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

2015

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2015 or fiscal plan year beginning 01/01/2015 and ending 12/31/2015

A This return/report is for:
- [X] 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)
- [ ] a one-participant plan
- [ ] a foreign plan

B This return/report is
- [ ] 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:
- [X] Form 5558
- [ ] automatic extension
- [ ] DFVC program
- [ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
THE CHRIST HOSPITAL CARDIOVASCULAR ASSOCIATES LLC DEFINED BENEFIT PLAN

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 09/30/2010

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)
THE CHRIST HOSPITAL

2139 AUBURN AVENUE
CINCINNATI, OH 45219-2906

2b Employer Identification Number (EIN) 26-3070266

2c Sponsor's telephone number 513-585-4654

2d Business code (see instructions) 621111

3a Plan administrator's name and address [X] Same as Plan Sponsor.

3b Administrator's EIN

3c Administrator's telephone number

4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN, and the plan number from the last return/report.
a Sponsor's name

4b EIN

4c PN

5a Total number of participants at the beginning of the plan year	**5a**	21
b Total number of participants at the end of the plan year	**5b**	21
c Number of participants with account balances as of the end of the plan year (defined benefit plans do not complete this item)	**5c**	
d(1) Total number of active participants at the beginning of the plan year	**5d(1)**	21
d(2) Total number of active participants at the end of the plan year	**5d(2)**	21
e Number of participants that 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.	10/13/2016	PAUL GELTER
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

Preparer's name (including firm name, if applicable) and address (include room or suite number)

Preparer's telephone number

6a Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) [X] 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.) [X] 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)? [X] Yes [ ] No [ ] Not determined

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	4355569	4988685
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	4355569	4988685
8 Income, Expenses, and Transfers for this Plan Year		**(a) Amount**	**(b) Total**
a Contributions received or receivable from: (1) Employers	8a(1)	691967	
(2) Participants	8a(2)	0	
(3) Others (including rollovers)	8a(3)	0	
b Other income (loss)	8b	-58851	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		633116
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d		
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		0
i Net income (loss) (subtract line 8h from line 8c)	8i		633116
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 1I 3H

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		X		
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				
j Did the plan trust incur unrelated business taxable income?	10j				

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) [X] Yes [ ] No

11a Enter the unpaid minimum required contribution 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 [X] 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)

Part VIII Trust Information

14a Name of trust	**14b** Trust's EIN
14c Name of trustee or custodian	**14d** Trustee's or custodian's telephone number

Part IX IRS Compliance Questions

15a Is the plan a 401(k) plan?	☐ Yes	☐ No
15b If "Yes," how does the 401(k) plan satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under sections 401(k)(3) and 401(m)(2)?	☐ Design-based safe harbor method	☐ ADP/ACP test
15c If the ADP/ACP test is used, did the 401(k) plan perform ADP/ACP testing for the plan year using the "current year testing method" for nonhighly compensated employees (Treas. Reg sections 1.401(k)-2(a)(2)(ii) and 1.401(m)-2(a)(2)(ii))?	☐ Yes	☐ No
16a Check the box to indicate the method used by the plan to satisfy the coverage requirements under section 410(b):	☐ Ratio percentage test	☐ Average benefit test
16b Does the plan satisfy the coverage and nondiscrimination tests of sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules?	☐ Yes	☐ No
17a Has the plan been timely amended for all required tax law changes?	☐ Yes	☐ No ☐ N/A

17b Date the last plan amendment/restatement for the required tax law changes was adopted____/____/____. Enter the applicable code ____ (See instructions for tax law changes and codes).

17c If the plan sponsor is an adopter of a pre-approved master and prototype (M&P) or volume submitter plan that is subject to a favorable IRS opinion or advisory letter, enter the date of that favorable letter _____/_____/_____ and the letter's serial number _____.

17d If the plan is an individually-designed plan and received a favorable determination letter from the IRS, enter the date of the plan's last favorable determination letter _____/_____/_____.

18 Is the Plan maintained in a U.S. territory (i.e., Puerto Rico (if no election under ERISA section 1022(i)(2) has been made), American Samoa, Guam, the Commonwealth of the Northern Mariana Islands or the U.S. Virgin Islands)?	☐ Yes	☐ No
19 Were in-service distributions made during the plan year?	☐ Yes	☐ No
If "Yes," enter amount	**19**	
20 Were required minimum distributions made to 5% owners who have attained age 70 ½ (regardless of whether or not retired), as required under section 401(a)(9)?	☐ Yes	☐ No ☐ N/A

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

2015

This Form is Open to Public Inspection

For calendar plan year 2015 or fiscal plan year beginning 01/01/2015 and ending 12/31/2015

▶ **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
THE CHRIST HOSPITAL CARDIOVASCULAR ASSOCIATES LLC DEFINED BENEFIT PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
THE CHRIST HOSPITAL

D Employer Identification Number (EIN)
26-3070266

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [X] 100 or fewer [ ] 101-500 [ ] More than 500

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2015

2 Assets:

a Market value	**2a**	4355569
b Actuarial value	**2b**	4355569

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	21	4504911	4504911
d Total	21	4504911	4504911

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**	6.36%
6 Target normal cost	**6**	0

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

Signature of actuary

10/12/2016
Date

MATTHEW LITTLE
Type or print name of actuary

14-08076
Most recent enrollment number

MERCER
Firm name

248-945-5500
Telephone number (including area code)

ONE TOWNE SQUARE
SUITE 1100
SOUTHFIELD, MI 48076
Address of the firm

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 [ ]

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	77347
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	74014
9	Amount remaining (line 7 minus line 8)	0	3333
10	Interest on line 9 using prior year's actual return of 9.93%	0	331
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	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 6.58%		0
	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		0
	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	3664

Part III Funding Percentages

14	Funding target attainment percentage	14	96.60 %
15	Adjusted funding target attainment percentage	15	96.60 %
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	95.74 %
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
03/30/2015	18504	0			
07/13/2015	18504	0			
04/14/2016	9642	0			
07/15/2016	9642	0			
09/15/2016	635675	0			
			Totals ► 18(b)	691967	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	626063

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [X] Yes [ ] No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? [X] 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:	2nd segment:	3rd segment:	
4.72 %	6.11 %	6.81 %	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	62

23 Mortality table(s) (see instructions) ☒ 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**	0
b Excess assets, if applicable, but not greater than line 31a	**31b**	0

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	153006	38566
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**	38566

	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**	38566
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	626063

38 Present value of excess contributions for current year (see instructions)

a Total (excess, if any, of line 37 over line 36)	**38a**	587497
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

42 Amount of acceleration adjustment	**42**	
43 Excess installment acceleration amount to be carried over to future plan years	**43**	

Schedule SB, line 26 — Schedule of Active Participant Data

Attained age	Years of credited service										
	Under 1	1–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40 & up	Total
Under 25											
25–29											
30–34											
35–39											
40–44											
45–49			5								5
50–54			3	4							7
55–59			1	2							3
60–64				5							5
65–69											
70 & up				1							1
Total			9	12							21

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Actuarial Assumptions

Discount rate sponsor elections		
• Segment rates or full yield curve	Segment	
• Look-back months	4	
	Stabilized rates	**Nonstabilized rates**
• First 5 years	4.72%	1.15%
• Next 15 years	6.11%	4.06%
• Over 20 years	6.81%	5.15%
Mortality sponsor elections[1]		
• Healthy participants	The mandated PPA 2015 Combined Unisex mortality table prescribed by Section 417(e) for determining lump sums. No mortality is assumed in the deferral period.	
• Pre-1995 disabilities	Not applicable	
• Post-1994 disabilities	Not applicable	
417(e) lump sums	Liabilities are determined based on the underlying annuity used by the plan to determine the lump sum amount, rather than valuing the lump sum payment. This annuity is valued based on funding interest rates rather than 417(e) rates. As noted above, the mortality table used is the mandated Applicable PPA 2015 Combined Unisex mortality table prescribed by Section 417(e) for determining lump sums.	
Other economic assumptions		
• Salary increases	Not applicable	
• Flat-dollar benefit increases	Not applicable	
• Social Security taxable wage base increases	Not applicable	
• Inflation	Not applicable	

Rationale for Economic Assumptions

- Discount rate sponsor elections – Plan Sponsor elected Segment rates with 4 month look-back. Rates prescribed by IRS monthly.

[1] *Typically, "valuation" mortality is defined as follows:*

Section 430(h)(3) prescribes separate static / generational annuitant and nonannuitant mortality tables. In some defined circumstances, combined static annuitant and nonannuitant mortality tables can be used. These prescribed tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 for actives and plus 15 years for inactives, based on Scale AA.

However, for this plan this prescribed "valuation" mortality is not applicable. The only applicable mortality is the mandated PPA 2015 Combined Unisex mortality table prescribed by Section 417(e) for determining lump sums.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Demographic assumptions		
• Withdrawal	None Assumed	
• Disability incidence	None Assumed	
• Retirement age	100% at Normal Retirement Date, or current age if later	
• Spouse assumptions	**Male participants**	**Female participants**
– Percentage married	85%	85%
– Spouse age difference	3 years younger	3 years older
Form of payment	**Lump Sum**	
• Active retirements	100%	
• Future vested deferred	Not applicable	
• Future disabilities	Not applicable	
• Future deaths	Not applicable	
Unpredictable contingent event assumptions	Not applicable	

Rationale for Demographic Assumptions

- Retirement age – No early retirement presumed due to lack of early retirement subsidy. There is not sufficient data to develop reliable retirement rates beyond normal retirement.
- Form of payment based on observed plan experience.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Actuarial Methods

Asset Methods

The asset valuation method is the fair market value.

Participant Methods

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The participants included in the spinoff from the Ohio Heart and Vascular Center, Inc. Defined Benefit Plan are valued in The Christ Hospital Cardiovascular Associates LLC Defined Benefit Plan as of January 1, 2015.
- **Participants excluded:** No actuarial liability is included for nonvested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts**: The plan does not have any insurance contracts.

Minimum Funding Methods

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

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

2015

This Form is Open to Public Inspection

For calendar plan year 2015 or fiscal plan year beginning 01/01/2015 and ending 12/31/2015

▶ **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
THE CHRIST HOSPITAL CARDIOVASCULAR ASSOCIATES LLC DEFINED BENEFIT PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
THE CHRIST HOSPITAL

D Employer Identification Number (EIN)
26-3070266

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [X] 100 or fewer [ ] 101-500 [ ] More than 500

Part I Basic Information

1	Enter the valuation date: Month 01 Day 01 Year 2015		
2	Assets		
	a Market value	2a	4,355,569
	b Actuarial value	2b	4,355,569

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	21	4,504,911	4,504,911
d Total	21	4,504,911	4,504,911

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	6.36%
6	Target normal cost	6	0

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

M. L.

Signature of actuary

10/12/2016

Date

MATTHEW LITTLE

Type or print name of actuary

1408076

Most recent enrollment number

MERCER

Firm name

248-945-5500

Telephone number (including area code)

ONE TOWNE SQUARE
SUITE 1100
SOUTHFIELD MI 48076

Address of the firm

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 [ ]

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	77,347
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	74,014
9	Amount remaining (line 7 minus line 8)	0	3,333
10	Interest on line 9 using prior year's actual return of 9.93%	0	331
11	Prior year's excess contributions to be added to prefunding balance		
	a Present value of excess contributions (line 38a from prior year)		0
	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 6.58%		0
	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		0
	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	3,664

Part III Funding Percentages

14	Funding target attainment percentage	14	96.60%
15	Adjusted funding target attainment percentage	15	96.60%
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	95.74%
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
03/30/2015	18,504	0			
07/13/2015	18,504	0			
04/14/2016	9,642	0			
07/15/2016	9,642	0			
09/15/2016	635,675	0			
			Totals ► 18(b)	691,967	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	626,063
20	Quarterly contributions and liquidity shortfalls		
	a Did the plan have a "funding shortfall" for the prior year?		[X] Yes [ ] No
	b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?		[X] 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:	2nd segment:	3rd segment:	☐ N/A, full yield curve used
4.72%	6.11%	6.81%	

b Applicable month (enter code)	21b	4
22 Weighted average retirement age	22	62

23 Mortality table(s) (see instructions) ☒ 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		0
b Excess assets, if applicable, but not greater than line 31a	31b		0
32 Amortization installments:		Outstanding Balance	Installment
a Net shortfall amortization installment		153,006	38,566
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		38,566

	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	38,566
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	626,063
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	38a	589,922
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

42 Amount of acceleration adjustment	42	
43 Excess installment acceleration amount to be carried over to future plan years	43	

Schedule SB, Part V — Summary of Plan Provisions

Effective date and plan year	Original plan: September 30, 2010 Plan year: January 1 through December 31 except for the first Plan Year which was a Short Plan Year from September 30, 2010 to December 31, 2010.
Status of the plan	The plan is closed to new entrants and all benefits are frozen.
Significant events that occurred during the year	None
Definitions	
• Covered employees	Only Transferred Ohio Heart Participants shall be Participants under the Plan. There shall be no new Participants after the Effective Date.
• Years of service	All Years of Service taken into account under the Ohio Heart Plan as of the Effective Date and all Years of Service with the Employer subsequent to the Effective Date.
• Average compensation	The average of the highest thirty-six (36) consecutive months (or lesser period if the Participant has fewer than 36 months of Compensation) of Monthly Compensation.
• Accrued benefit	Equal to the Participant's frozen Accrued Benefit under the Ohio Heart Plan.
Normal retirement	
• Eligibility	The later of the Employee's 62nd birthday, or the 10th anniversary of such Employee's first date of participation in the Plan. However, in no event will an Employee's "Normal Retirement Age" exceed the later of the Employee's 65th birthday or the 5th anniversary of such Employee's participation in the Plan.
• Benefit	Equal to the Participant's frozen Accrued Benefit under the Ohio Heart Plan.
Early retirement	
• Eligibility	None.
• Benefit	None.
Late retirement	
• Eligibility	Employment beyond Normal Retirement Date.
• Benefit	A Participant who works beyond their Normal Retirement Date will upon actual retirement receive the greater of the actuarial equivalent of their Accrued Benefit calculated at Normal Retirement and their Accrued Benefit calculated as of their actual retirement.
Deferred vested	
• Eligibility	All benefits are vested.
• Benefit	Equal to the Participant's frozen Accrued Benefit under the Ohio Heart Plan.

Schedule SB, Part V — Summary of Plan Provisions

Disability	
• Eligibility	Totally and permanently disabled.
• Benefit	Calculated for Normal Retirement, reduced by 1/15th for each of the first five years, 1/30th for each of the next 5 years and actuarially for each additional year.
Pre-retirement death	
• Eligibility	All participants are eligible.
• Benefit prior to early retirement	The surviving spouse will automatically receive a monthly annuity calculated as if the participant had terminated employment on his date of death, survived to his earliest retirement date and retired with a Joint & 50% annuity unless another optional form is elected by a qualified election. However, regardless of form of payment, 100% of the Actuarial Equivalent value of the benefit is payable in the event of Participant death prior to retirement. If the value of the Participant's accrued benefit is greater than the value of the form elected, the excess is also payable to the beneficiary.
Form of benefits	
• Normal form	Single life annuity
• Optional forms	Actuarial equivalent 50% joint & survivor annuity, lump sum, periodic installments.
• Actuarial Equivalence	Lump sums: *Interest:* The interest rate(s) as determined under Code Section 417(e) with an annual calendar year stability period and a look-back period of three months prior to the beginning of the stability period. *Mortality:* the applicable mortality table as determined under Code Section 417(e). Other than lump sums; Pre-Retirement: 5.00% interest only. Post-Retirement: 5.00% interest and the 1994 GAR Blended Table (50% Male / 50% Female).
Miscellaneous	
• Maximum compensation	Not applicable since the benefits are frozen.
• Maximum benefits	Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2015, the limit is $210,000.

Schedule SB, Part V — Summary of Plan Provisions

Benefits Included or Excluded

Unless noted below, all benefits provided by the plan, as restated and amended through September 30, 2010, are included in this valuation.

- **Most recent plan amendments included:** None.
- **Plan amendments excluded:** None.
- **Late retirement increases:**
  - *Active participants:* The plan applies late retirement actuarial increases for all participants who defer retirement beyond their normal retirement date and this valuation includes those increases.
  - *Deferred vested participants:* There are currently no deferred vested participants over normal retirement age.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). Therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.
- **IRC Section 436 benefit restrictions:**
  - *Unpredictable contingent event benefits:* This valuation excludes restricted contingent event benefits that occurred before the valuation date but includes contingent event benefits which are expected to occur on or after the valuation date regardless of anticipated funding-based limitations.
  - *Plan amendments:* See above.
  - *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
  - *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

Plan Provision Changes Since Prior Valuation

Maximum benefit amounts under IRS rules was updated from 2014 to 2015.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year covered under PPA. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than $0.

Shortfall bases					
Year established		**Outstanding balance**	**Years remaining**		**2015 Installment**
2009	$	5,089	1	$	5,089
2010		(71,214)	2		(36,428)
2011		256,512	3		89,476
2012		(257,503)	4		(68,895)
2013		291,297	5		63,753
2014		(118,188)	6		(22,247)
2015		47,013	7		7,818
Total	$	153,006		$	38,566