

Form 5500-SF Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation		Short Form Annual Return/Report of Small Employee Benefit Plan This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500-SF.		OMB Nos. 1210-0110 1210-0089 2018 This Form is Open to Public Inspection	
Part I Annual Report Identification Information					
For calendar plan year 2018 or fiscal plan year beginning 03/01/2018 and ending 02/28/2019					
A This return/report is for:		☒ a single-employer plan ☐ a multiple-employer plan (not multiemployer) (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)			
B This return/report is		☐ a one-participant plan ☐ a foreign plan			
		☐ the first return/report ☐ the final return/report			
		☐ an amended return/report ☐ a short plan year return/report (less than 12 months)			
C Check box if filing under:		☐ Form 5558 ☐ automatic extension ☐ DFVC program			
		☐ special extension (enter description)			
Part II Basic Plan Information —enter all requested information					
1a Name of plan HORAN ASSOCIATES, INC. DEFINED BENEFIT PLAN		1b Three-digit plan number (PN) ▶		003	
		1c Effective date of plan		03/01/2009	
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) HORAN ASSOCIATES, INC. 4990 EAST GALBRAITH ROAD, SUITE 102 CINCINNATI, OH 45236		2b Employer Identification Number (EIN)		31-1004837	
		2c Sponsor's telephone number		513-745-0707	
		2d Business code (see instructions)		523900	
3a Plan administrator's name and address ☒ Same as Plan Sponsor.		3b Administrator's EIN			
		3c Administrator's telephone number			
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report. a Sponsor's name c Plan Name		4b EIN			
		4d PN			
5a Total number of participants at the beginning of the plan year		5a		100	
b Total number of participants at the end of the plan year		5b		78	
c Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)		5c			
d(1) Total number of active participants at the beginning of the plan year		5d(1)		100	
d(2) Total number of active participants at the end of the plan year		5d(2)		78	
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested		5e		0	
Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.					
Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.					
SIGN HERE	Filed with authorized/valid electronic signature.	07/02/2019	TERENCE HORAN		
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator		
SIGN HERE	Filed with authorized/valid electronic signature.	07/02/2019	TERENCE HORAN		
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500-SF.					
Form 5500-SF (2018) v.17102					

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) ☒ Yes ☐ No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.) ☒ Yes ☐ No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.**
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? ☒ Yes ☐ No ☐ Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4187689. (See instructions.)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	1921667	1242951
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	1921667	1242951
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	381677	
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)		
b Other income (loss)	8b	-12217	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		369460
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	1048176	
e Certain deemed and/or corrective distributions (see instructions)	8e		
f Administrative service providers (salaries, fees, commissions)	8f		
g Other expenses	8g		
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		1048176
i Net income (loss) (subtract line 8h from line 8c)	8i		-678716
j Transfers to (from) the plan (see instructions)	8j		

Part IV Plan Characteristics

- 9a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
1A 1D
- b** If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions

10 During the plan year:		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a		☒	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b		☒	
c Was the plan covered by a fidelity bond?	10c		☒	
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d		☒	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e		☒	
f Has the plan failed to provide any benefit when due under the plan?	10f		☒	
g Did the plan have any participant loans? (If "Yes," enter amount as of year-end.)	10g		☒	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and line 11a below) ☒ Yes ☐ No

11a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40..... **11a** 0

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? ☐ Yes ☒ No
(If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.)

a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. Month Day Year

If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.

b Enter the minimum required contribution for this plan year **12b**

c Enter the amount contributed by the employer to the plan for this plan year **12c**

d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) **12d**

e Will the minimum funding amount reported on line 12d be met by the funding deadline? ☐ Yes ☐ No ☐ N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year? ☐ Yes ☒ No

If "Yes," enter the amount of any plan assets that reverted to the employer this year **13a**

b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? ☐ Yes ☒ No

c If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

13c(1) Name of plan(s):	13c(2) EIN(s)	13c(3) PN(s)

<div>SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Single-Employer Defined Benefit Plan Actuarial Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).</div> <div>File as an attachment to Form 5500 or 5500-SF.</div>	<div>OMB No. 1210-0110</div> <div>2018</div> <div>This Form is Open to Public Inspection</div>
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For calendar plan year 2018 or fiscal plan year beginning 03/01/2018 and ending 02/28/2019	
Round off amounts to nearest dollar.	
Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.	
A Name of plan HORAN ASSOCIATES, INC. DEFINED BENEFIT PLAN	B Three-digit plan number (PN) 003
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF HORAN ASSOCIATES, INC.	D Employer Identification Number (EIN) 31-1004837
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☒ 100 or fewer ☐ 101-500 ☐ More than 500

Part I	Basic Information			
1	Enter the valuation date: Month 03 Day 01 Year 2018			
2	Assets:			
a	Market value	2a	1913896	
b	Actuarial value	2b	1913896	
3	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a	For retired participants and beneficiaries receiving payment	0	0	0
b	For terminated vested participants	0	0	0
c	For active participants	100	1887147	1887147
d	Total	100	1887147	1887147
4	If the plan is in at-risk status, check the box and complete lines (a) and (b)			
a	Funding target disregarding prescribed at-risk assumptions	4a		
b	Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5	Effective interest rate	5	4.73%	
6	Target normal cost	6	54005	

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		
BETH F. BROOKE	Signature of actuary	06/17/2019
CUNI, RUST & STRENK, INC.	Type or print name of actuary	Date
4555 LAKE FOREST DRIVE, SUITE 620 CINCINNATI, OH 45242	Firm name	17-03658
	Address of the firm	Most recent enrollment number
		513-891-0270
		Telephone number (including area code)

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9 Amount remaining (line 7 minus line 8)	0	0
10 Interest on line 9 using prior year's actual return of _____ %	0	0
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		74074
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>4.89</u> %		3622
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance		77696
d Portion of (c) to be added to prefunding balance		0
12 Other reductions in balances due to elections or deemed elections	0	0
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14 Funding target attainment percentage	14	101.41%
15 Adjusted funding target attainment percentage	15	101.41%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	95.19%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls**18** Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
02/26/2019	300000	0			
02/28/2019	81677	0			
Totals ▶			18(b)	381677	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	364192

20 Quarterly contributions and liquidity shortfalls:

- a** Did the plan have a "funding shortfall" for the prior year? ☒ Yes ☐ No
- b** If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☒ No
- c** If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 3.92%	2nd segment: 5.52%	3rd segment: 6.29%	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 0
22 Weighted average retirement age				22 62
23 Mortality table(s) (see instructions)	Prior regulation:	☐ Prescribed - combined	☐ Prescribed - separate	☐ Substitute
	Current regulation:	☒ Prescribed - combined	☐ Prescribed - separate	☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	54005	
b Excess assets, if applicable, but not greater than line 31a	31b	26749	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	0	0	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	34	27256	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0
36 Additional cash requirement (line 34 minus line 35)	36	27256	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	364192	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	336936	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:				
a Schedule elected	☐ 2 plus 7 years	☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008	☐ 2009	☐ 2010	☐ 2011

Form 5500-SFDepartment of the Treasury
Internal Revenue ServiceDepartment of Labor
Employee Benefits Security Administration
Pension Benefit Guaranty Corporation**Short Form Annual Return/Report of Small Employee Benefit Plan**

This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500-SF.**OMB Nos. 1210-0110
1210-0089**2018****This Form is Open to Public Inspection****Part I Annual Report Identification Information**For calendar plan year 2018 or fiscal plan year beginning **03/01/2018** and ending **02/28/2019**

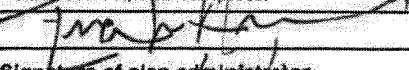
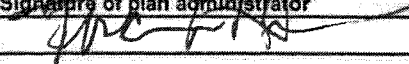
- A** This return/report is for: ☒ a single-employer plan ☐ a multiple-employer plan (not multiemployer) (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- B** This return/report is: ☐ a one-participant plan ☐ a foreign plan
- ☐ the first return/report ☐ the final return/report
- ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
- C** Check box if filing under: ☐ Form 5558 ☐ automatic extension ☐ DFVC program
- ☐ special extension (enter description)

Part II Basic Plan Information -- enter all requested information

1a Name of plan Horan Associates, Inc. Defined Benefit Plan		1b Three-digit plan number (PN) ▶ 003
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing Address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) Horan Associates, Inc. 4990 East Galbraith Road, Suite 102 US Cincinnati OH 45236		1c Effective date of plan 03/01/2009 2b Employer Identification Number (EIN) 31-1004837 2c Sponsor's telephone number (513) 745-0707 2d Business code (see instructions) 523900
3a Plan administrator's name and address ☒ Same as Plan Sponsor		3b Administrator's EIN 3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report. a Sponsor's name c Plan Name		4b EIN 4d PN
5a Total number of participants at the beginning of the plan year	5a	100
b Total number of participants at the end of the plan year	5b	78
c Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	5c	
d(1) Total number of active participants at the beginning of the plan year	5d(1)	100
d(2) Total number of active participants at the end of the plan year	5d(2)	78
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	5e	0

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE		7/2/19	Terence Horan
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE		7/2/19	Terence Horan
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

For Paperwork Reduction Act Notice, see the instructions for Form 5500-SF.

Form 5500-SF (2018)
v.171027

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) ☒ Yes ☐ No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-487? (See instructions on waiver eligibility and conditions.) ☒ Yes ☐ No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.
- c** If the plan is a defined benefit plan, is it covered under the PBGC Insurance program (see ERISA section 4021)? ☒ Yes ☐ No ☐ Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this year 4187689 (See instructions.)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	1,921,667	1,242,951
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	1,921,667	1,242,951
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	381,677	
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)		
b Other income (loss)	8b	(12,217)	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		369,460
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	1,048,176	
e Certain deemed and/or corrective distributions (see instructions)	8e		
f Administrative service providers (salaries, fees, commissions)	8f		
g Other expenses	8g		
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		1,048,176
i Net income (loss) (subtract line 8h from line 8c)	8i		(678,716)
j Transfers to (from) the plan (see instructions)	8j		

Part IV Plan Characteristics

- 9a** If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
1A 1D
- b** If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions

10 During the plan year:	Yes	No	N/A	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a	X		
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b	X		
c Was the plan covered by a fidelity bond?	10c	X		
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d	X		
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e	X		
f Has the plan failed to provide any benefit when due under the plan?	10f	X		
g Did the plan have any participant loans? (If "Yes," enter amount as of year end.)	10g	X		
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500 and line 11a below)	☒ Yes ☐ No
11a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40	11a 0
12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.)	☐ Yes ☒ No
a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver Month Day Year	
If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.	
b Enter the minimum required contribution for this plan year	12b
c Enter the amount contributed by the employer to the plan for the plan year	12c
d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount)	12d
e Will the minimum funding amount reported on line 12d be met by the funding deadline?	☐ Yes ☐ No ☐ N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year? If "Yes," enter the amount of any plan assets that reverted to the employer this year	☐ Yes ☒ No
b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	☐ Yes ☒ No
c If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)	
13c(1) Name of plan(s):	13c(2) EIN(s)
.....	13c(3) PN(s)
.....	

2018 Schedule SB, line 22 -- Description of Weighted Average Retirement Age
Plan Name: Horan Associates, Inc. Defined Benefit Plan
EIN: 31-1004837
PN: 003

(A)	(B)	(C)	(D)	(E)
Retirement Age	Retirement Rates	Fraction Remaining	Probability Distribution	Sum Weighted Average Age
62	100.00%	0.00000	100.00%	62.00000

Weighted Average Retirement Age

62.0

The Retirement Rates (Column B) at each Early Retirement Age (Column A) are converted to a probability distribution (Column D). The products of Column A and Column D are summed to determine the resulting Weighted Average Retirement Age.

2018 Schedule SB, line 19(c) – Discounted Employer Contributions

Plan Name: Horan Associates, Inc. Defined Benefit Plan

EIN: 31-1004837

PN: 003

Effective Interest Rate: 4.73%

Effective Interest Rate for Late Quarterlies: 9.73%

<u>Date</u>	<u>Contribution Amount</u>	<u># Days to 3/1/2018</u>	<u>Discounted Contributions @ 4.73%</u>
2/26/2019	\$300,000	362	\$286,195
2/28/2019	\$81,677	364	\$77,997
Total	<u>\$381,677</u>		<u>\$364,192</u>

Required Quarterlies for the 2018 Plan Year Discounted to 3/1/2018

9.73% 4.73% 4.73%
0.9113278 0.95483625 0.954836246

Due Date	Amount Due	Date Made	Amount Actually Contributed	Amount on Time	Amount Late	Residual Amount	Late Amounts Discounted to Due Date	Late Amounts Discounted to BOPY	Residual Amounts Discounted to BOPY	Total Contribution Discounted to BOPY
6/15/2018	6,133	2/26/2019	6,133		6,133	-	5,746	5,670	0	5,670
9/15/2018	6,133	2/26/2019	6,133		6,133	-	5,882	5,737	0	5,737
12/15/2018	6,133	2/26/2019	6,133		6,133	-	6,020	5,804	0	5,804
3/15/2019	6,133	2/26/2019	6,133	6,133		6,133	0	0	5,858	5,858
11/15/2019	4,187	2/26/2019	275,468	275,468		275,468	0	0	263,126	263,126
		2/28/2019	81,677	81,677		81,677	0	0	77,997	77,997
			<u>300,000</u>		<u>18,399</u>	<u>281,601</u>				<u>364,192</u>

2018 Schedule SB, Part V – Summary of Plan Provisions
Plan Name: Horan Associates, Inc. Defined Benefit Plan
EIN: 31-1004837
PN: 003

1. Effective Date: March 1, 2009.
2. Plan Year: March 1st through February 28th.
3. Covered Employees: All employees of Horan Associates, Inc.
4. Eligibility: March 1st or September 1st following the attainment of age 21 and the completion of 1 year of service.
5. Average Monthly Earnings: Average monthly compensation for the highest thirty-six consecutive months.
6. Vesting Service: One Year of Vesting Service is granted for at least 1,000 Hours of Service worked during the Plan Year.
7. Benefit Service: One Year of Benefit Service is granted for at least 1,000 Hours of Service worked during the Plan Year. No Benefit Service will be credited prior to an Employee's entry into the Plan as an Active Participant.

2018 Schedule SB, Part V – Summary of Plan Provisions
Plan Name: Horan Associates, Inc. Defined Benefit Plan
EIN: 31-1004837
PN: 003

8. Normal Retirement:

- | | |
|--------------------|---|
| a. Eligibility | Later of attainment of Age 62 and five years of plan service. |
| b. Monthly Benefit | For Shareholders, x% of Average Monthly Earnings times Years of Benefit Service with a maximum of 10 Years of Benefit Service, where x% equals the following: for Group 1, 2.59%, for Group 2, 3.68%, and for Group 3, 2.43%. For all other participants, 0.5% of Average Monthly Earnings times Years of Benefit Service with a maximum of 10 Years of Benefit Service. Benefit accrual is offset by the benefit equivalent to the annual profit sharing contribution, to a maximum of 0.5%. |

9. Early Retirement:

None

10. Vested Retirement:

- | | |
|--------------------|---|
| a. Eligibility | 2 Years of Vesting Service. Participants vest 20% after two Years of Service plus 20% each year thereafter to 100% after six Years of Service. |
| b. Monthly Benefit | Calculated as for Normal Retirement based on Benefit Service and Average Monthly Compensation as of date of separation, times the participant's vesting percentage. |

2018 Schedule SB, Part V – Summary of Plan Provisions
Plan Name: Horan Associates, Inc. Defined Benefit Plan
EIN: 31-1004837
PN: 003

11. Disability Retirement:

- | | |
|--------------------|---|
| a. Eligibility | Total and permanent disability. |
| b. Monthly Benefit | Accrued Benefit as of the Disability Retirement Date, reduced by one-fifteenth (1/15) for each of the first five years and one-thirtieth (1/30) for each of the next five years by which by which the starting date of the benefit precedes the Normal Retirement Date, and reduced actuarially for each additional year. |

12. Pre-Retirement Death:

- | | |
|--------------------|---|
| a. Eligibility | A Participant with an Accrued Benefit. |
| b. Monthly Benefit | The Actuarial Present Value of the Participant's Accrued Benefit. |

13. Payment Forms:

- | | |
|-------------|---|
| a. Normal | Life annuity for single participants and an Actuarially Equivalent 50% Joint & Survivor annuity for married participants. |
| b. Optional | Actuarially equivalent single premium, nontransferable annuity, periodic installment payments, or lump sum distribution. |

2018 Schedule SB, Part V – Summary of Plan Provisions
Plan Name: Horan Associates, Inc. Defined Benefit Plan
EIN: 31-1004837
PN: 003

14. Actuarial Equivalency:

- | | |
|-------------------------|---|
| a. Other than Lump Sums | 1994 Group Annuity Reserve Table, blended 50% male and 50% female and 5.50%. No pre-retirement mortality. |
| b. Lump Sums | Greater of plan actuarial equivalence and 417(e) assumptions. 417(e) Applicable Mortality Table and 417(e) Applicable Interest Rate for the fifth month prior to the beginning of the Plan Year in which the distribution occurs. |

15. Maximum Annual Benefit:

\$220,000 per year for participants retiring at age 62 and later during the 2018 Plan Year.

16. Changes Since Last Year:

None.

SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2018 This Form is Open to Public Inspection
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For calendar plan year 2018 or fiscal plan year beginning 03/01/2018 and ending 02/28/2019

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan Horan Associates, Inc. Defined Benefit Plan	B Three-digit plan number (PN) ▶ 003
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF Horan Associates, Inc.	D Employer Identification Number (EIN) 31-1004837
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☒ 100 or fewer ☐ 101-500 ☐ More than 500

Part I Basic Information

1 Enter the valuation date: Month <u>03</u> Day <u>01</u> Year <u>2018</u>			
2 Assets:			
a Market value	2a	1,913,896	
b Actuarial value	2b	1,913,896	
3 Funding target/participant count breakdown:	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	0	0	0
b For terminated vested participants	0	0	0
c For active participants	100	1,887,147	1,887,147
d Total	100	1,887,147	1,887,147
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)	☐		
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5	4.73 %	
6 Target normal cost	6	54,005	

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE BFB Signature of actuary Beth F. Brooke Type or print name of actuary Cuni, Rust & Strenk, Inc. Firm name 4555 Lake Forest Drive, Suite 620 US Cincinnati OH 45242 Address of the firm	06/17/2019 Date 17-03658 Most recent enrollment number (513) 891-0270 Telephone number (including area code)
---	--

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the instructions for Form 5500 or 5500-SF.

Schedule SB (Form 5500) 2018
v. 171027

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9 Amount remaining (line 7 minus line 8)	0	0
10 Interest on line 9 using prior year's actual return of _____ %	0	0
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		74,074
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>4.89</u> %		3,622
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance		77,696
d Portion of (c) to be added to prefunding balance		0
12 Other reductions in balances due to elections or deemed elections	0	0
13 Balance at beginning of current year (line 9 + line 10 + line 11d - line 12)	0	0

Part III Funding Percentages

14 Funding target attainment percentage	14	101.41 %
15 Adjusted funding target attainment percentage	15	101.41 %
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	95.19 %
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
02/26/2019	300,000				
02/28/2019	81,677				
Totals ▶ 18(b)				381,677	18(c) 0

19 Discounted employer contributions -- see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date ..	19c	364,192

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year?	☒ Yes ☐ No
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	☐ Yes ☒ No
c If line 20a is "Yes," see instructions and complete the following table as applicable:	

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used To Determine Funding Target and Target Normal Cost**21** Discount rate:**a** Segment rates:

1st segment:

3.92 %

2nd segment:

5.52 %

3rd segment:

6.29 %

☐ N/A, full yield curve used**b** Applicable month (enter code)**21b**

0

22 Weighted average retirement age**22**

62

23 Mortality table(s) (see instructions)

Prior regulation:

☐ Prescribed - combined☐ Prescribed - separate☐ Substitute

Current regulation:

☒ Prescribed - combined☐ Prescribed - separate☐ Substitute**Part VI Miscellaneous items****24** Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment ☐ Yes ☒ No**25** Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment ☐ Yes ☒ No**26** Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment ☒ Yes ☐ No**27** If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment**27****Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years****28** Unpaid minimum required contributions for all prior years **28** 0**29** Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a) **29** 0**30** Remaining amount of unpaid minimum required contributions (line 28 minus line 29) **30** 0**Part VIII Minimum Required Contribution For Current Year****31** Target normal cost and excess assets (see instructions):**a** Target normal cost (line 6)**31a**

54,005

b Excess assets, if applicable, but not greater than line 31a**31b**

26,749

32 Amortization installments:

Outstanding Balance

Installment

a Net shortfall amortization installment

0

0

b Waiver amortization installment

0

0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount**33****34** Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)**34**

27,256

Carryover balance

Prefunding Balance

Total balance

35 Balances elected for use to offset funding requirement

0

0

0

36 Additional cash requirement (line 34 minus line 35)**36**

27,256

37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)**37**

364,192

38 Present value of excess contributions for current year (see instructions)**a** Total (excess, if any, of line 37 over line 36)**38a**

336,936

b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances**38b**

0

39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)**39**

0

40 Unpaid minimum required contributions for all years**40**

0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)**41** If an election was made to use PRA 2010 funding relief for this plan:**a** Schedule elected ☐ 2 plus 7 years ☐ 15 years**b** Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

2018 Schedule SB, Part V – Statement of Actuarial Assumptions/Methods

Plan Name: Horan Associates, Inc. Defined Benefit Plan

EIN: 31-1004837

PN: 003

1. Interest Rates:

a. Minimum Funding	
Segment 1	3.92%
Segment 2	5.52%
Segment 3	6.29%
 Post-retirement Lump Sum Rate	 5.50%
b. Maximum Funding	
Segment 1	1.89%
Segment 2	3.66%
Segment 3	4.46%
 Post-retirement Lump Sum Rate	 5.50%

2. Mortality Rates:

<u>Pre-retirement:</u>	None.
<u>Post-retirement:</u>	2018 Applicable Mortality Table

3. Salary Scale: 0.00%.

4. Retirement Ages: Normal Retirement Age or Attained Age, if later.

5. Assumed form of Benefit Payment: Lump Sum Distribution

2018 Schedule SB, Part V – Statement of Actuarial Assumptions/Methods

Plan Name: Horan Associates, Inc. Defined Benefit Plan

EIN: 31-1004837

PN: 003

- | | |
|-------------------------------------|--|
| 6. <u>Termination Rates:</u> | None. |
| 7. <u>Disability Rates:</u> | None. |
| 8. <u>Plan Expenses:</u> | None. |
| 9. <u>Actuarial Cost Method:</u> | Unit Credit under PPA rules. |
| 10. <u>Asset Valuation Method:</u> | Market Value. |
| 11. <u>Changes Since Last Year:</u> | The interest rates and mortality table were updated pursuant to IRS regulations. |

2018 Schedule SB, Line 26 - Schedule of Active Participant Data
Plan Name: Horan Associates, Inc. Defined Benefit Plan
EIN: 31-1004837
PN: 003

Years of Plan Service

Age Group	<u>< 1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35 +</u>	<u>Total</u>
< 19	0	0	0	0	0	0	0	0	0	0
20-24	3	3	0	0	0	0	0	0	0	6
25-29	3	6	1	0	0	0	0	0	0	10
30-34	6	8	4	0	0	0	0	0	0	18
35-39	5	4	8	0	0	0	0	0	0	17
40-44	1	5	5	0	0	0	0	0	0	11
45-49	4	0	4	0	0	0	0	0	0	8
50-54	1	3	8	0	0	0	0	0	0	12
55-59	1	3	4	0	0	0	0	0	0	8
60-64	0	2	2	0	0	0	0	0	0	4
65-69	0	0	5	0	0	0	0	0	0	5
70 +	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
Total	24	35	41	0	0	0	0	0	0	100