, we were able to go out and leverage both our dealer partners and the relationships that we have with various chassis dealers to order additional chassis. So,



in terms of the impact, it's really a short term situation at Vactor, and typically we have a shutdown between the Christmas and New Year's holiday - they've moved that shutdown forward, we're doing our physical inventory during that time period, but there will be a brief pause over the Fourth of July week that we will be shut down. Our goal is to optimize our efficiency, and then we feel like we're in a really good position once we come out of that Fourth of July holiday that we'll be able to ramp up pretty quickly.

Ian?

**Ian Hudson**

Yes, and Ken, in terms of—I think it will have both a revenue impact, as you said, as well as the earnings impact that flows through, but I think as Jennifer mentioned, it's fairly limited at this point to that two-week period in late second quarter and early third quarter. We've done a great job in securing chassis for the balance of the year. It really is limited to that one location we talked about because the teams have done a nice job in our sweeper facility pivoting to change the schedule so that we're doing—producing more of the three-wheeled Pelican lines, and that's the one where we actually produce the chassis, so I think it's really just a testament to the flexibility of the teams, that we've been able to really minimize the financial impact.

**Jennifer Sherman**

Yes, I guess the only thing I'd add is you might have read that a lot of the chassis OEMs are sold out for the year. I think we're in a good competitive position because of the work that we did late last year and early this year, and we have our orders in so we can secure those chassis that we need for 2021 and ramp production back up. Although it's a challenging set of facts, we're in a better position than most to respond to them.

**Ken Newman**

Is it fair to assume that the entire backlog as of the end of first quarter is expected to deliver in 2021? None of those are for 2022 delivery?

**Jennifer Sherman**

It really depends on the product line.

**Ken Newman**

Understood.

**Jennifer Sherman**

Dump trucks and trailers would be delivered in 2021. It depends - some of the sewer cleaners could extend into 2022, and there's a continuum depending on the product line.

**Ken Newman**

Right. For my follow-up, it seems that you had really solid orders in the quarter. Obviously I think everybody is trying to navigate their way around the tough supply chain tightness. Do you have any sense of whether or not your customers are pulling forward orders in order to get ahead of some of those supply chain issues? Would you expect—or maybe just give a little bit of commentary in terms of what order inquiries are like quarter to date.

**Jennifer Sherman**

Sure, a couple things. We're always looking at order pull forward. We didn't see that here, so the answer to your question is no. Another encouraging fact is that our April orders remain strong.

**Ian Hudson**

Yes Ken, I think when we see pull forward, Ken, it's typically somewhat limited to certain product lines. The strength in the orders we've seen really was almost in all of our end markets for the majority of our product lines, so it wasn't limited to any one single product line. It was strength almost across the board.

**Jennifer Sherman**

We've seen some really nice traction, that I talked about in my prepared remarks, on some of our organic growth initiatives, particularly in our dump truck and trailer business.

**Ken Newman**

Right. One more, if I could squeeze it in. Regarding your M&A pipeline, I know you're talking about the pipeline remaining active. It seems like you've got a lot of dry powder here in terms of availability and liquidity. Can you just talk about the opportunities in terms of deal sizes and multiples, and again just kind of remind us on how you're thinking about the best returns relative to potential targets across the portfolio.

**Jennifer Sherman**

Yes, a couple things. Our pipeline is about as full as it's ever been, so that's encouraging, particularly because we have a very detailed road map in terms of what we're interested in buying and we work those relationships, and we're starting to see as we come out of this pandemic that that hard work has benefited us.

In term of deal size, everything from a small product line acquisition to transformational type deals, we're always looking at a number of different opportunities. On multiples, we've seen, as everybody has, that there's—multiples are going up, and again we believe that given the position we're in, there are a lot of synergy opportunities for us to fill out our product portfolio. We talked about in the first quarter OSW, closing that transaction. We've done some training already on ETI and we're very encouraged by what we've seen thus far.

Again, we will continue to be disciplined acquirers, and obviously we look at a number of different factors but we need to make sure that we always talk about does this make sense and how does this bring value to Federal Signal shareholders, so we're very encouraged and energized by what's in our pipeline.

**Ken Newman**

That's great, thanks. I'll jump back in queue.

**Operator**

Our next question comes from Mike Shlisky with Collier Securities. Please proceed with your question.

**Jennifer Sherman**

Good morning Mike.

**Mike Shlisky**

Good morning everyone. Hey, how are you doing?

**Jennifer Sherman**

Great.

**Mike Shlisky**

Okay, I wanted to quickly follow up on one of the earlier questions just asked about the pull forward, the possible pull forward of orders. It sounded like chassis supply was not a reason for folks to order more during the quarter and trying to get ahead of the curve, but was there any order pull forward from people concerned about getting their prices increased on them, or was that not much of an issue either?

**Jennifer Sherman**

We didn't hear a lot of that back from our sales channels, and our price increase—because of the rising commodity costs, the price increases have taken somewhat of an irregular pattern this year compared to a more stable commodity market, so that has—we haven't received a lot of that feedback.

The feedback has really been around a couple things. One is, as we've talked about before, our sales people have been out for—starting during the pandemic last year, when it was safe, they started to get back out, and we believe that they were able to capture some additional market share as a result of that. Number two is just talking to our dealers, the confidence is pretty high, particularly around some of the stimulus funds that have been available. Number three is we've seen our used equipment sales increase and our rental utilization numbers continue to uptick, so it's really been across the board.

I would be remiss if I didn't talk about new product development and the impact that that's had on some of our businesses, particularly our TBEI, dump truck and trailer business.

**Mike Shlisky**

Got it. Maybe I ought to keep focusing on chassis supply, but I want to ask this one as well. How open are your customers or your end users to changing brands if there's going to be one brand that's not available for potentially a couple of months here? Do you get the sense that some are (inaudible) a certain model or you can just switch whenever you feel like it?

**Jennifer Sherman**

On the municipal side, it's more challenging to change the chassis brand because it's gone through, in many times, a bid process. On the industrial side, there's more flexibility, but another fact that differentiates Federal Signal vis-à-vis some of our competitors is our rental fleet. First thing is that particular chassis and the Canadian market chassis has not been impacted thus far, so we've got quite a bit of flexibility there in terms of production scheduling, where we can sub in some of those units.

In a nutshell, much more flexibility on the industrial side than on the municipal side, but given our rental fleet and the strong presence we have in Canada, we've got a lot of different levers to pull in response to this.

**Mike Shlisky**

Got it. If I could just throw one more in here, I really wanted to dig a little deeper on the safety security business. In the quarter, you improved your margins even though sales were down. I know that's sometimes par for the course, which is great work there, but I'm curious if you can give us a little more color. I'm kind of curious as to how you were able to make that happen this particular time.

**Ian Hudson**

Yes Mike, there's—that business, mix can be a factor from time to time because you have some of the larger systems businesses, they can have a different margin profile than some of the public safety equipment, for example. But, I think one of the things we've done a really job there is on 80/20, down at that location. It is—the cost structure of that facility is that the more you can drive through the top line, it has more pull through effect because the overhead is just limited to one primary location for the most part.

I think one of the other things that we talked about was the in-sourcing work that we've done. Jennifer talked about the MicroPulse, which is a particular product line that we launched during the first quarter, and that's a product that we typically outsourced in the past, and we moved that in-house and really had some nice margin improvement resulting from that in the quarter, and I think as we move forward, that's one of the other areas that we expect from an 80/20 standpoint, we always go through the process, does it make more sense for us to produce it versus sourcing it externally, so that's one area that the teams have just done a nice job on.

**Mike Shlisky**

Excellent, thanks so much. I'll hop back in queue.

**Ian Hudson**

Thanks Mike.

**Jennifer Sherman**

Thank you.

**Operator**

Our next question comes from Felix Boeschen with Raymond James. Please proceed with the question.

**Jennifer Sherman**

Good morning.

**Felix Boeschen**

Hey, good morning everyone. I was curious if we could talk about the dump trailer business or dump truck business a little bit more. Just first to start, I think you mentioned orders were up 28% in the quarter. I just wanted to double check, does that include the acquisition of OSW or is that kind of an organic apples-to-apples number we should be thinking about?

**Ian Hudson**

Yes, that's taking out the impact of OSW, Felix. Obviously in our orders this year, that includes the OSW numbers, but the rate that Jennifer quoted, that carves it out, so that's really the organic growth rate.

**Felix Boeschen**

Okay, awesome. Then if you could broadly talk about what you're hearing from end customers in that business, and then similarly I know we've talked about supply chain issues quite a bit on this call, but curious if you could touch on the overall lead time specifically in that book of the business right now.

**Jennifer Sherman**

Yes, so a couple things. One is, as you know, we acquired that business in mid 2017. One of the first things the teams did is took a look at how do we implement some of the best practices that Federal Signal had developed on new product development. It's really just a fantastic management team and so we took some of the best that Federal Signal had developed and that particular management team and really started to look at accelerating new product development. We gave some examples on my prepared remarks that's starting to benefit us and will continue to do so going forward.

The second issue is capacity, so we've made some pretty significant capacity investments in the dump truck businesses at our Lake Crystal facility, at our Rugby facility. We also opened an outfitting center in High Point, North Carolina, and now we are looking at our OSW facility and how do we leverage that facility in the group of businesses in addition to our outfitting facility that was just opened in Tempe, Arizona.

So again, it gives the team an opportunity to optimize production at those various facilities, and we've got more capacity now, so it's always exciting when you sit and there's a theory and then you execute, and the performance has really surpassed my expectations in terms of what they've been able to do.

With respect to lead times, they have extended but given the capacity expansions that we've made and the automation investments that we've made under our ownership, right now we're at a point where we still believe that we're very competitive in the marketplace.

**Felix Boeschen**

Okay, and then I guess my bigger picture question as it relates to TBEI and OSW is can you help us unpack the margin profile a little bit? I always thought of TBEI as being very high margin business. Understand this year you have a slew of supply chain headwinds going on and obviously commodity cost pressures, but knowing that it is maybe a quicker lead time business, does it feel like you're able to pass on price adequately there? Then overall, I know OSW is coming off depressed 2020 COVID levels, but help us understand what this acceleration in the dump trailer business could mean to overall ESG margins, I guess is my bigger picture question.

**Ian Hudson**

Yes, I think—Felix, obviously you know with our businesses within ESG, we talk about that EBITDA margin target of 15% to 18%, which we think for a specialty vehicle company, that's a pretty attractive margin profile. We have also talked about taking those up once we get through this pandemic. I would say within the portfolio of TBEI businesses we have, the margin profile probably varies. I mean, we're talking a little bit about different sizes of dump trucks across the portfolio. As we've talked about, I think in our year-end call, OSW right now is not currently operating within that range, but one of the filters that we

apply when we look at acquisitions is asking ourselves, even if they're not currently operating within those ranges, do they have the ability to get within that range once we apply our 80/20 principles and explore some of the synergy opportunities there.

OSW isn't there right now, but I think we feel like over the course of the next two to three years, there's opportunity to get there, and I think that will then be the area where as we look at TBEI as a platform for growth, looking at some of these companies sharing best practices across the businesses, sharing buying practices and things of that nature, we think that's where there's going to be some potential for margin improvement, which will be one of the factors we take into account when we come up with our revised margin targets.

**Jennifer Sherman**

I'd add within the TBEI group, as Ian mentioned, we have a—there's a range depending on both mix, fleet orders and otherwise, but we've got some very high performing EBITDA margin businesses within that product portfolio.

**Felix Boeschen**

Got it, very helpful. I'll leave it there.

**Ian Hudson**

Thanks Felix.

**Operator**

Our next question comes from Walter Liptak with Seaport Global. Please proceed with your questions.

**Jennifer Sherman**

Good morning Walt.

**Walter Liptak**

Hi guys. Congratulations on a nice quarter.

Wanted to—so I think the big question here has been covered, which is the question about pent-up demand, and it doesn't sound like there was, so I guess my question first is if you had to pin the order growth on one or two things, is it just the selling and the opening, or was it some sort of—you know, it doesn't sound like it was a pre-buy, but do you think that this is sustainable or do you think that this is something we saw a big slug of orders that were pent up and now we're going to see things taper off?

**Jennifer Sherman**

We've been encouraged because the strong order trend has continued in April. It has been kind of across the board too, is something else that's encouraging. We've seen some nice traction on NPD, but there is always seasonality in our businesses. It can vary quarter to quarter, but I think what I'd note is, and I tried to address this again in my prepared remarks, is that we did not slow down on our NPD investments during 2020 in the pandemic, and I think we're really seeing some of the benefits of that as we work our way through 2021.



**Ian Hudson**

I think the other thing I would add, and Jennifer mentioned it, that with safe digging, we gave some statistics about the percentage of our sewer cleaners that now include the hydro or vacuum excavation package. That's where we've been out doing demonstrations, and demos are up 17% year-over-year, that is having some nice pull through, if you will, on the sewer cleaners in that about 70% of our sewer cleaners over the course of the last two years have been sold with this hydro excavation package, so not only do we have our Truvac line of products where you can use those purely for safe digging, we also have sewer cleaners now that have the optionality to perform that function as well.

The continued strength in our sewer cleaner demand is encouraging really and is kind of tangential to the efforts that we're having on the safe digging side.

**Walter Liptak**

Yes, that's great. Yes, it's good to see the Truvac orders picking up again, because I think those were hit pretty hard during the pandemic.

I guess another question would be going back to the chassis shortages and your inventory or your own pre-buy of chassis, are you seeing a competitive advantage? I know you guys are good at anticipating demand and getting your chassis slots. Do you think you've been beating out the competitors with your chassis availability?

**Jennifer Sherman**

Yes.

**Ian Hudson**

Yes, I think we were very proactive, I would say. Certainly towards the end of last year, we saw some of this, and we started taking actions at that point. We worked with our dealers and kind of shared our knowledge with them to say, we are going out and trying to secure additional supply, encouraging them to do the same. I think we had a question earlier about do we work with customers to see if they would be agreeable to switching out the chassis, and certainly the teams are all over that, so I think yes, I would echo Jennifer's statement that we—it does give us a competitive advantage, because I think to be here today and knowing the efforts of the team and how they've mitigated the potential impact, I think they've just done an outstanding job.

**Walter Liptak**

Okay.

**Jennifer Sherman**

As the economy opens back up and these infrastructure projects move forward, I was speaking to one of our dealers yesterday and she was explaining to me how important it is to have equipment available, both for (inaudible) used equipment and new sales, and we've been able to respond to that demand.

**Ian Hudson**

I think one of the other things from a competitive standpoint that we have, we also have a rental fleet that can be a temporary solution that we can offer to our customers in the event that they're unable to get a chassis, so having the range of product offerings we have has helped us during this time.

**Walter Liptak**

Okay, that's great. Yes, that was another question that I had about that rental fleet. It sounds like you didn't take up guidance despite the strong orders because of concern about deliveries in the back half of the year, but is it possible that the rental fleet could offset all or most of any sort of chassis-related production slowdowns?

**Ian Hudson**

Yes, well just to be clear on the first part of your comment, I think our concern from the chassis supply situation is really limited to late second quarter, early third quarter around that July 4 holiday. We're expecting production to ramp back up as we go forward with the chassis that we have been able to secure and what we've been told by the chassis OEMs about how they're going to reopen again. I just wanted to make that point clear.

On the rental side of the equation, we have seen an uptick in rental demand in April, and one of the things we mentioned, we're monitoring the situation up in Canada with the shutdown in Ontario in particular because that is typically a strong market for us from an aftermarket standpoint, from a rental standpoint, so that's one area where we're monitoring. But as you said, during that timeframe, could we offer rentals or used equipment sales, could they benefit? Potentially, yes.

**Jennifer Sherman**

I think the other thing to note, though, is that we also—one of the advantages we have is between us and our dealer rental partner, we have the ability to redeploy that equipment in Canada to other regions if we need to.

**Walter Liptak**

Okay, good point. All right.

Then Jennifer, you mentioned in the discussion about M&A that there could be something transformational. I wonder if you could tell us a little bit about what transformational means. Is it transformational because of size or is it transformational because of the type of product that you would be acquiring in an M&A deal?

**Jennifer Sherman**

Yes, I want to make sure I'm clear here. The question I was responding to was what types of acquisitions are in the pipeline, and at any one point in time we're always looking at a number of different opportunities, everything from \$10 million type product line acquisitions to large transformational type deals. That's something that's an ongoing exercise at the Company rather than anything specific. That's really how I was responding to that particular question. The vast majority of our acquisitions, I think will fall into that \$50 million to \$100 million type range, similar to MRL and OSW.

Transformational would be—could be something like the TBEI type deal, where we make a meaningful investment into a new product category, so that's a good example of something that we're very proud of the work that's been done and we've seen the results for Federal Signal shareholders.

**Walter Liptak**

Okay, got it. All right, thank you.

**Operator**

Our next question comes from Chris Moore with CJS Securities. Please proceed.

**Jennifer Sherman**

Good morning Chris.

**Chris Moore**

Good morning. Just on the record orders, 26% year-over-year, can you talk a little bit about the mix between price and volume on that?

**Ian Hudson**

Yes, it's mostly volume, Chris. I mean, in that number we have OSW is in that number, so there's about \$25 million of orders from the acquisition. Price can range anywhere from—in a typical year, it could be anywhere from 1% to 4%, depending on the business, but most of this is really volume driven and, as I said earlier, it really is across the board as we go through the different product lines. Dump trucks are up, as Jennifer mentioned, in excess of 20%, sewer cleaners are up 30%, aftermarket demand is up in excess of 20%, so it isn't any one single product line. It really is across the board.

**Chris Moore**

Got it, that's helpful. Thinking about steel, obviously rapid increase. It sounds like it was more of a headache than anything for you guys in the first quarter. You talked about some unsteady price increases, so just trying to get a sense in terms of how you view the balance now between raising prices to protect margin and the current demand.

**Jennifer Sherman**

I think the teams have pretty good visibility with respect to steel. As you know, we do about \$45 million of direct steel purchases, and so we lock in pricing so the teams can react, particularly the TBEI team can react pretty quickly.

I think the other issue right now for us and for many companies is it's critical that you secure availability, so we have secured the necessary steel to produce the backlog, and that's been a significant effort.

**Chris Moore**

Got it. Most of my others were answered. I will leave it there. Appreciate it, guys.

**Jennifer Sherman**

Thank you.

**Operator**

Our next question comes from Greg Burns with Sidoti & Company. Please proceed.

**Jennifer Sherman**

Morning Greg.

**Greg Burns**

Morning. In terms of the safe digging opportunity, it sounds like you've gained more market acceptance or there's more traction in the market, so could you just talk about what you're hearing from customers, the demand you're seeing, is it picking up because there's more understanding of what it is, is it government mandated? What's driving the demand there?

**Jennifer Sherman**

Yes, I think it's really been a grassroots effort to educate customers about both the safety benefits and the efficiency benefits. One of the reasons that we give you the data on demonstrations is because we've found that that is an important leading indicator, if somebody is interested in that. Again, where we are in Chicago, last night the western suburbs, a good portion of them didn't have any type of internet access, which is even more critical today than it might have been a couple years ago, because a construction crew cut a fiber line, so that type of incident in many situations will lead customers to want to better understand what the alternatives are.

We also believe as we move forward with the infrastructure investments that are being made by the government right now, particularly some of the broadband work, that will also benefit sales of safe digging trucks. We continue to monitor legislation and legislation right now is at a best practice stage, but that is something that increases awareness among our customer base.

**Greg Burns**

Okay. You talked about the outfitting of the sewer cleaners with the safe digging package. What would that do typically to the MSRP of a sewer cleaner, adding that package?

**Jennifer Sherman**

Yes, I asked that very question the other day so I could better understand it, and there is so much features and functionality that it can be anything from—it varies pretty significantly. There's small things that you can do that are in the \$10,000 to \$20,000 range, and then there's much larger types of packages that tend to be closer to the \$70,000 to \$100,000 range, so it really depends on the type of package that you order.

**Greg Burns**

Okay, and that 70% attach rate, do you think that's sustainable? Do you foresee selling that much safe digging equipment into the sewer cleaner market?

**Ian Hudson**

Yes, it's been at that level, Greg. Over the last couple of years, it's been at that level, and it was similar in Q1.

**Greg Burns**

Okay. Then just lastly, I might have missed it but on the TBEI side of the business, where the customers are bringing their chassis, has there been any issues there with the customers having availability, chassis availability?

**Jennifer Sherman**

To date, it's been pretty minimal.

**Greg Burns**

Okay, thank you.

**Operator**

Our next question comes from Marco Rodriguez with Stonegate Capital. Please proceed.

**Jennifer Sherman**

Good morning.

**Marco Rodriguez**

Good morning. Thank you for taking my questions. Most have actually been asked and answered, but just one real quick one here for you. I know it's still a little bit early and you made some positive comments on the OSW acquisition closing, and results look to be pretty good, but can you kind of just give us a little bit of an update on the integration efforts there?

**Jennifer Sherman**

Sure, a couple things. One is as we evaluate acquisitions, one of the things that's key to us is to have an experienced management team, and Jay DeNoma, who leads that business, is—you know, we're very pleased that he's part of the Federal Signal family. Bob Fines, who runs our TBEI business, is very much involved in the integration of the business. He's been out there a couple times. Ian, Mark, myself have all been out there. I feel like we're developing a pretty good playbook. We've done a number of successful acquisitions over the last five years, and like anything, you get better at each one you do, so we understand the importance of 80/20, and Bob and Jay and the team had a working session last week with very positive feedback, so we're putting in the building blocks during 2021 to capture the—to improve EBITDA margin performance and capture the synergies that we talked about when we did the deal. But (inaudible) it's early days but we're pleased and we're off to a strong start.

**Marco Rodriguez**

Understood. Last one from me, I just wanted to make sure I heard this correctly. The impact of the winter storms on results for the quarter, it sounded like it was minimal, if anything on results?

**Jennifer Sherman**

Well, we lost production for a couple days, so I think what we were trying to indicate is although there was no structural damage, our results reflected the fact—which were very strong, reflect the fact that we lost

production in several of our southern facilities for days and, in one situation, for almost a week. It was a despite that type comment.

**Marco Rodriguez**

I see, so is there a way that you can quantify the impact to the quarter's results?

**Ian Hudson**

I think if you look at the gross margin, it's a factor in the lower gross margin in the quarter. There's a couple of other things that—you know, obviously in Q1 last year, we had record production at our largest facility and minimal impact from the pandemic. When you look at gross margin, we had obviously some unfavorable absorption impact because we weren't producing for that period of time, so that's probably where you'd see it a little bit. It wasn't material in any sense, but it was a headwind to our gross margin for the quarter.

**Marco Rodriguez**

Got it. Thanks a lot, guys, I really appreciate the time.

**Jennifer Sherman**

Thank you.

**Operator**

Our next question is a follow-up from Steve Barger with Keybanc. Please proceed.

**Ken Newman**

Hey, thank you. This is Ken Newman again - thanks. Just one quick follow-up here.

I wanted to touch back on the rental comments that you had made. Obviously I think I totally get the whole idea around COVID impacts in Canada, but I would think that a tighter supply chain is probably a net tailwind for fleet dynamics, so for improving rental rates or fleet utilization, as well as for used equipment prices that you saw out of the fleet. Can you just give us a little bit of color in terms of how you're thinking about forward moves in rental rates, utilization, and what's being sold out of the fleet this year versus being built for fleet growth?

**Ian Hudson**

Yes, it's something, Ken, we monitor very closely. We look at both on a product line basis and also geographically. We look at time and financial utilization, and then we use that process—it's a monthly process where we make decisions about how much to add to the fleet and whether we accelerate sales out of the fleet, so that's been an ongoing process.

What we have seen, I would say over the course of the last couple of quarters, we've seen an increase in the sales of used equipment in the sense of the age of the equipment. They're really assets that are probably north of three to four years old, I would say, so we've been selling more of the older units out of the fleet. Predominantly safe digging equipment we've been selling out of the fleet, and some of that might be just to gain access to customers that, because of the price dynamics, we wouldn't have had access to in the past.



I think the strategy is working in having the aftermarket businesses giving us access to customers that we wouldn't have had in the past, so I think that process that we've implemented has been really beneficial. Used equipment sales were up in the quarter, parts were up in the quarter. Aftermarket revenues in total grew, I think, to about 27% of ESG's revenues for the quarter - that was up from 24% last year, so we are seeing that (inaudible) traction continue and so as you say, it is nice to have alternate product offerings that we can give to our customers in the event that there is some supply chain tightness.

**Jennifer Sherman**

Yes, a couple facts that I think are important is, one, we have the ability obviously to move that fleet as needed to respond to demand, but number two is the chassis that is preferred in that fleet, the Western Star chassis, has not been impacted to date by the semiconductor shortage, so again that gives us the ability—flexibility with respect to the production scheduling and also the ability to respond because we have those chassis available.

**Ken Newman**

Yes. If I think just longer term the ability to grow that part of the business, right, does that require a significant amount of Capex, or how do you think about growing fleet versus growing branches to kind of improve your geographic footprint longer term to help improve the adoption of rental across all of your businesses?

**Jennifer Sherman**

We're fortunate because we have a number of strong rental partners through our TruVac dealer network, so we work with those partners to make sure that we've got geographic coverage where we need it. That's something that we'll continue to do. We'll also continue in those areas where we don't have a strong TruVac partner, we will grow our fleet as necessary to respond to customer demand. I think we're in a pretty good position because of the strength of those partnerships and also our ability to grow where there could be unmet customer demand.

**Ken Newman**

Understood, thanks for the time.

**Jennifer Sherman**

Thank you.

**Operator**

We have another follow-up from Walter Liptak with Seaport Global. Please proceed.

**Walter Liptak**

Thanks for taking this one. As a follow-on to the last one, talking about rental and alluding to how you use other rental partners potentially for some of your products, are you selling yet any of the safe digging machines or any other machines to the large rental companies?

**Jennifer Sherman**

No, and we have no intentions on doing so. Right now, we're very—we have a number of great rental partners, and this is a highly specialized piece of equipment and they're responding very well to rental demand.

**Walter Liptak**

Okay, got it. All right, thank you.

**Operator**

At this time, I would like to turn the call back over to Ms. Jennifer Sherman for closing comments.

**Jennifer Sherman**

Thank you. In closing, I would like to reiterate that we are confident in the long term prospects for our businesses and our markets. Our foundation is strong and we are focused on delivering profitable long term growth through the execution of our strategic initiatives. We would like to express our thanks to our shareholders, employees, distributors, dealers and customers for their continued support.

Thank you for joining us today and we'll talk to you soon.

**Operator**

Thank you. You may now disconnect your lines at this time. Thank you for your participation and have a great day.