



Federal Signal Corp Retirement Plan – 2017 ANNUAL FUNDING NOTICE

Introduction

This notice includes important information about the funding status of your pension plan (“the Plan”) and general information about the benefit payments guaranteed by the Pension Benefit Guaranty Corporation (“PBGC”), a federal insurance agency. All traditional pension plans (called “defined benefit pension plans”) must provide this notice every year regardless of their funding status. This notice does not mean that the Plan is terminating. It is provided for informational purposes and you are not required to respond in any way. This notice is for the plan year beginning 1/1/17 and ending 12/31/17 (“Plan Year”).

How Well Funded Is Your Plan

Under federal law, the plan must report how well it is funded by using a measure called the “funding target attainment percentage.” This percentage is obtained by dividing the Plan’s Net Plan Assets by Plan Liabilities on the Valuation Date for the plan year. In general, the higher the percentage, the better funded the plan. Your Plan’s funding target attainment percentage for the Plan Year and each of the two preceding plan years is shown in the chart below, along with a statement of the value of the Plan’s assets and liabilities for the same period.

<b>Funding Target Attainment Percentage</b>			
	<b>2017</b>	<b>2016</b>	<b>2015</b>
1. Valuation Date	1/1/2017	1/1/2016	1/1/2015
2. Plan Assets			
a. Total Plan Assets	\$138,782,783	\$138,655,855	\$133,404,761
b. Funding Standard Carryover Balance	\$0	\$0	\$0
c. Prefunding Balance	\$2,288,584	\$0	\$0
d. Net Plan Assets (a) – (b) – (c) = (d)	\$136,494,199	\$138,655,855	\$133,404,761
3. Plan Liabilities	\$144,558,979	\$139,434,198	\$136,499,108
4. Funding Target Attainment Percentage (2d)/(3)	94.4%	99.4%	97.7%

Plan Assets and Credit Balances

Total Plan Assets in the chart above are the value of the Plan’s assets on the Valuation Date (see line 2 in the chart above). Credit balances were subtracted from Total Plan Assets to determine Net Plan Assets (line 2 d) used in the calculation of the funding target attainment percentage shown in the chart above. While pension plans are permitted to maintain credit balances (also called “funding standard carryover balances” or “prefunding balances” see 2 b & c in the chart above) for funding purposes, they may not be taken into account when calculating a plan’s funding target attainment percentage. A plan might have a credit balance, for example, if in a prior year an employer made contributions to the plan above the minimum level required by law. Generally, the excess contributions are counted as “credits” and may be applied in future years toward the minimum level of contributions a plan sponsor is required to make by law.

Plan Liabilities

Plan Liabilities shown in line 3 of the chart above are the liabilities used to determine the Plan’s Funding Target Attainment Percentage. This figure is an estimate of the amount of assets the Plan needs on the Valuation Date to pay for promised benefits under the plan.

Year-End Assets and Liabilities

The asset values in the chart above are measured as of the first day of the Plan Year. They also are “actuarial values”. Actuarial values differ from market values in that they do not fluctuate daily based on changes in the stock or other markets. Actuarial values smooth out those fluctuations and can allow for more predictable levels of future contributions. Despite the fluctuations, market values tend to show a clearer picture of a plan’s funded status at a given point in time. As of December 31, 2017, the fair market value of the Plan’s assets was \$132,558,790. On this same date, the Plan’s liabilities, determined using market rates, were \$169,235,780.

Participant Information

The total number of participants in the Plan as of the Plan’s valuation date was 3,151. Of this number, 492 were active participants, 1,453 were retired or separated from service and receiving benefits, and 1,206 were retired or separated from service and entitled to future benefits.

## Funding & Investment Policies

Every pension plan must have a procedure for establishing a funding policy to carry out plan objectives. A funding policy relates to the level of assets needed to pay for promised benefits. The funding policy of the Plan is to make periodic contributions to the Plan, with the intention that:

- Annual contributions at least meet the minimum amount calculated under the new Pension Protection Act requirements.
- Benefits will be fully provided for employees during retirement.

Once money is contributed to the Plan, the money is invested by plan officials, called fiduciaries, who make specific investments in accordance with the Plan's investment policy. Generally speaking, an investment policy is a written statement that provides the fiduciaries who are responsible for plan investments with guidelines or general instructions concerning investment management decisions. The investment policy of the Plan is intended to:

- Ensure that current future benefit obligations are adequately funded in a cost-effective manner.
- Maintain a diversified portfolio of equity, alternative and fixed income instruments in order to maximize the long-term return on Plan assets for a prudent level of risk.
- Maintain liquidity to meet benefit payment and other Plan costs.
- Prudently manage administrative and management costs related to the Plan.
- Regularly review investment results and rebalance the portfolio periodically when considered appropriate.

Under the Plan's investment policy, the Plan's assets were allocated among the following categories of investments, as of the end of the Plan Year. These allocations are percentages of total assets:

Cash and cash equivalents	3.2%
<b>Equity securities:</b>	
U.S. Large Cap	30.2%
U.S. Small and Mid-Cap	14.1%
Developed international	14.8%
Emerging markets	9.8%
<b>Fixed income:</b>	
Government securities	5.0%
Asset-backed securities	8.9%
Corporate bonds	10.5%
<b>Other investments:</b>	
Mutual funds	1.1%
Real estate	2.4%
<b>Total assets</b>	<b>100.0%</b>

## Right to Request a Copy of the Annual Report

A pension plan is required to file with the U.S. Department of Labor an annual report called the Form 5500 that contains financial and other information about the plan. Copies of the annual report are available from the U.S. Department of Labor, Employee Benefits Security Administration's Public Disclosure Room at 200 Constitution Avenue, NW, Room N-1513, Washington, DC 20210, or by calling 202.693.8673. For 2009 and subsequent plan years, you may obtain an electronic copy of the plan's annual report by going to [www.efast.dol.gov](http://www.efast.dol.gov) and using the Form 5500 search function. Or you may obtain a copy of the Plan's annual report by making a written request to the plan administrator. Individual information, such as the amount of your accrued benefit under the plan, is not contained in the annual report. If you are seeking information regarding your benefits under the plan, contact the plan administrator identified below under "Where To Get More Information."

## Summary of Rules Governing Termination of Single-Employer Plans

If a plan is terminated, there are specific termination rules that must be followed under federal law. A summary of these rules follows.

There are two ways an employer can terminate its pension plan. First, the employer can end the plan in a "standard termination" but only after showing the PBGC that the plan has enough money to pay all benefits owed to participants. Under a standard termination, the plan must either purchase an annuity from an insurance company (which will provide you with periodic retirement benefits, such as monthly, for life or for a set period of time when you retire) or, if the plan allows, issue one lump-sum payment that covers the entire benefit. The plan administrator must give advance notice that identifies the insurance company (or companies) that the employer may select to provide the annuity. The PBGC's guarantee ends when the employer purchases an annuity or gives a lump-sum payment to participants.

Second, if the plan is not fully-funded, the employer may apply for a distress termination. To do so, however, the employer must be in financial distress and prove to a bankruptcy court or to the PBGC that the employer cannot remain in business unless the plan is terminated. If the application is granted, the PBGC will take over the plan as trustee and pay plan benefits, up to the legal limits, using plan assets and PBGC guarantee funds.

Under certain circumstances, the PBGC may take action on its own to end a pension plan. Most terminations initiated by the PBGC occur when the PBGC determines that plan termination is needed to protect the interests of plan participants or of the PBGC insurance program. The PBGC can do so if, for example, a plan does not have enough money to pay benefits currently due.

#### Benefit Payments Guaranteed by the PBGC

When the PBGC takes over a plan, it pays pension benefits through its insurance program. Only benefits that one has earned a right to receive and that cannot be forfeited (called vested benefits) are guaranteed. Most participants and beneficiaries receive all of the pension benefits they would have received under their plan, but some people may lose certain benefits that are not guaranteed.

The amount of benefits that PBGC guarantees is determined as of the plan termination date. However, if a plan terminates during a plan sponsor's bankruptcy and the bankruptcy proceeding began on or after September 16, 2006, then the amount guaranteed is determined as of the date the sponsor entered bankruptcy.

The PBGC maximum benefit guarantee is set by law and is updated each calendar year. For a plan with a termination date or sponsor bankruptcy date, as applicable in 2018, the maximum guarantee is \$5,420 per month, for a benefit paid to a 65-year-old retiree with no survivor benefit. If a plan terminates during a plan sponsor's bankruptcy, and the bankruptcy proceeding began on or after September 16, 2006, the maximum guarantee is fixed as of the calendar year in which the sponsor entered bankruptcy. The maximum guarantee is lower for an individual who begins receiving benefits from PBGC before age 65; the maximum guarantee by age can be found on PBGC's website, [www.pbgc.gov](http://www.pbgc.gov). The guaranteed amount is also reduced if a benefit will be provided to a survivor of the plan participant.

The PBGC guarantees "basic benefits" earned before a plan is terminated, which includes:

- pension benefits at normal retirement age;
- most early retirement benefits;
- annuity benefits for survivors of plan participants; and
- disability benefits for a disability that occurred before the date the plan terminated or the date the sponsor entered bankruptcy, as applicable.

The PBGC does not guarantee certain types of benefits:

- The PBGC does not guarantee benefits for which you do not have a vested right, usually because you have not worked enough years for the company.
- The PBGC does not guarantee benefits for which you have not met all age, service, or other requirements.
- Benefit increases and new benefits that have been in place for less than one year are not guaranteed. Those that have been in place for less than five years are only partly guaranteed.
- Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay, are not guaranteed.
- The PBGC generally does not pay lump sums exceeding \$5,000.

In some circumstances, participants and beneficiaries still may receive some benefits that are not guaranteed. This depends on how much money the terminated plan has and how much the PBGC recovers from employers for plan underfunding.

#### Corporate and Actuarial Information on File with PBGC

A plan sponsor must provide the PBGC with financial information about itself and actuarial information about the plan under certain circumstances, such as when the funding target attainment percentage of the plan (or any other pension plan sponsored by a member of the sponsor's controlled group) falls below 80 percent (other triggers may also apply). The sponsor of the Plan, Federal Signal, and members of its controlled group, if any, were subject to this requirement to provide corporate financial information and plan actuarial information to the PBGC. The PBGC uses this information for oversight and monitoring purposes.

#### Where to Get More Information

For more information about this notice, you may contact Federal Signal Corporation's Benefits Department, at 1415 W. 22<sup>nd</sup> Street, Suite 1100, Oak Brook, IL 60523 or by phone at 1-855-895-4333. For identification purposes, the official plan number is 003 and the plan sponsor's employer identification number or "EIN" is 36-1063330. For more information about the PBGC, go to PBGC's website, [www.pbgc.gov](http://www.pbgc.gov).

#### MAP-21 and HATFA SUPPLEMENT TO ANNUAL FUNDING NOTICE

This is a temporary supplement to the annual funding notice. It is required by new federal laws named Moving Ahead for Progress in the 21st Century Act (MAP-21) and Highway and Transportation Funding Act of 2014 (HATFA). MAP-21/HATFA changed how pension plans calculate their liabilities. The purpose of this supplement is to show the effect of these changes. Prior to MAP-21/HATFA, pension plans determined their liabilities using a two-year average of interest rates. Now pension plans also must take into account a 25-year average of interest rates. This means that MAP-21/HATFA interest rates likely will be higher and plan liabilities lower than they were under prior law. As a result, employers may contribute less money to the plan at a time when market interest rates are at or near historical lows.

The "Information Table" shows how the MAP-21/HATFA interest rates affect the Plan's: (1) Funding Target Attainment Percentage, (2) Funding Shortfall, and (3) Minimum Required Contribution. The funding target attainment percentage of a plan is a measure of how well the plan is funded on a particular date. The funding shortfall of a plan is the amount by which liabilities exceed net plan assets. The minimum required contribution is the amount of money an employer is required by law to contribute to a plan in a given year. The following table shows this information determined with and without the MAP-21/HATFA rates to illustrate the effect of MAP-21/HATFA. The information is provided for the Plan Year and for each of the two preceding plan years, if applicable.

<b>INFORMATION TABLE</b>						
	2017		2016		2015	
	<b>With Adjusted Interest Rates</b>	<b>Without Adjusted Interest Rates</b>	<b>With Adjusted Interest Rates</b>	<b>Without Adjusted Interest Rates</b>	<b>With Adjusted Interest Rates</b>	<b>Without Adjusted Interest Rates</b>
Funding Target Attainment Percentage	94.4%	76.8%	99.4%	80.9%	97.7%	78.1%
Funding Shortfall	\$8,064,780	\$41,215,626	\$778,343	\$32,578,032	\$3,094,347	\$37,496,700
Minimum Required Contribution	\$4,729,591	\$9,767,435	\$4,552,146	\$9,693,322	\$6,426,111	\$12,039,683

Events Having a Material Effect on Assets or Liabilities

By law this notice must contain a written explanation of new events that have a material effect on plan liabilities or assets. This is because such events can significantly affect the funding condition of a plan. For the 2017 plan year, the following event was not reflected in the January 1, 2017 information shown in the Funding Target Attainment Percentage chart above and is expected to have such an effect:

The Federal Signal Corporation provided a one-time voluntary lump sum offering for participants who were separated from service and entitled to future benefits as of January 1, 2017 and who were not rehired or had commenced payments as of December 1, 2017. Participants who elected to participate in the offer were paid their benefits in December 2017. The following table shows the estimated impact on the liabilities and assets as of December 31, 2018 of the voluntary lump sum offering:

(\$millions)	Before Offering	After Offering	Dollar Change	Percentage Change
Plan Liabilities	\$137.2	\$127.7	(\$9.5)	(7.0%)
Plan Assets	\$151.4	\$136.8	(\$14.6)	(9.6%)
Funded Percentage	110.4%	107.2%	(\$5.0)	(2.9%)