

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans 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.	OMB Nos. 1210-0110 1210-0089 2023 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024	
A	This return/report is for: ☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must provide participating employer information in accordance with the form instructions.) ☒ a single-employer plan ☐ a DFE (specify) _____ ☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
C	If the plan is a collectively-bargained plan, check here. ▶ ☐
D	Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)
E	If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. ▶ ☐

Part II	Basic Plan Information—enter all requested information
1a	Name of plan UMASS MEMORIAL HEALTH CARE PENSION PLAN
1b	Three-digit plan number (PN) ▶ 005
1c	Effective date of plan 01/01/1971
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) UMASS MEMORIAL HEALTH CARE, INC. WBC- 67 MILLBROOK STREET NORTH BUILDING, 1ST FLOOR WORCESTER, MA 01606
2b	Employer Identification Number (EIN) 04-3358566
2c	Plan Sponsor's telephone number 508-334-8511
2d	Business code (see instructions) 622000

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 accompanying schedules, statements and attachments, 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.	07/15/2025	DIANE SARKISIAN
	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
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

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
5 Total number of participants at the beginning of the plan year	5 12909
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d). a(1) Total number of active participants at the beginning of the plan year a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits c Other retired or separated participants entitled to future benefits d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. f Total. Add lines 6d and 6e g(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item) g(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....	6a(1) 8379 6a(2) 9418 6b 1461 6c 2627 6d 13506 6e 130 6f 13636 6g(1) 6g(2) 6h 104
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item).....	7

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1A 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
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10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- (1) ☒ **R** (Retirement Plan Information)
- (2) ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3) ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary
- (4) ☐ **DCG** (Individual Plan Information) – Number Attached _____
- (5) ☐ **MEP** (Multiple-Employer Retirement Plan Information)

b General Schedules

- (1) ☒ **H** (Financial Information)
- (2) ☐ **I** (Financial Information – Small Plan)
- (3) ☐ **A** (Insurance Information) – Number Attached 0
- (4) ☒ **C** (Service Provider Information)
- (5) ☒ **D** (DFE/Participating Plan Information)
- (6) ☐ **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2023 Form M-1 annual report. If the plan was not required to file the 2023 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

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 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024	
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 UMASS MEMORIAL HEALTH CARE PENSION PLAN	B Three-digit plan number (PN) 005
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF UMASS MEMORIAL HEALTH CARE, INC.	D Employer Identification Number (EIN) 04-3358566
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 10 Day 01 Year 2023			
2	Assets:			
a	Market value	2a	989393004	
b	Actuarial value	2b	1044209143	
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	1351	321750191	321750191
b	For terminated vested participants	3179	139485284	139485284
c	For active participants	8379	685657444	695732420
d	Total	12909	1146892919	1156967895
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	5.36 %	
6	Target normal cost			
a	Present value of current plan year accruals	6a	48845998	
b	Expected plan-related expenses	6b	8900000	
c	Target normal cost	6c	57745998	

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 ERIC GEISSLER Type or print name of actuary WILLIS TOWERS WATSON US LLC Firm name 3340 PLAYERS CLUB PARKWAY SUITE 200 MEMPHIS, TN 38125-8942 Address of the firm	07/14/2025 Date 23-07911 Most recent enrollment number 901-930-0000 Telephone number (including area code)
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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	90109319
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	54054509
9 Amount remaining (line 7 minus line 8)	0	36054810
10 Interest on line 9 using prior year's actual return of <u>11.63</u> %	0	4193174
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		28240940
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>5.53</u> %		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		3284421
c Total available at beginning of current plan year to add to prefunding balance		31525361
d Portion of (c) to be added to prefunding balance		31525361
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	71773345

Part III Funding Percentages			
14 Funding target attainment percentage	14	84.05	%
15 Adjusted funding target attainment percentage	15	84.05	%
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	86.41	%
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
11/13/2024	9348333	0	04/01/2025	7775000	0
12/03/2024	14166667	0	05/01/2025	7775000	0
01/02/2025	7775000	0	06/03/2025	7775000	0
02/03/2025	7775000	0			
02/10/2025	50000000	0			
03/03/2025	7775000	0			
Totals ▶			18(b)	120165000	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	111944802
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
0	0	0
		(4) 4th
		0

Part V	Assumptions Used to Determine Funding Target and Target Normal Cost
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21 Discount rate:**a** Segment rates:1st segment:
4.75 %2nd segment:
5.00 %3rd segment:
5.74 %☐ N/A, full yield curve used**b** Applicable month (enter code).....**21b**

4

22 Weighted average retirement age**22**

63

23 Mortality table(s) (see instructions)☐

Prescribed - combined

☒

Prescribed - separate

☐

Substitute

Part VI	Miscellaneous Items
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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 Demographic and benefit information**a** Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.☒

Yes

☐

No

b Is the plan required to provide a projection of expected benefit payments? 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
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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
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31 Target normal cost and excess assets (see instructions):**a** Target normal cost (line 6c).....**31a**

57745998

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

0

32 Amortization installments:

Outstanding Balance

Installment

a Net shortfall amortization installment

184532097

18433299

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**

76179297

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	61930640	61930640

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

14248657

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

111944802

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

97696145

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

61930640

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 the American Rescue Plan Act of 2021 (See Instructions)
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41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. ☒ 2019 ☐ 2020 ☐ 2021

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2023
		This Form is Open to Public Inspection.

For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024		
A Name of plan UMASS MEMORIAL HEALTH CARE PENSION PLAN	B Three-digit plan number (PN) ▶	005
C Plan sponsor's name as shown on line 2a of Form 5500 UMASS MEMORIAL HEALTH CARE, INC.	D Employer Identification Number (EIN) 04-3358566	

Part I	Service Provider Information (see instructions)
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You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. ☒ Yes ☐ No
- b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
ASIA ALTERNATIVES
84-3891191

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
BROOKFIELD CORPORATION
BROOKFIELD PLACE NEW YORK 250 VESEY STREET, 15TH FLOOR NEW YORK, NY 10281

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
COHEN & STEERS GLOBAL REALTY
20-4949403

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
GLOBAL ALPHA CAPITAL MANAGEMENT
98-1484036

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

HARBOURVEST

74-3130888

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

INDEPENDENT FRANCHISE PARTNERS

801 S. CANAL STREET
CHICAGO, IL 60607

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

MASSACHUSETTS FINANCIAL SERVICES CO

04-2747644

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

SEI TRUST COMPANY

06-1271230

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

THE VARDE FUND XII, G.P., L.P.

98-1439368

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

TIFF ADVISORY SERVICES, INC.

54-1678701

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

VIVO CAPITAL LLC

20-3075737

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

WILLIS TOWERS WATSON US LLC

53-0181291

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
11 50	ACTUARY	1224753	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

CAMBRIDGE ASSOCIATES

04-3515240

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 51	INVESTMENT MANAGER	550000	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

MARATHON LONDON INTERNATIONAL INVES

04-3237387

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 72	INVESTMENT MANAGER	405328	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

BOSTON PARTNERS

1 BEACON STREET - 30TH FLOOR
BOSTON, MA 02108

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 72	INVESTMENT MANAGER	398003	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

ACADIAN ASSET MANAGEMENT LLC

45-2634493

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 72	INVESTMENT MANAGER	386186	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

WALTER SCOTT & PARTNERS LIMITED

98-0465834

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 51	INVESTMENT MANAGER	352851	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

INCOME RESEARCH + MANAGEMENT

27-4823991

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 72	INVESTMENT MANAGER	241670	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

BANK OF NEW YORK MELLON

25-6078093

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
18 21 28 51	CUSTODIAN	133643	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

MELLON CAPITAL MGMT

25-1442864

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
21 51	INVESTMENT MANAGER	49610	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

CROWE LLP

35-0921680

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
15 50	AUDITOR	29750	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

STATE STREET GLOBAL ADVISORS

81-4017137

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 51	INVESTMENT MANAGER	25242	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

NEPC, LLC

255 STATE STREET
BOSTON, MA 02109

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 51	INVESTMENT MANAGER	19052	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE D (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	DFE/Participating Plan Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection.
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For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024

A Name of plan <u>UMASS MEMORIAL HEALTH CARE PENSION PLAN</u>	B Three-digit plan number (PN) ▶ <u>005</u>
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C Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>UMASS MEMORIAL HEALTH CARE, INC.</u>	D Employer Identification Number (EIN) <u>04-3358566</u>
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Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
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a Name of MTIA, CCT, PSA, or 103-12 IE: BNYM MELLON DB SL BROAD MARKET STOC

b Name of sponsor of entity listed in (a): THE BANK OF NEW YORK MELLON

c EIN-PN <u>25-6078093-106</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>173995189</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: STATE STREET LONG US TREASURY INDEX

b Name of sponsor of entity listed in (a): STATE STREET GLOBAL ADVISORS

c EIN-PN <u>04-0025081-479</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>148951067</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: STATE STREET 20+ YEAR US TREASURY S

b Name of sponsor of entity listed in (a): STATE STREET GLOBAL ADVISORS

c EIN-PN <u>90-0337987-169</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>29534160</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: POLEN FOCUS GR COLL INV TRUST

b Name of sponsor of entity listed in (a): SEI TRUST COMPANY

c EIN-PN <u>81-2617494-094</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>30967297</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: GLOBAL ALPHA INTERNATIONAL SMALL CA

b Name of sponsor of entity listed in (a): GLOBAL ALPHA CAPITAL MANAGEMENT LTD.

c EIN-PN <u>30-0958532-001</u>	d Entity code <u>E</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>27708725</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: MARATHON LONDON INTERNATIONAL INVES

b Name of sponsor of entity listed in (a): MARATHON ASSET MANAGEMENT LLP

c EIN-PN <u>04-3237387-001</u>	d Entity code <u>E</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>47659037</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: IR&M LONG GOVERNMENT/CREDIT FUND LL

b Name of sponsor of entity listed in (a): INCOME RESEARCH & MANAGEMENT

c EIN-PN <u>27-4823991-001</u>	d Entity code <u>E</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>83668194</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE: ACADIAN EMERGING MARKETS EQUITY II

b Name of sponsor of entity listed in (a): ACADIAN ASSET MANAGEMENT LLC

c EIN-PN 04-2929221-012	d Entity code E	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 0
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a Name of MTIA, CCT, PSA, or 103-12 IE: NCS GROUP TRUST GLOBAL FUND

b Name of sponsor of entity listed in (a): BNY MELLON INVESTMENT MANAGEMENT CAYMAN LTD

c EIN-PN 76-6192146-003	d Entity code C	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 39483776
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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Part II Information on Participating Plans (to be completed by DFEs, other than DCGs)

(Complete as many entries as needed to report all participating plans. DCGs must report each participating plan using Schedule DCG.)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2023
		This Form is Open to Public Inspection

For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024		
A Name of plan UMASS MEMORIAL HEALTH CARE PENSION PLAN	B Three-digit plan number (PN) ▶	005
C Plan sponsor's name as shown on line 2a of Form 5500 UMASS MEMORIAL HEALTH CARE, INC.	D Employer Identification Number (EIN) 04-3358566	

Part I	Asset and Liability Statement		
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.			
Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a	0	0
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)	41037078	120165000
(2) Participant contributions	1b(2)		
(3) Other	1b(3)	1298938	1524514
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)	642542	28675
(2) U.S. Government securities	1c(2)	5302929	5221046
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred.....	1c(3)(A)	23168132	30688399
(B) All other.....	1c(3)(B)	28039376	29262702
(4) Corporate stocks (other than employer securities):			
(A) Preferred.....	1c(4)(A)		
(B) Common	1c(4)(B)	60850670	40460234
(5) Partnership/joint venture interests	1c(5)	283329990	356448606
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)		
(9) Value of interest in common/collective trusts	1c(9)	251225868	422931488
(10) Value of interest in pooled separate accounts.....	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities.....	1c(12)	199892378	159035956
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	95256815	68098626
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other.....	1c(15)	2053223	4456483

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	992097939	1238321729
Liabilities			
g Benefit claims payable	1g		
h Operating payables	1h	146853	127677
i Acquisition indebtedness	1i		
j Other liabilities	1j	2080166	9818089
k Total liabilities (add all amounts in lines 1g through 1j)	1k	2227019	9945766
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	989870920	1228375963

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	120165000	
(B) Participants	2a(1)(B)		
(C) Others (including rollovers)	2a(1)(C)		
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B), (C), and line 2a(2)	2a(3)		120165000
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	-16134	
(B) U.S. Government securities	2b(1)(B)	169144	
(C) Corporate debt instruments	2b(1)(C)	3019072	
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)		
(F) Other	2b(1)(F)	194308	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		3366390
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)	964500	
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	1687579	
(D) Total dividends. Add lines 2b(2)(A) , (B), and (C)	2b(2)(D)		2652079
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	206193042	
(B) Aggregate carrying amount (see instructions)	2b(4)(B)	191612275	
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		14580767
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)	35797377	
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts.....	2b(6)		75747086
(7) Net investment gain (loss) from pooled separate accounts.....	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts.....	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		44376728
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		15357934
c Other income	2c		42152
d Total income. Add all income amounts in column (b) and enter total	2d		312085513

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	61911693	
(2) To insurance carriers for the provision of benefits.....	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		61911693
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses:			
(1) Salaries and allowances	2i(1)		
(2) Contract administrator fees.....	2i(2)		
(3) Recordkeeping fees.....	2i(3)	938112	
(4) IQPA audit fees.....	2i(4)	2000	
(5) Investment advisory and investment management fees	2i(5)	2365921	
(6) Bank or trust company trustee/custodial fees	2i(6)	133584	
(7) Actuarial fees	2i(7)	330465	
(8) Legal fees	2i(8)		
(9) Valuation/appraisal fees	2i(9)		
(10) Other trustee fees and expenses	2i(10)		
(11) Other expenses	2i(11)	7898695	
(12) Total administrative expenses. Add lines 2i(1) through (11)	2i(12)		11668777
j Total expenses. Add all expense amounts in column (b) and enter total	2j		73580470

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		238505043
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☒ Unmodified (2) ☐ Qualified (3) ☐ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☐ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: **COHNREZNICK LLP**

(2) EIN: **33-4144829**

d The opinion of an independent qualified public accountant is **not attached** as part of Schedule H because:

(1) ☐ This form is filed for a CCT, PSA, DCG or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l. DCGs do not complete lines 4e, 4f, 4k, 4l, and 5, and DCGs generally complete the rest of Part IV collectively for all plans in the DCG, except as otherwise provided (see instructions).

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? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)		☒	
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)		☒	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)		☒	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)		☒	
e Was this plan covered by a fidelity bond?	☒		5000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		☒	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?		☒	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?		☒	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	☒		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)	☒		
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?		☒	
l Has the plan failed to provide any benefit when due under the plan?		☒	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b 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.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☒ Yes ☐ No ☐ Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 541798.

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection.
For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024		
A Name of plan UMASS MEMORIAL HEALTH CARE PENSION PLAN		B Three-digit plan number (PN) ▶ 005
C Plan sponsor's name as shown on line 2a of Form 5500 UMASS MEMORIAL HEALTH CARE, INC.		D Employer Identification Number (EIN) 04-3358566
Part I	Distributions	
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....		1 0
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 25-1926855		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year		3 711
Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)	
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ☐ Yes ☒ No ☐ N/A		
If the plan is a defined benefit plan, go to line 8.		
5 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 ruling letter granting the waiver. Date: Month _____ Day _____ Year _____		
If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)		6a
b Enter the amount contributed by the employer to the plan for this plan year		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ☐ Yes ☐ No ☐ N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ☐ Yes ☐ No ☒ N/A		
Part III	Amendments	
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ☐ Increase ☐ Decrease ☐ Both ☒ No		
Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.	
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?..... ☐ Yes ☐ No		
11 a Does the ESOP hold any preferred stock? ☐ Yes ☐ No		
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ☐ Yes ☐ No		
12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ☐ Yes ☐ No		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2023 v. 230707		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:		
a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment)	14a	
b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b	
c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:		
a The corresponding number for the plan year immediately preceding the current plan year	15a	
b The corresponding number for the second preceding plan year	15b	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:		
a Enter the number of employers who withdrew during the preceding plan year	16a	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	16b	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment..... ☐

Part VI	Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans
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18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment..... ☐

19 If the total number of participants is 1,000 or more, complete lines (a) and (b):

a Enter the percentage of plan assets held as:

Public Equity: 51.0 % Private Equity: 26.0 % Investment-Grade Debt and Interest Rate Hedging Assets: 15.0 %

High-Yield Debt: 2.0 % Real Assets: 1.0 % Cash or Cash Equivalents: 0.0 % Other: 5.0 %

b Provide the average duration of the Investment-Grade Debt and Interest Rate Hedging Assets:

☐ 0-5 years ☐ 5-10 years ☒ 10-15 years ☐ 15 years or more

20 PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☒ No

b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation: _____

Part VII	IRS Compliance Questions
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21a Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules? ☒ Yes ☐ No

21b If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

☐ Design-based safe harbor method

☐ "Prior year" ADP test

☐ "Current year" ADP test

☒ N/A

22 If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter ___/___/___ (MM/DD/YYYY) and the Opinion Letter serial number _____.

UMass Memorial Health Care Pension Plan

Financial Statements

(With Supplemental Schedules)

and Independent Auditor's Report

September 30, 2024 and 2023

UMass Memorial Health Care Pension Plan
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September 30, 2024 and 2023

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Independent Auditor's Report

To the Plan Administrator and the Investment and Pension Committee
UMass Memorial Health Care Pension Plan

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed audits of the financial statements of UMass Memorial Health Care Pension Plan (the "Plan"), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 ("ERISA"), as permitted by ERISA Section 103(a)(3)(C) ("ERISA Section 103(a)(3)(C)"). The financial statements comprise the statements of net assets available for benefits as of September 30, 2024 and 2023, and the related statements of changes in net assets available for benefits for the years ended September 30, 2024 and 2023, and the related notes to the financial statements.

Management, having determined it is permissible in the circumstances, has elected to have the audits of the Plan's financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the Plan ("investment information") by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA ("qualified institution").

Management has obtained certifications from a qualified institution as of September 30, 2024 and 2023, and for the years then ended September 30, 2024 and 2023, stating that the certified investment information, as described in Note 5 to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audits and on the procedures performed as described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section:

- The amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.
- The information in the accompanying financial statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

Management is also responsible for maintaining a current Plan instrument, including all Plan amendments, administering the Plan, and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements

Except as described in the *Scope and Nature of the ERISA Section 103(a)(3)(C) Audit* section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a significant likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audits did not extend to the certified investment information, except for obtaining and reading the certification, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matter

Supplemental Schedules Required by ERISA

The supplemental schedules of Schedule H, Part IV, Line 4(i), Schedule of Assets (Held at End of Year), Schedule H, Part IV, Line 4(i), Schedule of Assets (Acquired and Disposed of Within Year) and Schedule H, Part IV, Line 4(j), Schedule of Reportable Transactions, are presented for purposes of additional analysis and are not a required part of the financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedules, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in the supplemental schedules that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

In forming our opinion on the supplemental schedules, we evaluated whether the supplemental schedules, other than the information agreed to or derived from the certified investment information, including their form and content, are presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion:

- The form and content of the supplemental schedules, other than the information in the supplemental schedules that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.
- The information in the supplemental schedules related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).



Hartford, Connecticut
July 14, 2025

UMass Memorial Health Care Pension Plan
Statements of Net Assets Available for Benefits
September 30, 2024 and 2023

	2024	2023
Assets:		
Investments, at fair value	\$ 1,116,632,215	\$ 949,761,923
Receivables:		
Employer contribution receivable	120,165,000	41,037,078
Due from brokers for securities sold	546,964	434,737
Accrued interest and dividends	977,550	864,201
Total receivables	121,689,514	42,336,016
Total assets	1,238,321,729	992,097,939
Liabilities:		
Due to brokers for securities purchased	9,818,089	2,080,166
Accrued administrative expenses	127,677	146,853
Total liabilities	9,945,766	2,227,019
Net assets available for benefits	\$ 1,228,375,963	\$ 989,870,920

See notes to financial statements.

UMass Memorial Health Care Pension Plan
Statements of Changes in Net Assets Available for Benefits
September 30, 2024 and 2023

	2024	2023
Additions:		
Investment income:		
Net appreciation in fair value of investments	\$ 184,402,011	\$ 96,946,124
Dividends	2,683,181	2,697,371
Interest	4,835,321	3,789,698
Investment expenses	(2,562,454)	(2,060,556)
Total investment income	189,358,059	101,372,637
Employer contribution	120,165,000	41,037,078
Total additions	309,523,059	142,409,715
Deductions:		
Benefits paid to participants	61,911,693	72,460,333
Administrative expenses	9,106,323	9,638,253
Total deductions	71,018,016	82,098,586
Net increase	238,505,043	60,311,129
Net assets available for benefits, beginning of year	989,870,920	929,559,791
Net assets available for benefits, end of year	\$ 1,228,375,963	\$ 989,870,920

See notes to financial statements.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

Note 1 – Description of Plan

The following description of the UMass Memorial Health Care Pension Plan (the Plan, merged plan) provides only general information. Participants should refer to the Plan document, and any amendments hereto, for a more complete description of the Plan's provisions.

Significant Plan Amendments

Effective December 1, 2019, the first amendment to the Marlborough Hospital Retirement Plan (the Marlborough Plan) merged the UMass Memorial Health Care Pension Plan (the UMass Plan) into the Marlborough Plan and changed the sponsorship of the Marlborough Plan to UMass Memorial Health Care, Inc. (UMMHC or the Plan Sponsor as used herein). The second amendment effective December 1, 2019 changed the Marlborough Plan name to the UMass Memorial Health Care Pension Plan, retaining the calendar year for application to certain periods utilized for administration of the Plan, the structure of the Plan document and certain other harmonization changes to reflect the merger. In addition, participants under the provisions of the Marlborough Plan may elect the monthly annuity form of benefit at Normal Retirement Age, even while actively employed, similar to the option in the UMass Plan. This merger did not affect the participants' pension benefits because the benefit provisions of the merged plan were incorporated into the Plan. The third amendment effective January 1, 2020 clarified the disability pension provisions of the UMass Plan. The fourth amendment effective September 29, 2020 provided for a 2020 Group Annuity Contract Purchase. The fifth amendment effective October 1, 2021 aligned the Clinton lump sum stability period with the rest of the Plan. The sixth amendment effective January 1, 2024 increased the small payment amount from \$5,000 to \$7,000.

General

Effective December 1, 2019, the Plan consists of two former pension plans: the UMass Plan and the Marlborough Plan. Information about the two former plans is included below. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

The UMass Plan is a partially frozen defined benefit pension plan covering employees of UMMHC and certain participating affiliates who have attained the age of 18 years, have completed one year of service and are not contract employees. Effective January 1, 2007, the UMass Plan was amended to exclude new employees who elected to be covered under the enhanced Employer Matching Contribution through the UMass Memorial Health Care 401(k) Plan.

The Marlborough Plan is a partially frozen defined benefit pension plan covering eligible employees of Marlborough Hospital. Employees became eligible to participate in the Marlborough Plan on April 1 or October 1 following the completion of 1,000 hours of service in the 12-month period after the employee's hire date or in any plan year thereafter until September 30, 2004, the date the Marlborough Plan was amended. Effective October 1, 2004, Marlborough Hospital amended the Marlborough Plan to preclude the admission of any employees hired after September 30, 2004. In addition, employees participating in the Marlborough Plan on October 1, 2004 were given an opportunity to elect to freeze benefits on that date and transfer participation to a defined contribution plan.

Plan Trustee

The Bank of New York Mellon is the Plan Trustee (the Trustee).

Plan Administrator

The Plan is administered by the Investment and Pension Committee (the Committee) appointed by UMMHC. The Committee is the named fiduciary with the authority to control and manage the administration of the Plan.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

Participant's Accounts

Under the plan provisions, participants' accumulated plan benefits are revalued on an annual basis according to years of service and average earnings, as defined by the Plan document.

Funding Policy

UMMHC contributes such amounts as are necessary, if any, on an actuarial basis, to the Plan, with assets sufficient to meet the benefits to be paid to plan participants. The annual contribution is determined based on actuarial information provided by the Plan's actuary utilizing the projected unit credit cost method. UMMHC met the minimum funding requirements under ERISA for the years ended September 30, 2024 and 2023.

Pension Benefits

The Plan includes participants from two former pension plans: the UMass Plan and the Marlborough Plan.

UMass Plan

Pension Benefits (Excluding Frozen Participants)

Before March 1, 2018, National Association of Government Employees participants required completion of five years of vesting service to be fully vested. Starting March 1, 2018, all participants are fully vested upon completion of three years of vesting services. Participants who are vested are entitled to a pension based upon the final average earnings formula through December 31, 2016 plus the career average pay formula for each subsequent year starting January 1, 2017.

This final average earnings formula takes into account years of credited service up to a maximum of 30 years and the participant's highest five consecutive years of compensation or the final five years of compensation, whichever is higher, for the final average annual earnings. That formula's basic monthly annuity benefit is one-twelfth of \$43.20 plus 1.25% of the average annual earnings in excess of \$6,600, multiplied by years of credited service. The career average pay formula for each year, starting January 1, 2017, includes the sum of the pension earned through December 31, 2016 plus each subsequent year of eligible service's monthly benefit at age 65 of 1.25% times that year's pensionable pay divided by 12.

The Plan permits early retirement at any age to participants who have terminated employment and are vested. The pension benefit commenced prior to normal retirement age of 65 will be reduced according to a formula that takes into account the number of years before normal retirement age the participant elects to receive the benefit. The normal form of benefit payment is an immediate 50% qualified joint and survivor annuity for participants with a spouse and a single life annuity for those participants without a spouse. Optional forms, including contingent annuity and life annuity, certain and continuous annuity, and lump-sum distribution are available on an actuarially equivalent basis.

Pension Benefits (Frozen Participants)

Frozen plan participants, who are the Clinton Hospital participants, under the provisions of the merged frozen Clinton Hospital Pension Plan, who were eligible employees at the date the Plan was frozen (July 1996) with five or more years of benefit service, as defined by the Plan, are entitled to monthly pension benefits beginning at normal retirement age of 65 equal to 0.75% of average monthly compensation plus 0.5% of average monthly compensation above Social Security Covered Compensation (as defined in the Internal Revenue Code (IRC)) multiplied by years of benefit service up to a maximum of 35 years until the date the Plan was frozen. The average monthly compensation is calculated as of July 15, 1996. The Plan permits early retirement at age 60.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

Participants of the former Clinton Hospital Pension Plan who had completed five years of defined service as of the date the Plan was frozen on July 15, 1996, are fully vested. There were some employees terminated before rendering five years of benefit service and reaching normal (or if applicable early) retirement age at the date the Plan was frozen, and they forfeited the right to receive any of their accumulated benefits in accordance with the Plan's vesting provisions. Participants may elect to receive their pension benefits in the form of a qualified joint and survivor annuity for married participants or a life annuity for unmarried participants. Optional forms of distributions include a straight life annuity, life annuity with period certain, a joint and survivor annuity, and a lump-sum. The former Clinton Hospital Pension Plan was merged into the Plan on December 31, 2009. An amendment, effective October 1, 2021, aligns the Clinton lump-sum stability period with the rest of the Plan.

Death Benefits

For other than the frozen plan participants, the preretirement death benefit for married participants will be computed assuming that the married participant had terminated on the date of death and had elected the 50% joint and survivor option. Under the joint and survivor option, the retirement benefits payable to the participant's spouse are equal to 50% of the benefits that would have been payable to the participant based on an actuarial equivalent of the normal form of benefit payment.

If a participant is unmarried on the date of death, the preretirement death benefit will be paid as a lump-sum to the designated beneficiary or, in the absence of a beneficiary designation, to the estate of the employee/participant. The beneficiary or the estate is due a benefit up to 55% of the amount of the lump-sum distribution the unmarried participant would have been entitled to receive had he or she retired on the date of death.

The former Clinton Hospital Pension Plan participants' spouses will receive 50% of the participant's accrued benefit upon the death of a participant who has attained age 50 and has completed 10 years of vesting service at the date the Clinton Hospital Pension Plan was frozen or has attained age 65 and completed five years of vesting service prior to the date the Clinton Hospital Pension Plan was frozen.

Disability Benefits

For other than frozen plan participants, a participant who is totally and permanently disabled is eligible for disability retirement benefits if the participant is 50 or older with 10 years of service. The amount of the benefit is the same as the normal retirement benefit reduced by any workers' compensation sponsored by the employer. Former Clinton Hospital Pension Plan participants, who become totally and permanently disabled, who are 55 and have completed 15 years of service as of the date of the disability, will receive a monthly benefit equal to their normal retirement benefit, reduced for a commencement date prior to their normal retirement date.

Marlborough Plan

Pension Benefits (Partially Frozen)

Participants who have completed five years of defined service are fully vested. Participants retiring at the normal retirement age of 65 and who have completed at least five years of credited service are entitled to an annual pension benefit equal to 0.5% of average annual compensation up to \$7,800 multiplied by years of service, plus 1% of excess average annual compensation over \$7,800 multiplied by years of service up to a maximum of 35 years. Participants who attain the age of 60 with 10 years of vested service or 62 with five years of vested service are eligible for an early retirement benefit. The benefit is calculated as above, reduced by a certain percentage for each month between the early retirement date and the normal retirement date.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

The normal form of benefit payment is a life annuity for unmarried participants and 100% joint and survivor annuity for married participants. Optional forms, including partial percentage joint and survivor annuities, certain and continuous annuities and lump-sum distributions, are available on an actuarially equivalent basis. The death benefit will be computed assuming that the participant had terminated on the date of death and had elected the 100% joint and survivor option. Under the joint and survivor option, the retirement benefits payable to the participant's spouse are equal to 100% of the benefits that would have been payable to the participant based on an actuarial equivalent of the normal form of benefit payment.

Death and Disability Benefits

Spouses of participants who are retired or have completed five or more years of service, upon death of the participant, will be eligible to receive benefits the same as early retirement or normal retirement, as applicable. In addition, participants with 15 or more years of service who are totally and permanently disabled are eligible for a disability retirement benefit, which is the same as the normal retirement benefit reduced by workers' compensation or any UMMHC paid monthly or weekly sickness and accident benefits.

Note 2 – Summary of Accounting and Reporting Policies

Basis of Accounting

The financial statements of the Plan are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (GAAP).

Use of Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of net assets available for Plan benefits during the reporting period; disclosure of contingent assets and liabilities; and other amounts reported in the financial statements and accompanying notes. The actuarial present value of accumulated plan benefits and contributions to the Plan are estimates which are based upon the actuarial methods and assumptions selected regarding salary rates, employee termination rates, mortality rates and other factors. Actual results could differ from those estimates.

Administrative Expenses/Related Party and Party-in-Interest Transactions

Expenses incurred in the administration of the Plan including fees paid to third-party administrators and other expenses, primarily actuarial fees, investment advisory fees, tax preparation fees, and Pension Benefit Guaranty Corporation (PBGC) premiums are paid from the Plan assets. All the Plan's investments are managed by the Trustee. The Trustee is also the recordkeeper for the Plan and, therefore, these transactions qualify as party-in-interest transactions.

The Plan's expenses are paid either by the Plan or UMMHC, as provided by the Plan document. Expenses that are paid directly by UMMHC and not reimbursed by the Plan are excluded from these financial statements. Certain expenses incurred in connection with the general administration of the Plan that are paid by the Plan are recorded as deductions in the accompanying statements of changes in net assets available for benefits.

Investment Valuation

The Plan's investments are reported at fair value. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability.

Purchases and sales of securities are recorded on a trade date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation includes the gains and losses on investments bought and sold, as well as held during the year.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

The Plan's Committee determines the Plan's valuation policies utilizing information provided by the investment advisers, investment managers and custodians.

Payments of Benefits

Benefit payments to participants are recorded when paid.

Subsequent Events

The Plan has evaluated subsequent events through July 14, 2025, which is the date the financial statements were available for issuance.

Note 3 – Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits are those future periodic payments, including lump-sum distributions that are attributable under the Plan's provisions to the service participants have rendered. Accumulated plan benefits include benefits expected to be paid to present, retired or terminated employees or their beneficiaries. Benefits under the Plan are based on the participants' compensation during their years of service. The accumulated plan benefits for active participants are based on their total compensation for all service ending on the date as of which the benefit information is presented (the valuation date). For frozen Plan participants, the compensation service period ended the date the Plan was frozen. Benefits payable under all circumstances (retirement, death and termination of employment) are included to the extent they are deemed attributable to participant service rendered to the valuation date.

The actuarial present value of accumulated plan benefits is determined by the Plan's Actuary, and is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment.

Significant assumptions and methods underlying the actuarial computation are as follows:

Assumed Rate of Return on Investments	6.50%
Plan Accounting Discount Rate	6.50%
Actuarial Cost Method	Projected Unit Credit Cost Method
Average Retirement Age	65
Future Compensation Rate of Increase	2.05% to 5.55% compounded annually based upon age
Lump Sum Mortality Assumption	Prescribed 2023 PPA mortality table
Mortality Basis	Pri-2012 blue collar mortality table, with separate tables for employees, healthy retirees, and contingent survivors, projected generationally using Scale MP-2021 for mortality improvements.

The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits. The computation of the actuarial present value of accumulated plan benefits was made as of October 1, 2023. Had the valuation been performed as of September 30, 2024, there would have been no material differences.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

Note 4 – Accumulated Plan Benefits

October 1, 2023

Statement of Actuarial Plan Benefits

Actuarial present value of accumulated plan benefits

Vested benefits:

Active employees	\$ 580,348,963
Participants with deferred benefits	119,435,669
Participants currently receiving payments	280,627,226
	<u>980,411,858</u>

Nonvested accumulated benefits	<u>10,939,851</u>
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Total actuarial present value of accumulated plan benefits	<u>\$ 991,351,709</u>
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Year Ended
October 1, 2023

Statement of Changes in Accumulated Benefits

Actuarial present value of accumulated plan benefits at beginning of year	<u>\$ 962,277,052</u>
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Increase (decrease) during the year attributed to:

Benefits accumulated	36,327,998
Actuarial losses	17,742,121
Decrease in the discount period	62,554,367
Actual benefits paid	(72,460,333)
Assumption changes	(15,089,496)
	<u>29,074,657</u>

Actuarial present value of accumulated plan benefits at end of year	<u>\$ 991,351,709</u>
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Note 5 – Information Certified by the Trustee

The Plan's assets held by the Trustee, investment information and related activity are certified as accurate and complete by the Trustee and are not to be subject to audit. The Plan administrator has obtained certification from the Trustee as of and for the years ended September 30, 2024 and 2023, that the following information included in the Plan's financial statements and supplemental schedules is complete and accurate as of September 30, 2024 and 2023:

- Investments, liabilities due to brokers for securities purchased, and receivables from brokers for securities sold;
- Investment income and securities transactions for the years ended;
- Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year);
- Schedule H, Part IV, Line 4i – Schedule of Assets (Acquired and Disposed of Within Year); and
- Schedule H, Part IV, Line 4j – Schedule of Reportable Transactions.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

Note 6 – Fair Value Measures

Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Assets and liabilities reported at fair value are classified and disclosed in one of the following three categories:

Level 1 - Observable inputs such as quoted prices for identical assets and liabilities in active markets at the measurement date. The fair value hierarchy gives the highest priority to Level 1 inputs;

Level 2 - Valuations using observable inputs other than Level 1 prices such as quoted prices in active markets for similar assets and liabilities; quoted prices for identical or similar assets or liabilities in markets that are not active; broker or dealer quotations; or inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3 - Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

In accordance with the accounting guidance, certain investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient to fair value have not been classified in the fair value hierarchy. The fair value amounts represented in this table are intended to permit reconciliation of the fair value hierarchy to the amount presented in the statements of net assets available for benefits.

The Committee categorizes, for disclosure purposes, assets and liabilities measured at fair value in the financial statements based upon whether the inputs used to determine their fair values are observable or unobservable. Observable inputs are inputs that are based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about pricing the asset or liability based on the best information available in the circumstances.

The Committee primarily uses market values as provided by the custodian along with consideration of the prices as provided by the investment managers. These market values are set with reference to market activity for highly liquid assets such as U.S. Treasury and agency securities and agency residential mortgage-backed securities, and matrix pricing for other asset classes, such as commercial mortgage and other asset-backed securities. Values for corporate bonds, convertible bonds and municipal bonds may be determined using discounted cash flow pricing models considering adjustments for spreads and prepayments for the instruments. Prices for fixed income securities may also be priced using dealer quotes.

Management has ongoing procedures in place to evaluate and monitor new and ongoing third-party valuations including regular communication with investment advisors, monthly and quarterly performance benchmarking, and the review of partnership financial statements.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Investments may be classified as Level 2 when market information is available, yet the investment is not traded in an active market. Market information, subscription, and redemption activity, if applicable, and the length of time until the investment will become redeemable are considered when determining the proper categorization of the investment's fair value measurement within the fair valuation hierarchy. Investments that have observable market inputs and have the ability to redeem at the measurement date are classified in the fair value hierarchy as Level 2.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

The following fair value hierarchy tables present information about the Plan's financial assets measured at fair value on a recurring basis based upon the lowest level of significant input to the valuations.

September 30, 2024					
Fair Value at Reporting Date Using:					
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Valued Using NAV as a Practical Expedient	Total
Financial assets at fair value					
Investments:					
Commingled funds	\$ -	\$ -	\$ -	\$ 562,778,107	\$ 562,778,107
Private equity funds	-	-	-	286,591,880	286,591,880
Mutual funds	30,551,993	-	-	-	30,551,993
Bonds and notes	5,221,046	64,407,584	-	-	69,628,630
Hedge funds	-	-	-	89,046,063	89,046,063
Common stocks	48,467,405	-	-	-	48,467,405
Cash equivalents	29,568,137	-	-	-	29,568,137
Total investments at fair value	\$ 113,808,581	\$ 64,407,584	\$ -	\$ 938,416,050	\$ 1,116,632,215

September 30, 2023					
Fair Value at Reporting Date Using:					
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Valued Using NAV as a Practical Expedient	Total
Financial assets at fair value					
Investments:					
Commingled funds	\$ -	\$ -	\$ -	\$ 429,795,872	\$ 429,795,872
Private equity funds	-	-	-	242,634,182	242,634,182
Mutual funds	88,286,362	-	-	-	88,286,362
Bonds and notes	5,302,929	53,260,732	-	-	58,563,661
Hedge funds	-	-	-	62,018,181	62,018,181
Common stocks	60,850,671	-	-	-	60,850,671
Cash equivalents	7,612,994	-	-	-	7,612,994
Total investments at fair value	\$ 162,052,956	\$ 53,260,732	\$ -	\$ 734,448,235	\$ 949,761,923

The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions on model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. For the years ended September 30, 2024 and 2023, there were no transfers between levels.

Valuation Techniques

Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The following is a description of the valuation methodologies used for assets measured at fair value on a recurring basis. There have been no changes in methodologies used as of September 30, 2024 and 2023.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

The fair value of investments is determined in accordance with the current fair value guidance and as described below. NAV would not be used as a practical expedient for fair value when it is determined to be probable that the investment would sell for an amount different than the reported net asset value. In such situations, management would estimate the fair value of the investment in good faith based on the available information and will update the fair value methodology if a significant event occurs which has the potential of impacting the ultimate value of the investment.

Cash Equivalents – The carrying value of cash equivalents approximates fair value as original maturities are less than three months and/or include money market funds that are based on quoted prices and are actively traded.

Mutual Funds and Common Stocks – The fair values of mutual funds and common stocks are based on quoted market prices or net asset value. These mutual funds are required to publish the NAV and to transfer at that price. The mutual funds held by the Plan are deemed to be actively traded. The fair value of domestic and international equity securities is principally based on quoted market prices that are traded in an active market.

Commingled Funds – The fair value of common collective trusts is based on the NAV of the fund, representing the fair value of the underlying investments, which are generally securities traded on an active market. The NAV is used as a practical expedient to estimate fair value.

Private Equity and Hedge Funds – The estimated fair values of these investments for which no quoted market prices are readily available, are determined based upon the information provided by the fund managers. Such information is generally based on the NAV of the fund, which is used as a practical expedient to estimate fair value. Certain investments may be subject to a minimum holding period or lockup, may not be able to redeem at the measurement date or within 90 days thereof, can be subject to redemption notice periods more than 90 days, or have the ability to limit the aggregate amount of shareholder redemptions. Investment gains, losses, and expenses are allocated to the investors based on the ownership percentage as described in the respective partnership or hedge fund agreements.

Bonds and Notes – Certain bonds are valued at the closing price reported in the active market in which the bond is traded. Other bonds are valued based on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar bonds, the bond is valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks.

The Plan holds shares or interests in investment companies at year end whereby the fair value of the investment held is estimated based on the NAV per share (or its equivalent) of the investment company. The NAV, or NAV equivalent, used (a) do not have a readily determinable fair market value and (b) prepare their financial statements consistent with the measurement principles of an investment company or have the attributes of an investment company.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

The following table summarizes the fair value, unfunded commitments and redemption restrictions of those investments measured at NAV as of:

September 30, 2024				
Investment class	NAV	Unfunded Commitments	Redemption Frequency	Redemption Notice
Commingled funds	\$ 562,778,107	\$ -	Daily - monthly	1-30 days
Private equity funds	286,591,880	82,161,257	Illiquid	Illiquid
Hedge funds	89,046,063	-	Monthly - quarterly	15-60 days
Total	\$ 938,416,050	\$ 82,161,257		

September 30, 2023				
Investment class	NAV	Unfunded Commitments	Redemption Frequency	Redemption Notice
Commingled funds	\$ 429,795,872	\$ -	Daily - monthly	1-30 days
Private equity funds	242,634,182	37,443,834	Illiquid	Illiquid
Hedge funds	62,018,181	-	Monthly - quarterly	15-60 days
Total	\$ 734,448,235	\$ 37,443,834		

Included in the table above, due to redemption restrictions, there is one hedge fund with a fair value of \$1,610,074 and \$1,729,729 at September 30, 2024 and 2023, respectively, that is not able to be redeemed. Additionally, there is one private equity fund with a fair value of \$31,501,416 and \$28,331,575 at September 30, 2024 and 2023, respectively, that has an annual redemption term with a notice period by September 30th. Investments in the private equity funds may also include contractual commitments to provide capital contributions during the investment period and may extend to the end of the fund term. During these contractual periods, investment managers may require us to invest in accordance with the terms of the agreement. Commitments not called during the investment period will expire and not be funded.

Our investment strategy is to utilize broadly diversified passive vehicles where appropriate, with an investment mix and risk profile consistent with pension liabilities. Periodic studies are undertaken to determine the asset mix that will meet pension obligations at a reasonable cost to the Plan and which are consistent with the fiduciary requirements of pension regulations.

In selecting the expected long-term rate of return on assets, the Plan considered the average rate of earnings expected on the funds invested or to be invested to provide for the benefits of these plans. This included considering the Plan's asset allocation and the expected returns likely to be earned over the life of the Plan. This basis is consistent with the prior year.

Note 7 – Related Party and Party-in-Interest Transactions

The Plan's investments are managed by the Trustee. As such, transactions with the Trustee qualify as party-in-interest transactions. Actuarial and Plan administrative services are provided by Willis Towers Watson and qualify as party-in-interest transactions. In addition, certain employees and facilities of UMMHC have been used to perform administrative functions for the Plan at no charge to the Plan.

Note 8 – Income Tax Status

Internal Revenue Service (IRS) Announcement 2015-19 changed the determination letter program for individually designed pension plans. This announcement eliminates the staggered five-year determination letter remedial amendment cycles for individually designed retirement plans and limits the scope of the determination letter program for individually designed plans to initial plan qualification and qualification upon Plan termination. As such, the Plan did not obtain a determination letter from the IRS. Although the Plan

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

has been amended since the date of the determination of qualification letter, the Plan administrator believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and, therefore, believes that the Plan is qualified, and the related trust is tax-exempt.

The two former pension plans, the Marlborough Plan and the UMass Plan, had previously obtained IRS determination letters dated June 27, 2014 and July 21, 2017, respectively, informing the plans' sponsors that the plans were designed in accordance with applicable sections of the IRC.

GAAP requires plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. As a result of certain of the Plan's investments, the Plan is subject to Unrelated Business Income Taxes. Tax expense or benefit is included in administrative expenses.

Note 9 – Plan Termination

In the event of a termination or partial termination of the Plan, each affected participant's accrued benefit will be fully vested and nonforfeitable to the extent funded or as guaranteed by PBGC. Each participant affected by the termination or partial termination will have recourse only to the assets then held by the Plan and to the PBGC for payment of his or her accrued benefit.

In the event of a termination or partial termination of the Plan, the net assets of the Plan shall be allocated among the participants and beneficiaries of the Plan according to the provisions of ERISA, subject to approval by the IRS and Department of Labor in the following order of precedence:

- a. To provide retirement benefits to participants and beneficiaries who were receiving payments under the Plan as of the beginning of the three-year period ending on the termination date of the Plan; each such benefit will be based on the provisions of the Plan as in effect during the five-year period ending on the termination date under which such benefits would be least. For purposes of this paragraph, the lowest benefit would have been in pay status during the three-year period ending on the date of Plan termination.
- b. To provide all other benefits to affected participants under Title IV of ERISA and rules and regulations promulgated thereunder (determined as if the insurance limits provided under ERISA for benefit payments payable to one person with respect to more than one participant or from more than one terminated plan and the insurance limits or benefits payable to substantial owner all were not applicable).
- c. To provide all other nonforfeitable benefits accrued by affected participants under the Plan.
- d. To provide all other benefits accrued by affected participants under the Plan.
- e. Any residual assets of the Plan remaining after distribution in accordance with this section will be distributed to the Employer provided that all liabilities of the Plan to participants and their beneficiaries have been satisfied.

Certain benefits under the Plan are insured by the PBGC if the Plan terminates. Generally, the PBGC guarantees most vested normal age retirement benefits, early retirement benefits, and certain disability and survivor's pensions. However, the PBGC does not guarantee all types of benefits under the Plan, and the amount of benefit protection is subject to certain limitations. Vested benefits under the Plan are guaranteed at the level in effect on the date of the Plan's termination. However, there is a statutory ceiling, which is adjusted periodically.

UMass Memorial Health Care Pension Plan

Notes to Financial Statements

September 30, 2024 and 2023

Whether all participants receive their benefits should the Plan terminate at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide those benefits and may also depend on the financial condition of UMMHC and the level of benefits guaranteed by the PBGC.

Although it has not expressed any intention to do so, UMMHC has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA.

Note 10 – Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and those changes could materially affect the amounts reported in the statements of net assets available for benefits.

Plan contributions are made, and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to the uncertainties inherent in the estimations and assumptions processes, it is at least reasonably possible that changes in these estimates and assumptions in the near-term would-be material to the financial statements.

Supplemental Schedules

UMASS MEMORIAL HEALTH CARE PENSION PLAN
EIN: 04-3358566
Plan #: 005
Schedule H, Line 4(i) -
Schedule of Assets (Held at End of Year)
September 30, 2024

(a) (b) Identity of issue, borrower, lessor or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par or maturity value	(d) Cost	(e) Market value
INTEREST-BEARING CASH			
BNY MELLON	BNY MELLON CASH RESERVE 0.100% 12/31/2049 DD 06/26/97	\$28,675	\$28,675
TOTAL INTEREST-BEARING CASH		28,675	28,675
U. S. GOVERNMENT SECURITIES			
U.S. TREASURY	U S TREASURY BOND 4.625% 05/15/2054 DD 05/15/24	894,065	893,582
U.S. TREASURY	U S TREASURY BOND 4.125% 08/15/2044 DD 08/15/24	3,887,383	3,899,939
U.S. TREASURY	U S TREASURY NOTE 3.875% 08/15/2034 DD 08/15/24	428,619	427,525
TOTAL U. S. GOVERNMENT SECURITIES		5,210,067	5,221,046
CORPORATE DEBT INSTRUMENTS			
ABBVIE INC	ABBVIE INC 5.400% 03/15/2054 DD 02/26/24	318,412	333,569
ALLSTATE CORP	ALLSTATE CORP/THE 3.850% 08/10/2049 DD 06/10/19	660,390	695,827
AMEREN ILLINOIS CO	AMEREN ILLINOIS CO 3.700% 12/01/2047 DD 11/28/17	657,306	704,041
ELEVANCE HEALTH INC	ELEVANCE HEALTH INC 5.650% 06/15/2054 DD 05/30/24	789,890	816,804
APPLE INC	APPLE INC 2.650% 02/08/2051 DD 02/08/21	715,637	747,914
BHP BILLITON FINANCE USA LTD	BHP BILLITON FINANCE USA LTD 5.500% 09/08/2053 DD 09/08/23	613,167	649,705
BALTIMORE GAS AND ELECTRIC CO	BALTIMORE GAS AND ELECTRIC CO 4.550% 06/01/2052 DD	352,664	396,568
BANK OF AMERICA CORP	BANK OF AMERICA CORP VAR RT 08/15/2035 DD 08/15/24	1,181,688	1,202,354
BERKSHIRE HATHAWAY FINANCE CORP	BERKSHIRE HATHAWAY FINANCE COR 4.300% 05/15/2043 DD 05/15/13	281,836	312,415
BP CAPITAL MARKETS AMERICA INC	BP CAPITAL MARKETS AMERICA INC 2.939% 06/04/2051 DD	620,530	627,770
BURLINGTON NORTHERN SANTAFE	12/04/20BURLINGTON NORTHERN SANTA FE L 2.00% 04/15/2054 DD	897,601	969,742
CVS HEALTH CORP	06/09/23CVS HEALTH CORP 5.050% 03/25/2048 DD 03/09/18	1,196,800	1,280,784
CANADIAN NATIONAL RAILWAY CO	CANADIAN NATIONAL RAILWAY CO 3.650% 02/03/2048 DD 02/06/18	590,345	655,856
CISCO SYSTEMS INC	CISCO SYSTEMS INC 5.300% 02/26/2054 DD 02/26/24	939,283	1,017,264
COCA-COLA CO	COCA-COLA CO/THE 5.200% 01/14/2055 DD 08/14/24	305,233	319,423
COMMONWEALTH EDISON CO	COMMONWEALTH EDISON CO 3.800% 10/01/2042 DD 10/01/12	317,302	349,708
CONOCOPHILLIPS CO	CONOCOPHILLIPS CO 5.300% 05/15/2053 DD 05/23/23	590,852	649,979
DUKE ENERGY PROGRESS LLC	DUKE ENERGY PROGRESS LLC 3.600% 09/15/2047 DD 09/08/17	372,157	420,975
ELECTRICITE DE FRANCE SA	ELECTRICITE DE FRANCE SA 144A 6.900% 05/23/2053 DD	307,331	359,476
EXXON MOBIL CORP	05/23/23EXXON MOBIL CORP 3.452% 04/15/2051 DD 04/15/20	608,591	673,180
META PLATFORMS INC	META PLATFORMS INC 5.400% 08/15/2054 DD 08/09/24	49,801	52,314
META PLATFORMS INC	META PLATFORMS INC 5.550% 08/15/2064 DD 08/09/24	49,784	52,952
GENERAL DYNAMICS CORP	GENERAL DYNAMICS CORP 4.250% 04/01/2040 DD 03/25/20	674,117	738,097
HOME DEPOT INC	HOME DEPOT INC/THE 2.750% 09/15/2051 DD 09/21/21	604,912	690,632
JPMORGAN CHASE & CO	JPMORGAN CHASE & CO VAR RT 11/19/2041 DD 11/19/20	552,889	578,561
ELI LILLY & CO	ELI LILLY & CO 3.950% 03/15/2049 DD 02/22/19	756,808	825,892
LOCKHEED MARTIN CORP	LOCKHEED MARTIN CORP 4.150% 06/15/2053 DD 05/05/22	441,949	484,165
MICROSOFT CORP	MICROSOFT CORP 2.500% 09/15/2050 DD 03/15/24	403,708	449,946
MIDAMERICAN ENERGY CO	MIDAMERICAN ENERGY CO 2.700% 08/01/2052 DD 07/22/21	119,475	138,680
NATIONAL RURAL UTILITIES	NATIONAL RURAL UTILITIES COOPE 4.400% 11/01/2048 DD 10/31/18	330,576	373,851
NESTLE HOLDINGS INC	NESTLE HOLDINGS INC 144A 4.700% 01/15/2053 DD 09/13/22	317,001	345,163
NORTHERN STATES POWER CO	NORTHERN STATES POWER CO/MN 2.600% 06/01/2051 DD 06/15/20	155,845	169,640
OCCIDENTAL PETROLEUM CORP	OCCIDENTAL PETROLEUM CORP 6.050% 10/01/2054 DD	458,376	451,964
PAYPAL HOLDINGS INC	07/26/24PAYPAL HOLDINGS INC 5.500% 06/01/2054 DD 05/28/24	664,101	709,182
PEPSICO INC	PEPSICO INC 2.750% 10/21/2051 DD 10/21/21	526,194	603,038
PFIZER INVESTMENT ENTERPRISES	PFIZER INVESTMENT ENTERPRISES 5.300% 05/19/2053 DD 05/19/23	727,376	800,715
PRESIDENT AND FELLOWS OF HARVARD	PRESIDENT AND FELLOWS OF HARVA 3.745% 11/15/2052 DD	34,388	34,210
PROLOGIS LP	04/19/22PROLOGIS LP 5.000% 03/15/2034 DD 01/25/24	654,485	675,847
PRUDENTIAL FINANCIAL INC	PRUDENTIAL FINANCIAL INC 4.350% 02/25/2050 DD 02/25/19	517,624	554,288
RIO TINTO FINANCE USA PLC	RIO TINTO FINANCE USA PLC 5.125% 03/09/2053 DD 03/09/23	604,758	675,101
ROCHE HOLDINGS INC	ROCHE HOLDINGS INC 144A 5.218% 03/08/2054 DD 03/08/24	805,076	823,850
CHARLES SCHWAB CORP	CHARLES SCHWAB CORP/THE VAR RT 05/19/2034 DD 05/19/23	198,535	224,694
SHELL INTERNATIONAL FINANCE	SHELL INTERNATIONAL FINANCE BV 3.750% 09/12/2046 DD	590,080	655,464
SIMON PROPERTY GROUP LP	09/12/16SIMON PROPERTY GROUP LP 3.800% 07/15/2050 DD 07/09/20	437,742	511,646
EQUINOR ASA	EQUINOR ASA 3.950% 05/15/2043 DD 05/15/13	631,402	668,648
T-MOBILE USA INC	T-MOBILE USA INC 5.650% 01/15/2053 DD 09/15/22	533,396	625,000
TEXAS INSTRUMENTS INC	TEXAS INSTRUMENTS INC 4.100% 08/16/2052 DD 08/16/22	350,675	392,072
TOTALENERGIES CAPITAL SA	TOTALENERGIES CAPITAL SA 5.425% 09/10/2064 DD 09/10/24	220,000	220,999
UNITED PARCEL SERVICE INC	UNITED PARCEL SERVICE INC 5.500% 05/22/2054 DD 05/22/24	786,051	825,398
UNITEDHEALTH GROUP INC	UNITEDHEALTH GROUP INC 4.750% 05/15/2052 DD 05/20/22	1,073,954	1,223,500
VIRGINIA ELECTRIC AND POWER CO	VIRGINIA ELECTRIC AND POWER CO 5.700% 08/15/2053 DD 08/10/23	673,830	763,813
WALMART INC	WALMART INC 4.050% 06/29/2048 DD 06/27/18	337,416	345,437
WELLS FARGO & CO	WELLS FARGO & CO VAR RT 10/23/2034 DD 10/23/23	757,694	820,289
AT&T INC	AT&T INC 4.650% 06/01/2044 DD 06/01/19	1,466,454	1,696,651
AT&T INC	AT&T INC 3.500% 09/15/2053 DD 03/15/21	142,441	168,625
AGREE LP	AGREE LP 5.625% 06/15/2034 DD 05/13/24	674,078	710,702
ALEXANDRIA REAL ESTATE EQUITIE	ALEXANDRIA REAL ESTATE EQUITIES 3.000% 05/18/2051 DD 02/18/21	724,780	786,364
ANGLO AMERICAN CAPITAL	*ANGLO AMERICAN CAPITAL PL 144A 4.750% 03/16/2052 DD	351,577	399,790
ANGLO AMERICAN CAPITAL PL	03/16/22ANGLO AMERICAN CAPITAL PL 144A 6.000% 04/05/2054 DD	197,234	209,144
ANHEUSER-BUSCH INBEV WORLDWIDE	ANHEUSER-BUSCH INBEV WORLDWIDE 5.450% 01/23/2039 DD	772,496	854,848
ANHEUSER-BUSCH INBEV WORLDWIDE	01/23/19ANHEUSER-BUSCH INBEV WORLDWIDE 4.375% 04/15/2038 DD	695,080	712,583
ASTRAZENECA PLC	04/04/18ASTRAZENECA PLC 3.000% 05/28/2051 DD 05/28/21	667,891	691,781
ATMOS ENERGY CORP	ATMOS ENERGY CORP 5.000% 12/15/2054 DD 10/01/24	49,644	48,739
BOEING CO	BOEING CO/THE 144A 6.858% 05/01/2054 DD 05/01/24	105,000	115,190
BRISTOL-MYERS SQUIBB CO	BRISTOL-MYERS SQUIBB CO 6.250% 11/15/2053 DD 11/13/23	756,526	827,705
PARAMOUNT GLOBAL	PARAMOUNT GLOBAL 4.850% 07/01/2042 DD 06/20/12	168,213	199,215
CELANESE US HOLDINGS LLC	CELANESE US HOLDINGS LLC VAR RT 11/15/2033 DD 08/24/23	659,260	732,377
CHARTER COMMUNICATIONS	CHARTER COMMUNICATIONS OPERATI 5.125% 07/01/2049 DD	533,676	570,137
COMCAST CORP	07/10/19COMCAST CORP 3.400% 07/15/2046 DD 07/19/16	1,063,311	1,210,606
DTE ELECTRIC CO	DTE ELECTRIC CO 2.950% 03/01/2050 DD 02/26/20	606,522	690,234
DUKE ENERGY CORP	DUKE ENERGY CORP VAR RT 09/01/2054 DD 08/22/24	202,250	207,734
DUKE ENERGY CAROLINAS LLC	DUKE ENERGY CAROLINAS LLC 3.950% 03/15/2048 DD	516,500	544,646
ENERGY TRANSFER LP	03/01/18ENERGY TRANSFER LP 6.500% 02/01/2042 DD 01/17/12	810,910	119,624
ENTERGY MISSISSIPPI LLC	ENTERGY MISSISSIPPI LLC 3.850% 06/01/2049 DD 06/05/19	987,989	657,443
ENTERPRISE PRODUCTS OPERATING	ENTERPRISE PRODUCTS OPERATING 3.700% 01/31/2051 DD	813,958	816,480
FLORIDA POWER & LIGHT CO	01/15/20FLORIDA POWER & LIGHT CO 2.875% 12/04/2051 DD 11/18/21	937,168	1,057,536
GLENCORE FUNDING LLC	GLENCORE FUNDING LLC 144A 5.893% 04/04/2054 DD 04/04/24	671,097	709,013
INTEL CORP	INTEL CORP 3.734% 12/08/2047 DD 06/08/18	343,526	349,367
JPMORGAN CHASE & CO	JPMORGAN CHASE & CO VAR RT 07/22/2035 DD 07/22/24	656,792	682,386
KEYBANK NA/CLEVELAND OH	KEYBANK NA/CLEVELAND OH 5.000% 01/26/2033 DD 01/26/23	206,520	242,552
KINDER MORGAN ENERGY PARTNERS	KINDER MORGAN ENERGY PARTNERS 6.500% 09/01/2039 DD	578,562	657,330
LYB INTERNATIONAL FINANCE	09/16/08LYB INTERNATIONAL FINANCE III 3.375% 10/01/2040 DD	380,708	425,552
LOWE'S COS INC	10/08/20LOWE'S COS INC 3.000% 10/15/2050 DD 10/22/20	136,602	135,776
WARNERMEDIA HOLDINGS INC	WARNERMEDIA HOLDINGS INC 5.141% 03/15/2052 DD 03/15/23	232,074	229,880
MARKEL GROUP INC	MARKEL GROUP INC 6.000% 05/16/2054 DD 05/16/24	685,091	727,367
NRG ENERGY INC	NRG ENERGY INC 144A 7.000% 03/15/2033 DD 03/09/23	391,291	449,967
NATWEST GROUP PLC	NATWEST GROUP PLC VAR RT 03/01/2035 DD 02/29/24	240,003	255,062
NEWMONT CORP	NEWMONT CORP / NEWCREST FINANCE 5.350% 03/15/2034 DD	698,145	732,354
NORFOLK SOUTHERN CORP	03/07/24NORFOLK SOUTHERN CORP 2.900% 08/25/2051 DD 08/25/21	376,160	406,977
NORTHROP GRUMMAN CORP	NORTHROP GRUMMAN CORP 4.750% 06/01/2043 DD 05/31/13	653,454	702,194
OMEGA HEALTHCARE INVESTORS INC	OMEGA HEALTHCARE INVESTORS INC 3.250% 04/15/2033 DD	507,439	558,851
ONEOK INC	03/10/21ONEOK INC 4.850% 02/01/2049 DD 01/18/19	247,549	285,734
ORACLE CORP	ORACLE CORP 6.500% 04/15/2038 DD 04/09/08	60,551	68,172

UMASS MEMORIAL HEALTH CARE PENSION PLAN
EIN: 04-3358566
Plan #: 005
Schedule H, Line 4(i) -
Schedule of Assets (Held at End of Year)
September 30, 2024

(a) (b) Identity of issue, borrower, lessor or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par or maturity value	(d) Cost	(e) Market value
ORACLE CORP	ORACLE CORP 5.500% 09/27/2064 DD 09/27/24	996,150	994,080
PACIFIC GAS AND ELECTRIC CO	PACIFIC GAS AND ELECTRIC CO 4.950% 07/01/2050 DD 07/02/20	366,033	447,743
PATTERSON-UTI ENERGY INC	PATTERSON-UTI ENERGY INC 7.150% 10/01/2033 DD 09/13/23	789,334	845,853
RTX CORP	RTX CORP 3.125% 07/01/2050 DD 05/18/20	599,780	694,239
SAUDI ARABIAN OIL CO	SAUDI ARABIAN OIL CO 144A 5.750% 07/17/2054 DD 07/17/24	336,247	349,316
TELEFONICA EMISIONES SA	TELEFONICA EMISIONES SA 7.045% 06/20/2036 DD 06/20/06	600,675	656,069
TOTALENERGIES CAPITAL INTERNATIONAL	TOTALENERGIES CAPITAL INTERNAT 3.127% 05/29/2050 DD 05/29/20	631,557	701,611
VALERO ENERGY CORP	VALERO ENERGY CORP 4.000% 06/01/2052 DD 02/07/22	436,442	491,579
VERIZON COMMUNICATIONS INC	VERIZON COMMUNICATIONS INC 3.400% 03/22/2041 DD 03/22/21	239,343	244,734
VIATRIS INC	VIATRIS INC 3.850% 06/22/2040 DD 06/22/21	588,834	692,883
VODAFONE GROUP PLC	VODAFONE GROUP PLC 5.750% 06/28/2054 DD 06/28/24	665,758	697,025
WELLS FARGO MORTGAGE	WELLS FARGO MORTGAGE B AR14 A1 VAR RT 08/25/2035 DD 07/01/05	867	893
	TOTAL CORPORATE DEBT INSTRUMENTS	55,176,571	59,951,101
CORPORATE STOCK - COMMON			
AMN HEALTHCARE SERVICES INC	AMN HEALTHCARE SERVICES INC	342,494	221,784
ABBVIE INC	ABBVIE INC	626,201	829,613
ACUTY BRANDS INC	ACUTY BRANDS INC	208,459	337,077
ADVANCED DRAINAGE SYSTEMS INC	ADVANCED DRAINAGE SYSTEMS INC	96,983	133,900
ALLISON TRANSMISSION HOLDINGS	ALLISON TRANSMISSION HOLDINGS	178,066	289,651
ALLSTATE CORP	ALLSTATE CORP/THE	152,186	259,062
ALPHABET INC	ALPHABET INC	842,344	1,019,480
AMERICAN INTERNATIONAL GROUP	AMERICAN INTERNATIONAL GROUP I	524,190	633,440
CENCORA INC	CENCORA INC	318,547	398,392
AMETEK INC	AMETEK INC	186,621	216,870
AMGEN INC	AMGEN INC	421,684	505,547
ANALOG DEVICES INC	ANALOG DEVICES INC	352,106	462,872
ELEVANCE HEALTH INC	ELEVANCE HEALTH INC	467,641	558,480
APPLIED MATERIALS INC	APPLIED MATERIALS INC	170,709	249,128
ARROW ELECTRONICS INC	ARROW ELECTRONICS INC	239,181	253,705
AUTOZONE INC	AUTOZONE INC	307,339	381,155
AVANTOR INC	AVANTOR INC	283,421	347,822
BP PLC ADR	BP PLC ADR	124,098	100,605
BANK OF AMERICA CORP	BANK OF AMERICA CORP	473,291	685,908
BEACON ROOFING SUPPLY INC	BEACON ROOFING SUPPLY INC	353,612	329,644
BOOKING HOLDINGS INC	BOOKING HOLDINGS INC	462,593	631,818
BRISTOL-MYERS SQUIBB CO	BRISTOL-MYERS SQUIBB CO	741,403	660,927
CDW CORP	CDW CORP/DE	187,839	210,685
CIGNA GROUP	CIGNA GROUP/THE	200,249	242,508
CANADIAN NATURAL RESOURCES LTD	CANADIAN NATURAL RESOURCES LTD	197,923	203,278
CENTENE CORP	CENTENE CORP	322,565	352,536
CISCO SYSTEMS INC	CISCO SYSTEMS INC	483,356	478,501
CITIGROUP INC	CITIGROUP INC	274,214	417,354
COGNIZANT TECHNOLOGY SOLUTIONS	COGNIZANT TECHNOLOGY SOLUTIONS	363,222	413,839
CONOCOPHILLIPS	CONOCOPHILLIPS	190,602	167,500
CORPAY INC	CORPAY INC	671,621	808,797
CORTEVA INC	CORTEVA INC	203,719	234,102
CURTISS-WRIGHT CORP	CURTISS-WRIGHT CORP	154,156	259,008
DELL TECHNOLOGIES INC	DELL TECHNOLOGIES INC	315,309	395,687
DISCOVER FINANCIAL SERVICES	DISCOVER FINANCIAL SERVICES	237,926	388,744
ELECTRONIC ARTS INC	ELECTRONIC ARTS INC	58,514	69,712
ENERSYS	ENERSYS	95,427	102,866
EQUIFAX INC	EQUIFAX INC	190,245	248,606
EXPEDITORS INTERNATIONAL OF WA	EXPEDITORS INTERNATIONAL OF WA	343,317	393,543
EXXON MOBIL CORP	EXXON MOBIL CORP	163,809	194,351
FMC CORP	FMC CORP	194,634	191,622
FIDELITY NATIONAL INFORMATION	FIDELITY NATIONAL INFORMATION	198,716	276,878
FIRST AMERICAN FINANCIAL CORP	FIRST AMERICAN FINANCIAL CORP	291,204	325,825
GLOBAL PAYMENTS INC	GLOBAL PAYMENTS INC	341,785	303,368
GOLDMAN SACHS GROUP INC	GOLDMAN SACHS GROUP INC/THE	346,543	530,263
HALLIBURTON CO	HALLIBURTON CO	264,344	189,609
HARLEY-DAVIDSON INC	HARLEY-DAVIDSON INC	298,598	348,003
HEWLETT PACKARD ENTERPRISE CO	HEWLETT PACKARD ENTERPRISE CO	111,429	131,251
HUMANA INC	HUMANA INC	369,755	240,722
HURON CONSULTING GROUP INC	HURON CONSULTING GROUP INC	233,214	243,379
INTERPUBLIC GROUP OF COS INC	INTERPUBLIC GROUP OF COS INC/T	150,264	165,836
JPMORGAN CHASE & CO	JPMORGAN CHASE & CO	589,361	856,935
JABIL INC	JABIL INC	288,548	272,493
JOHNSON & JOHNSON	JOHNSON & JOHNSON	791,677	823,751
KLA CORP	KLA CORP	163,742	276,464
KENVUE INC	KENVUE INC	199,439	238,308
KEURIG DR PEPPER INC	KEURIG DR PEPPER INC	284,838	335,371
LKQ CORP	LKQ CORP	232,898	197,005
LPL FINANCIAL HOLDINGS INC	LPL FINANCIAL HOLDINGS INC	205,701	208,669
LAM RESEARCH CORP	LAM RESEARCH CORP	171,108	222,790
LANDSTAR SYSTEM INC	LANDSTAR SYSTEM INC	273,018	291,426
LEIDOS HOLDINGS INC	LEIDOS HOLDINGS INC	156,837	239,610
LOEWS CORP	LOEWS CORP	309,966	387,029
MARKEL GROUP INC	MARKEL GROUP INC	438,709	490,966
MASCO CORP	MASCO CORP	133,999	210,438
MATCH GROUP INC	MATCH GROUP INC	188,434	195,103
MCKESSON CORP	MCKESSON CORP	186,551	212,106
MERCK & CO INC	MERCK & CO INC	474,497	523,398
MICROCHIP TECHNOLOGY INC	MICROCHIP TECHNOLOGY INC	596,581	616,948
MICRON TECHNOLOGY INC	MICRON TECHNOLOGY INC	400,459	370,763
MIDDLEBY CORP	MIDDLEBY CORP/THE	211,968	230,399
NVR INC	NVR INC	548,409	843,815
NICE LTD ADR	NICE LTD ADR	255,961	254,079
GEN DIGITAL INC	GEN DIGITAL INC	64,709	100,394
CHORD ENERGY CORP	CHORD ENERGY CORP	264,174	212,275
OMNICOM GROUP INC	OMNICOM GROUP INC	133,915	185,895
ORACLE CORP	ORACLE CORP	696,553	977,755
PHILIP MORRIS INTERNATIONAL IN	PHILIP MORRIS INTERNATIONAL IN	492,166	608,214
PHILLIPS 66	PHILLIPS 66	138,413	151,430
QUALCOMM INC	QUALCOMM INC	232,226	355,575
RESIDEO TECHNOLOGIES INC	RESIDEO TECHNOLOGIES INC	57,038	72,705
ROBERT HALF INC	ROBERT HALF INC	232,444	213,825
SHELL PLC ADR	SHELL PLC ADR	146,593	150,168
SS&C TECHNOLOGIES HOLDINGS INC	SS&C TECHNOLOGIES HOLDINGS INC	258,161	361,700
SANOI SA ADR	SANOI SA ADR	600,929	645,629
SCHLUMBERGER LTD	SCHLUMBERGER LTD	348,751	250,945
CHARLES SCHWAB CORP	CHARLES SCHWAB CORP/THE	152,512	180,042
SCIENCE APPLICATIONS INTERNATIONAL	SCIENCE APPLICATIONS INTERNATI	322,507	410,011
SHIFT4 PAYMENTS INC	SHIFT4 PAYMENTS INC	198,986	241,169

UMASS MEMORIAL HEALTH CARE PENSION PLAN
EIN: 04-3358566
Plan #: 005
Schedule H, Line 4(i) -
Schedule of Assets (Held at End of Year)
September 30, 2024

(a) (b) Identity of issue, borrower, lessor or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par or maturity value	(d) Cost	(e) Market value
J M SMUCKER CO SYNCHRONY FINANCIAL TAKE-TWO INTERACTIVE SOFTWARE TEXTRON INC TRAVELERS COS INC UNITEDHEALTH GROUP INC VISA INC WESTINGHOUSE AIR BRAKE TECHNOL WELLS FARGO & CO WESCO INTERNATIONAL INC WYNDHAM HOTELS & RESORTS INC ZIMMER BIOMET HOLDINGS INC ALLEGION PLC AON PLC CRH PLC COCA-COLA EUROPACIFIC PARTNERS MEDTRONIC PLC RENAISSANCERE HOLDINGS LTD SENSATA TECHNOLOGIES HOLDING TE CONNECTIVITY PLC WHITE MOUNTAINS INSURANCE GROU CHUBB LTD CHECK POINT SOFTWARE TECHNOLOG FLEX LTD	J M SMUCKER CO/THE SYNCHRONY FINANCIAL TAKE-TWO INTERACTIVE SOFTWARE TEXTRON INC TRAVELERS COS INC/THE UNITEDHEALTH GROUP INC VISA INC WESTINGHOUSE AIR BRAKE TECHNOL WELLS FARGO & CO WESCO INTERNATIONAL INC WYNDHAM HOTELS & RESORTS INC ZIMMER BIOMET HOLDINGS INC ALLEGION PLC AON PLC CRH PLC COCA-COLA EUROPACIFIC PARTNERS MEDTRONIC PLC RENAISSANCERE HOLDINGS LTD SENSATA TECHNOLOGIES HOLDING P TE CONNECTIVITY PLC WHITE MOUNTAINS INSURANCE GROU CHUBB LTD CHECK POINT SOFTWARE TECHNOLOG FLEX LTD	244,241 116,625 325,284 232,467 253,851 519,820 472,211 208,300 255,702 35,675 192,139 157,445 316,143 194,600 493,399 101,655 416,013 387,132 253,355 129,583 361,957 427,280 561,009 244,399	233,239 190,292 356,146 263,526 360,779 602,805 564,472 510,228 353,514 37,796 215,901 151,454 442,175 212,784 809,991 128,126 477,969 532,814 232,803 158,389 410,480 582,548 798,041 383,108
TOTAL CORPORATE STOCK - COMMON		33,760,724	40,460,234
PARTNERSHIP/JOINT VENTURE INTEREST			
FRANK RUSSELL GLOBAL PRIV EQUITY FD CERES FARMS LLC NGP NATURAL RESOURCES XI LP GSO SPECIAL SITUATIONS OVERSEAS FUND LTD GSO SPECIAL SITUATIONS OVERSEAS FD LTD CL C-105-B BROOKFIELD CAPITAL PARTNERS IV LP TIFF PRIVATE EQUITY PARTNERS LLC 2006 TIFF PRIVATE EQUITY PARTNERS LLC 2007 TOURMALET MATAWIN OFFSHORE FUND VI LP NEWBURY EQUITY PARTNERS III CAYMAN L P THOMA BRAVO FUND XI LP THE VARDE FUND XIII B FEEDER LP NEWBURY EQUITY PARTNERS V L.P. TOURMALET MATAWIN OFFSHORE FUND VII LP WHITEBOX MULTI STRATEGY FUND CLASS C-1-1 VIVO OPPORTUNITY FUND LP BROOKFIELD CAPITAL PTNRS V LP NEWBURY EQUITY PARTNERS IV LP NGP NATURAL RESOURCES XII THOMA BRAVO FUND XIII A LP CRAYHILL PRINCIPAL STRATEGIES FUND III LP BLUE TORCH OFFSHORE CREDIT ELLIOTT INTERNATIONAL LIMITED 10TH HBK MULTI-STRATEGY OFFSHORE FUND NO DAVIDSON KEMPNER INTERNATIONAL BRIDGEWATER PURE ALPHA MAJOR MARKETS PRIMARY WAVE MUSIC IP FUND 4 400 CAPITAL ASSET BASED OFFSHORE TERM FUND IV LP ENCAP ENERGY CAPITAL FUND XII LP LAKEWOOD CAPITAL OFFSHORE FUND LTD JUNTO OFFSHORE FUND LTD ACADIAN EMERGING MARKETS EQUITY FUND PZENA U.S. BEST IDEAS FUND LP CAMBER CAPITAL OFFSHORE FUND LTD THOMA BRAVO FUND XIV-A INDEPENDENT FRANCHISE PARTNERS GLOBAL EQUITY LP ASIA ALTERNATIVES MANAGEMENT LLC HARBOURVEST PARTNERS VI	FRANK RUSSELL GLOBAL PRIV EQUITY FD CERES FARMS LLC NGP NATURAL RESOURCES XI LP GSO SPECIAL SITUATIONS OVERSEAS FUND LTD GSO SPECIAL SITUATIONS OVERSEAS FD LTD CL C-105-B BROOKFIELD CAPITAL PARTNERS IV LP TIFF PRIVATE EQUITY PARTNERS LLC 2006 TIFF PRIVATE EQUITY PARTNERS LLC 2007 TOURMALET MATAWIN OFFSHORE FUND VI LP NEWBURY EQUITY PARTNERS III CAYMAN L P THOMA BRAVO FUND XI LP THE VARDE FUND XIII B FEEDER LP NEWBURY EQUITY PARTNERS V L.P. TOURMALET MATAWIN OFFSHORE FUND VII LP WHITEBOX MULTI STRATEGY FUND CLASS C-1-1 VIVO OPPORTUNITY FUND LP BROOKFIELD CAPITAL PTNRS V LP NEWBURY EQUITY PARTNERS IV LP NGP NATURAL RESOURCES XII THOMA BRAVO FUND XIII A LP CRAYHILL PRINCIPAL STRATEGIES FUND III LP BLUE TORCH OFFSHORE CREDIT ELLIOTT INTERNATIONAL LIMITED 10TH HBK MULTI-STRATEGY OFFSHORE FUND NO DAVIDSON KEMPNER INTERNATIONAL BRIDGEWATER PURE ALPHA MAJOR MARKETS PRIMARY WAVE MUSIC IP FUND 4 400 CAPITAL ASSET BASED OFFSHORE TERM FUND IV LP ENCAP ENERGY CAPITAL FUND XII LP LAKEWOOD CAPITAL OFFSHORE FUND LTD JUNTO OFFSHORE FUND LTD ACADIAN EMERGING MARKETS EQUITY FUND PZENA U.S. BEST IDEAS FUND LP CAMBER CAPITAL OFFSHORE FUND LTD THOMA BRAVO FUND XIV-A INDEPENDENT FRANCHISE PARTNERS GLOBAL EQUITY LP ASIA ALTERNATIVES MANAGEMENT LLC HARBOURVEST PARTNERS VI	4,604 28,331,575 3,852,625 1,082,307 339,552 7,991,055 1,970 340,193 51,105 4,930,582 7,980,639 11,658,616 15,790,219 42,404 14,379,157 323,301 19,224,944 14,196,956 4,710,716 20,544,886 3,427,640 3,533,985 900,000 12,500,000 9,500,000 4,000,000 3,574,389 1,286,000 2,775,460 4,000,000 16,000,000 31,344,046 16,000,000 5,000,000 14,432,197 26,042,274 7,572,908 14,666,702	4,604 31,501,416 3,989,951 1,225,576 384,499 7,360,184 1,970 340,193 51,105 5,250,531 8,975,172 13,047,338 16,428,460 42,404 16,098,696 748,928 20,555,672 14,287,356 5,512,039 22,454,814 3,427,640 3,724,700 900,000 12,715,915 9,668,606 3,807,155 3,574,389 1,286,000 2,775,460 3,992,718 16,000,000 31,344,046 16,000,000 4,939,771 16,380,116 33,017,833 8,519,388 16,113,961
TOTAL PARTNERSHIP/JOINT VENTURE INTEREST		332,333,006	356,448,606
OTHER INVESTMENTS			
CALIFORNIA ST MASSACHUSETTS ST NEW YORK CITY NY NEW YORK CITY NY SAN DIEGO COUNTY CA TEXAS ST MEXICO GOVERNMENT INTERNATIONAL UNIVERSITY OF CALIFORNIA CA	CALIFORNIA ST 7.550% 04/01/2039 DD 04/28/09 MASSACHUSETTS ST 5.456% 12/01/2039 DD 12/08/09 NEW YORK CITY NY MUNI WTR FIN 6.011% 06/15/2042 DD 03/18/10 NEW YORK CITY NY MUNI WTR FIN 5.440% 06/15/2043 DD 09/23/10 SAN DIEGO CNTY CA REGL TRANSPR 5.911% 04/01/2048 DD 11/10/10 TEXAS ST 5.517% 04/01/2039 DD 08/26/09 MEXICO GOVERNMENT INTERNATIONA 4.750% 03/08/2044 DD 03/08/12 UNIV OF CALIFORNIA CA RGTS MED 6.548% 05/15/2048 DD 11/18/10	734,214 672,649 695,413 62,039 216,916 346,966 901,114 630,415	779,272 682,932 719,618 61,270 223,155 354,146 981,360 654,731
TOTAL OTHER INVESTMENTS		4,259,725	4,456,483
COMMON/COLLECTIVE TRUST			
BNYM-M DB SL BROAD MKT SIF NCS GROUP TRUST GLOBAL FUND STATE STREET LONG US TREASURY INDEX NON-LENDING FUND STATE STREET 20+ YEAR US TREASURY STRIPS INDEX NON- LEND POLEN FOCUS GR COLL INV TRUST	BNYM-M DB SL BROAD MKT SIF NCS GROUP TRUST GLOBAL FUND STATE STREET LONG US TREASURY INDEX NON-LENDING FUND STATE STREET 20+ YEAR US TREASURY STRIPS INDEX NON- LEND POLEN FOCUS GR COLL INV TRUST	87,795,894 32,824,557 161,701,773 44,604,428 28,505,846	173,995,189 39,483,776 148,951,067 29,534,160 30,967,297
TOTAL COMMON/COLLECTIVE TRUST		355,432,497	422,931,488
103-12 INVESTMENT ENTITIES			
IR&M LONG CORPORATE COLLECTIVE FUND MARATHON LONDON INTL INV TR I GLOBAL ALPHA INTERNATIONAL SMALL CAP FUND LP	IR&M LONG CORPORATE COLLECTIVE FUND MARATHON LONDON INTL INV TR I GLOBAL ALPHA INTERNATIONAL SMALL CAP FUND LP	83,996,328 41,833,721 24,485,550	83,668,194 47,659,037 27,708,725
TOTAL 103-12 INVESTMENT ENTITIES		150,315,599	159,035,956
REGISTERED INVESTMENT COMPANIES			
DREYFUS TREASURY SECURITIES CM DREYFUS TREASURY SECURITIES CM MFS INTERNATIONAL EQUITY FUN VANGUARD FTSE EMERGING MARKE DREYFUS TREASURY SECURITIES CM DREYFUS TREASURY SECURITIES CM	DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97 DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97 MFS INTERNATIONAL EQUITY-R6 VANGUARD FTSE EMERGING MARKE DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97 DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD	379,606 317,401 16,281,052 7,999,976 8,261,913 20,580,542	379,606 317,401 30,551,993 8,007,171 8,261,913 20,580,542
TOTAL REGISTERED INVESTMENT COMPANIES		53,820,489	66,096,626
GRAND TOTAL		\$990,337,353	\$1,116,632,215

UMASS MEMORIAL HEALTH CARE PENSION PLAN
EIN: 04-3358566
Schedule H, Line 4(i) -
Schedule of Assets (Acquired and Disposed of Within Year)
For the Year Ended September 30, 2024

(a) Identity of issue, borrower, lessor or similar party	(b) Description of investment including maturity date, rate of interest, collateral, par or maturity value	(c) Cost of Acquisitions	(d) Proceeds of Dispositions
APACHE CORP	037411BA2 APACHE CORP 4.750% 04/15/2043 DD 04/09/12	\$ (74,922)	\$ 77,875
LELAND STANFORD JUNIOR UNIVERS	09659DAB2 LELAND STANFORD JUNIOR UNIVERS 3.460% 05/01/2047 DD 04/28/15	(60,614)	58,016
CAPITAL ONE FINANCIAL CORP	14040HDF9 CAPITAL ONE FINANCIAL CORP VAR RT 02/01/2035 DD 02/01/24	(210,000)	212,354
CHILE GOVERNMENT INTERNATIONAL	168863DS4 CHILE GOVERNMENT INTERNATIONAL 3.100% 05/07/2041 DD 05/07/21	(257,800)	270,669
CISCO SYSTEMS INC	17275RBV3 CISCO SYSTEMS INC 5.350% 02/26/2064 DD 02/26/24	(522,680)	500,110
DIAMONDBACK ENERGY INC	25278XBA6 DIAMONDBACK ENERGY INC 5.750% 04/18/2054 DD 04/18/24	(104,955)	102,207
DUKE UNIVERSITY HEALTH SYSTEM	26443CAA1 DUKE UNIVERSITY HEALTH SYSTEM 3.920% 06/01/2047 DD 06/06/17	(168,736)	168,475
ENI SPA	26874RAP3 ENI SPA 144A 5.950% 05/15/2054 DD 05/15/24	(197,656)	199,002
HONEYWELL INTERNATIONAL INC	438516CT1 HONEYWELL INTERNATIONAL INC 5.250% 03/01/2054 DD 03/01/24	(901,428)	895,887
HONEYWELL INTERNATIONAL INC	438516CU8 HONEYWELL INTERNATIONAL INC 5.350% 03/01/2064 DD 03/01/24	(209,483)	207,698
JPMORGAN CHASE & CO	46647PEH5 JPMORGAN CHASE & CO VAR RT 04/22/2035 DD 04/22/24	(407,037)	415,157
MORGAN STANLEY	61747YFL4 MORGAN STANLEY VAR RT 01/18/2035 DD 01/18/24	(335,000)	332,920
PINE STREET TRUST III	72284KAB7 PINE STREET TRUST III 144A 6.223% 05/15/2054 DD 06/11/24	(100,000)	100,558
PRESIDENT AND FELLOWS OF HARVARD	740816AM5 PRESIDENT AND FELLOWS OF HARVA 3.150% 07/15/2046 DD 10/13/16	(30,374)	29,880
SOUTHWESTERN PUBLIC SERVICE CO	845743BX0 SOUTHWESTERN PUBLIC SERVICE CO 6.000% 06/01/2054 DD 06/06/24	(104,221)	105,712
VISTRA OPERATIONS CO LLC	92840VAS1 VISTRA OPERATIONS CO LLC 144A 6.000% 04/15/2034 DD 04/12/24	(526,162)	552,261
WELLS FARGO & CO	95000U2M4 WELLS FARGO & CO VAR RT 04/04/2051 DD 03/30/20	(207,873)	239,017

See Independent Auditor's Report.

UMASS MEMORIAL HEALTH CARE PENSION PLAN
EIN: 04-3358566
Schedule H, Line 4(j) -
Schedule of Reportable Transactions
For the Year Ended September 30, 2024

(a) Identity of Party Involved	(b) Description of Asset (include interest rate and maturity in case of a loan)	(c) Purchase price	(d) Selling price	(g) Cost of Asset	(h) Current value of asset on transaction date	(i) Net gain or (loss)
Schedule of Reportable Transactions - Series						
DREYFUS TREASURY SECURITIES CM	DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97	\$ -	\$ 58,000,000	\$ 58,000,000	\$ 58,000,000	\$ -
DREYFUS TREASURY SECURITIES CM	DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97	57,638,318	-	-	-	-
ABRDN EMRG MRKTS-INST	ABRDN EMRG MRKTS-INST	-	60,087,188	62,720,597	60,087,188	(2,633,409)
ABRDN EMRG MRKTS-INST	ABRDN EMRG MRKTS-INST	28,146,769	-	-	-	-
BNY MELLON	BNY MELLON CASH RESERVE 0.100% 12/31/2049 DD 06/26/97	58,798,360	-	-	-	-
BNY MELLON	BNY MELLON CASH RESERVE 0.100% 12/31/2049 DD 06/26/97	-	59,412,227	59,412,227	59,412,227	-
DREYFUS TREASURY SECURITIES CM	DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97	492,790,054	-	-	-	-
DREYFUS TREASURY SECURITIES CM	DREYFUS TREASURY SECURITIES CM 5.271% 12/31/2035 DD 04/09/97	-	470,221,045	470,221,045	470,221,045	-
STATE STREET	STATE STREET LONG US TREASURY INDEX NON-LENDING FUND	-	18,535	22,132	18,535	(3,598)
STATE STREET	STATE STREET LONG US TREASURY INDEX NON-LENDING FUND	83,000,000	-	-	-	-

See Independent Auditor's Report.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26a Schedule of Active Participant Data as of October 1, 2023

Attained Age	Attained Years of Credited Service ²										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	0	111	5	0	0	0	0	0	0	0	116
	-	37,557	-	-	-	-	-	-	-	-	37,382
25-29	0	480	133	2	0	0	0	0	0	0	615
	-	59,385	60,096	-	-	-	-	-	-	-	59,467
30-34	0	440	375	102	2	0	0	0	0	0	919
	-	66,630	76,025	71,594	-	-	-	-	-	-	71,010
35-39	0	353	353	177	117	5	0	0	0	0	1,005
	-	66,936	83,467	85,032	76,780	-	-	-	-	-	77,037
40-44	0	257	263	150	192	104	9	0	0	0	975
	-	66,535	81,825	86,381	93,103	99,466	-	-	-	-	82,502
45-49	0	227	234	137	177	148	33	4	0	0	960
	-	72,258	82,729	90,264	98,357	95,607	104,652	-	-	-	86,935
50-54	0	233	233	126	190	166	75	32	2	0	1,057
	-	70,427	86,422	92,194	96,346	100,854	107,668	95,921	-	-	89,429
55-59	0	220	229	131	187	196	111	85	50	2	1,211
	-	82,867	90,001	93,946	92,337	108,860	118,485	116,964	111,210	-	97,976
60-64	0	122	183	127	145	190	142	64	57	44	1,074
	-	73,833	85,230	89,456	87,913	90,195	117,703	100,746	105,333	100,563	92,589
65-69	0	42	65	41	58	53	56	23	10	18	366
	-	95,823	77,987	89,116	88,069	90,482	111,432	123,247	-	-	94,822
70 & over	0	19	15	7	13	9	12	2	2	2	81
	-	-	-	-	-	-	-	-	-	-	92,315
Total	0	2,504	2,088	1,000	1,081	871	438	210	121	66	8,379
	-	67,138	81,266	87,345	91,304	98,015	115,082	108,525	107,093	104,832	83,815

² Age and service for purposes of determining category are based on exact (not rounded) values.

Plan Name: UMass Memorial Health Care Pension Plan

EIN / PN: 04-3358566 / 005

Plan Sponsor: UMass Memorial Health Care, Inc.

Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis:

Applicable month	June
Interest rate basis	3-Segment Rates

Interest rates:

	Reflecting Corridors (ARPA)	Not Reflecting Corridors
First segment rate	4.75%	3.03%
Second segment rate	5.00%	4.11%
Third segment rate	5.74%	4.27%
Effective interest rate	5.36%	4.17%

As permitted by law, rates reflecting stabilization are used to determine the funding target and target normal cost, and thus the minimum required contribution under IRC §430 for the plan. Because these assumptions are subject to a corridor based on average interest rates over a 25-year period, they may differ from (and currently are higher than) current market interest rates and may be inconsistent with other economic assumptions used in the valuation.

Annual rates of increase

Compensation	MNA/Non-union: 5.55% to 2.05% based on age. For the fiscal year ending 9/30/2024, an additional 4.00% was added to the rate of compensation increase in the first year. All Others: 3.55% to 2.05% based on age. For the fiscal year ending 9/30/2024, an additional 4.00% was added to the rate of compensation increase in the first year.
Future Social Security wage bases	N/A

Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Statutory limits on compensation	Accrued benefits projected to be paid in future years are limited to the maximum presently allowed under IRC §415. Plan compensation is limited to the maximum presently allowed under IRC §401(a)(17). No provision is made for future increases in the maximum annual benefit or compensation limit.
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Plan related expenses	The amount included this year for plan-related expenses is expected administrative expenses of \$8,900,000 for the period from October 1, 2023 to September 30, 2024.
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Return on assets ¹	6.50%
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The expected rate of return on plan assets for the plan year was selected by the plan sponsor. WTW's determination that this assumption does not significantly conflict with what would be reasonable is informed by WTW's Expected Return Estimator model and by analysis of recent and historical data, including the variability thereof, for CPI, GDP growth, and real returns on the various classes of assets held by the trust and recent trends.

Demographic Assumptions

Inclusion date	The valuation date coincident with or next following the date on which the employee becomes a participant.
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New or rehired employees	It was assumed there will be no new or rehired employees.
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Mortality

Healthy	Separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, adjusted backward to 2006 with Scale MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2021) and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, adjusted backward to 2006 with Scale MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2021). For lump sums, the prescribed mortality table for lump sums effective in 2023.
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¹ Return on assets assumption is limited by the third segment rate as recognized by PPA. The 2022 expected return is limited to 5.92%.

Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Disabled

Same as Healthy

Termination

The probabilities shown at the following illustrative ages indicate the withdrawal assumption, excluding disability, mortality, and retirement for employees included in the valuation:

Age	Probability of Withdrawal
25	10.00%
30	6.25%
35	5.75%
40	5.25%
45	4.75%
50 and over	4.25%

Additional probabilities of withdrawal in the first ten years of employment are assumed as follows: 15%, 10%, 8%, 7%, 6%, 5%, 4%, 3%, 2%, 1%.

Disability

Wyatt 1985 Disability Study Class 1 unisex rates.

Retirement

Rates at which participants are assumed to retire by age are shown below:

Age	Percentage retiring during the year
55 - 61	5%
62 - 64	10%
65 - 66	45%
67 - 69	30%
70	100%

Terminated vested participants are assumed to retire at 65.

Plan Name: UMass Memorial Health Care Pension Plan
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Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Benefit commencement dates

Preretirement death benefit	The later of the death of the active participant or the date the participant would have attained age 55.
Deferred vested benefit	Upon termination of employment or age 65.
Disability benefit	Upon disablement.
Retirement benefit	Upon termination of employment.

Form of payment

Of the terminated vested participants as of the census date, 30% are assumed to elect an annuity and 70% elect a lump sum payable at 65. 25% of active participants assumed to terminate prior to age 55 and eligible to elect an immediate lump sum are assumed to do so. For those not assumed to elect an immediate lump sum upon termination, 30% are assumed to elect an annuity and 70% elect a lump sum payable at 65. Of active participants assumed to retire, 50% are assumed to elect a lump sum and 50% elect an annuity. 100% of the active participants assumed to become disabled elect a lump sum payment (100% annuity for prior MH participants). For those electing annuities, 40% are assumed to elect a single life annuity and 60% elect a 50% joint and survivor.

Percent married

For purposes of valuing the pre-retirement surviving spouse's benefit, 60% of participants are assumed to be married.

Spouse age

Male spouses are assumed to be 3 years older than female spouses.

Covered pay

Compensation assumed paid in the current year beginning on the census date is the compensation paid in the prior year increased by the salary increase assumption for the participant's current age.

Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Cash flow

Decrement timing	The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met, or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.
Timing of benefit payments	Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

Methods

Census date	October 1, 2023
Valuation date	October 1, 2023
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost (TNC)	Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC §430.
Actuarial value of assets	Average of the fair market value of assets on the valuation date and the two immediately preceding valuation dates, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of market value, including discounted contributions receivable (discounted using the effective interest rate for the prior plan year.)

Plan Name:	UMass Memorial Health Care Pension Plan
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Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets

Benefits not valued

All benefits described in the Plan Provisions section of this report were valued. WTW has reviewed the plan provisions with UMass Memorial Health and, based on that review, is not aware of any significant benefits required to be valued that were not.

The plan pays small benefits (with a present value up to \$1,000) in a single lump sum payment. Such lump sums are not explicitly valued; rather such participants' benefits are valued using the benefit choice assumptions described above.

Sources of Data and Other Information

UMMH, UMMH's third party administrator, and the trustee furnished participant data electronically as of the census date. Information on assets, contributions and plan provisions was supplied by the plan sponsor and trustee.

Data were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date.

In consultation with the plan sponsor, the following assumptions were made for missing or apparently inconsistent data elements:

- Assumed status is the same as prior year if status is missing and prior year's status is deferred beneficiary, beneficiary, retiree, vested term, disability, active on leave, lump sum, death, or non-vested term.
- Assumed status is the same as prior year if status is beneficiary, retiree, vested term or pending term, and lump sum benefit amount is greater than \$0 and prior year's status is lump sum.
- Assumed benefit amount is the same as prior year if benefit and status are both missing.
- Assumed benefit form, pension end date, payment frequency, payment start date are the same as prior year if either of them and the status are both missing.

Plan Name:	UMass Memorial Health Care Pension Plan
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Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

- Assumed unknown survivor date of birth for deceased participants is 3 year age adjustment (males older than females) while gender is the opposite gender if they are missing.
- Assumed payment start date is the same as prior year's or the same as the payment date on check register file if it is missing for beneficiary or retiree status; if prior year's payment start date or the check register date are also missing, set the payment start date equals to the normal retirement date for beneficiary or retiree status.
- In cases where an accrued benefit was not provided for a terminated vested participant we have estimated the benefit where data is available to reasonably do so. If data is not available to estimate the benefits, we have used an amount equal to the average accrued benefit for the bargained employees or non-bargained employees, whichever is applicable to the specific employee.
- Changes in participant date of birth, date of hire, sex, benefit form, beneficiary date of birth and/or beneficiary gender are assumed to be correct.
- Participants paid on the check register, but not provided with a payment form were assumed to have a 50% Joint and Survivor annuity.
- Participants provided as in-pay in this year's data, but were valued as deceased last year, were assumed to be deceased.
- Retired participants not provided with payment amounts in the data were valued using their most recent payment amount from the check register if available.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Assumptions Rationale - Significant Economic Assumptions

Discount rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.
Expected return on plan assets	We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions. WTW's determination that this assumption does not significantly conflict with what would be reasonable is informed by WTW's Expected Return Estimator model and by analysis of recent and historical data, including the variability thereof, for CPI, GDP growth, and real returns on the various classes of assets held by the trust and recent trends.

Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Lump sum conversion rate	Actuarially equivalent lump-sum values were determined using the valuation interest rate.
Rates of increase in compensation	Assumed increases were chosen by the plan sponsor and, as required by IRC 430, they represent an estimate of future experience.
Administrative expenses	Assumed administrative expenses are estimated based on the prior year's expenses, with adjustment to reflect expected future payments.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Termination	Termination rates were based on an experience study conducted in 2019, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.
Disability	Disability rates are based on plan sponsor expectation for the future with periodic monitoring of observed gains and losses caused by disability patterns different than assumed.
Retirement	Retirement rates were based on an experience study conducted in 2022, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.
Benefit commencement date for deferred benefits:	
Preretirement death benefit	Surviving spouses are assumed to begin benefits at the earliest permitted commencement date because ERISA requires benefits to start then unless the spouse elects to defer. If the spouse elects to defer, actuarial increases from the earliest commencement date must be given, so that a later commencement date is expected to be of approximately equal value, and experience indicates that most spouses do take the benefit as soon as it is available.

Plan Name:	UMass Memorial Health Care Pension Plan
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Plan Sponsor:	UMass Memorial Health Care, Inc.
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SCHEDULE SB ATTACHMENTS

Deferred vested benefit	Deferred vested participants' assumed commencement age is a single age intended to capture the average age at commencement. Deferred vested early commencement factors are not subsidized so that the difference between this approach and using assumed commencement rates at multiple ages is not expected to be significant.
Form of payment	The percentage of retiring participants assumed to take lump sums, joint and survivor annuities, and the assumed survivor percentages, are based on plan sponsor expectations for the future, together with periodic monitoring of observed gains and losses caused by patterns that are different than assumed.

Source of Prescribed Methods

Funding methods	The methods used for funding purposes as described in Appendix A, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430 or were selected by the plan sponsor from a range of methods permitted by IRC §430.
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Changes in Assumptions and Methods

Change in assumptions and methods since prior valuation	The mortality projection scale used to calculate the funding target and target normal cost was updated from MP-2020 to MP-2021 as required by IRC §430. The segment interest rates used to determine the minimum funding requirements and benefit restrictions were updated from an applicable month of June 2022 to June 2023 and reflect the interest rate corridors of ARPA. The mortality assumption for valuing lump sums was updated from the 2022 PPA table to the 2023 PPA table. The salary scale assumption was updated to reflect an additional 4% on top of the current age-graded scale for the current year.
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Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

Plan Name	UMass Memorial Health Care Pension Plan
Plan Sponsor EIN	04-3358566
ERISA Plan #	005
Plan Year Ending	September 30, 2024

The required attachment marked with an “X” in the Attachment column is included within the Accountant’s Opinion attachment to Sch. H, Part III, Line 3, which consists of the entire audit report issued by the plan’s Independent Qualified Public Accountant (IQPA).

Form/Schedule	Line #	Description	Attachment
5500 Sch. H	Line 3	Financial statements used in formulating the IQPA's opinion	X
5500 Sch. H	Line 4i	Schedule of Assets (Held at End of Year)	X
5500 Sch. H	Line 4i	Schedule of Assets (Acquired and Disposed of Within Year)	X
5500 Sch. H	Line 4j	Schedule of Reportable Transactions	X
5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	

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 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 10/01/2023 and ending 09/30/2024

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 UMass Memorial Health Care Pension Plan		B Three-digit plan number (PN)	005
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF UMass Memorial Health Care, Inc.		D Employer Identification Number (EIN) 04-3358566	
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 10 Day 01 Year 2023			
2	Assets:			
a	Market value.....	2a	989,393,004	
b	Actuarial value	2b	1,044,209,143	
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	1,351	321,750,191	321,750,191
b	For terminated vested participants.....	3,179	139,485,284	139,485,284
c	For active participants.....	8,379	685,657,444	695,732,420
d	Total	12,909	1,146,892,919	1,156,967,895
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	5.36%	
6	Target normal cost			
a	Present value of current plan year accruals.....	6a	48,845,998	
b	Expected plan-related expenses	6b	8,900,000	
c	Target normal cost.....	6c	57,745,998	

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 Eric Geissler Signature of actuary	7/14/2025 Date 2307911 Most recent enrollment number 901-930-0000 Telephone number (including area code)
Eric Geissler Type or print name of actuary Willis Towers Watson US LLC Firm name 3340 Players Club Parkway Suite 200 Memphis TN 38125-8942 Address of the firm	

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	90,109,319
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	54,054,509
9	Amount remaining (line 7 minus line 8)	0	36,054,810
10	Interest on line 9 using prior year's actual return of <u>11.63</u> %	0	4,193,174
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		28,240,940
	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>5.53</u> %		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		3,284,421
	c Total available at beginning of current plan year to add to prefunding balance		31,525,361
	d Portion of (c) to be added to prefunding balance		31,525,361
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	71,773,345

Part III Funding Percentages			
14	Funding target attainment percentage	14	84.05 %
15	Adjusted funding target attainment percentage	15	84.05 %
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	86.41 %
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
11/13/2024	9,348,333	0			
12/03/2024	14,166,667	0			
01/02/2025	7,775,000	0			
02/03/2025	7,775,000	0			
02/10/2025	50,000,000	0			
03/03/2025	7,775,000	0			
04/01/2025	7,775,000	0			
05/01/2025	7,775,000	0			
06/03/2025	7,775,000	0			
Totals ►			18(b)	120,165,000	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 111,944,802
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
0	0
(3) 3rd	(4) 4th
0	0

Part V	Assumptions Used to Determine Funding Target and Target Normal Cost		
21	Discount rate:		
a	Segment rates:	1st segment: 4.75 % 2nd segment: 5.00 % 3rd segment: 5.74 %	☐ N/A, full yield curve used
b	Applicable month (enter code).....	21b	4
22	Weighted average retirement age	22	63
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	Demographic and benefit information		
a	Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ☒ Yes ☐ No		
b	Is the plan required to provide a projection of expected benefit payments? 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 6c).....	31a	57,745,998
b	Excess assets, if applicable, but not greater than line 31a	31b	0
32	Amortization installments:	Outstanding Balance	Installment
a	Net shortfall amortization installment	184,532,097	18,433,299
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	76,179,297
	Carryover balance	Prefunding balance	Total balance
35	Balances elected for use to offset funding requirement.....	0	61,930,640
36	Additional cash requirement (line 34 minus line 35)	36	14,248,657
37	Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	111,944,802
38	Present value of excess contributions for current year (see instructions)		
a	Total (excess, if any, of line 37 over line 36)	38a	97,696,145
b	Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	61,930,640
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 the American Rescue Plan Act of 2021 (See Instructions)		
41	If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. ☒ 2019 ☐ 2020 ☐ 2021		

SCHEDULE SB ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	UMass Memorial Health Care, Inc.
EIN/PN	04-3358566 / 005
Plan Name	UMass Memorial Health Care Pension Plan
Valuation Date	October 1, 2023
Enrolled Actuary	Eric Geissler
Enrollment Number	23-07911

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 22 Description of Weighted Average Retirement Age as of October 1, 2023

See Schedule SB, Part V - Statement of Actuarial Assumptions/Methods for retirement rates. The average retirement age for Line 22 was calculated by creating a hypothetical life table with retirement as the only decrement, and then computing the average retirement age for the table.

x	q_x^r	l_x	${}_{x-55}p_{55} = l_x / l_{55}$	$q_x^r * l_x / l_{55}$	$x * q_x^r * l_x / l_{55}$
55	0.05	1,000	1.000000	0.050000	2.750000
56	0.05	950	0.950000	0.047500	2.660000
57	0.05	903	0.902500	0.045125	2.572125
58	0.05	857	0.857375	0.042869	2.486388
59	0.05	815	0.814506	0.040725	2.402793
60	0.05	774	0.773781	0.038689	2.321343
61	0.05	735	0.735092	0.036755	2.242030
62	0.10	698	0.698337	0.069834	4.329691
63	0.10	629	0.628504	0.062850	3.959572
64	0.10	566	0.565653	0.056565	3.620181
65	0.45	509	0.509088	0.229090	14.890821
66	0.45	280	0.279998	0.125999	8.315951
67	0.30	154	0.153999	0.046200	3.095382
68	0.30	108	0.107799	0.032340	2.199107
69	0.30	75	0.075460	0.022638	1.562013
70	1.00	53	0.052822	0.052822	3.697518
Average age at retirement					63.104914
Rounded for Schedule SB item 22					63

Plan Name: UMass Memorial Health Care Pension Plan
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 Plan Sponsor: UMass Memorial Health Care, Inc.
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SCHEDULE SB ATTACHMENTS

Schedule SB, Part V Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis:

Applicable month	June
Interest rate basis	3-Segment Rates

Interest rates:

	Reflecting Corridors (ARPA)	Not Reflecting Corridors
First segment rate	4.75%	3.03%
Second segment rate	5.00%	4.11%
Third segment rate	5.74%	4.27%
Effective interest rate	5.36%	4.17%

As permitted by law, rates reflecting stabilization are used to determine the funding target and target normal cost, and thus the minimum required contribution under IRC §430 for the plan. Because these assumptions are subject to a corridor based on average interest rates over a 25-year period, they may differ from (and currently are higher than) current market interest rates and may be inconsistent with other economic assumptions used in the valuation.

Annual rates of increase

Compensation	MNA/Non-union: 5.55% to 2.05% based on age. For the fiscal year ending 9/30/2024, an additional 4.00% was added to the rate of compensation increase in the first year. All Others: 3.55% to 2.05% based on age. For the fiscal year ending 9/30/2024, an additional 4.00% was added to the rate of compensation increase in the first year.
Future Social Security wage bases	N/A

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Statutory limits on compensation	Accrued benefits projected to be paid in future years are limited to the maximum presently allowed under IRC §415. Plan compensation is limited to the maximum presently allowed under IRC §401(a)(17). No provision is made for future increases in the maximum annual benefit or compensation limit.
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Plan related expenses	The amount included this year for plan-related expenses is expected administrative expenses of \$8,900,000 for the period from October 1, 2023 to September 30, 2024.
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Return on assets ¹	6.50%
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The expected rate of return on plan assets for the plan year was selected by the plan sponsor. WTW's determination that this assumption does not significantly conflict with what would be reasonable is informed by WTW's Expected Return Estimator model and by analysis of recent and historical data, including the variability thereof, for CPI, GDP growth, and real returns on the various classes of assets held by the trust and recent trends.

Demographic Assumptions

Inclusion date	The valuation date coincident with or next following the date on which the employee becomes a participant.
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New or rehired employees	It was assumed there will be no new or rehired employees.
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Mortality

Healthy	Separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, adjusted backward to 2006 with Scale MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2021) and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, adjusted backward to 2006 with Scale MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2021). For lump sums, the prescribed mortality table for lump sums effective in 2023.
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¹ Return on assets assumption is limited by the third segment rate as recognized by PPA. The 2022 expected return is limited to 5.92%.

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Disabled

Same as Healthy

Termination

The probabilities shown at the following illustrative ages indicate the withdrawal assumption, excluding disability, mortality, and retirement for employees included in the valuation:

Age	Probability of Withdrawal
25	10.00%
30	6.25%
35	5.75%
40	5.25%
45	4.75%
50 and over	4.25%

Additional probabilities of withdrawal in the first ten years of employment are assumed as follows: 15%, 10%, 8%, 7%, 6%, 5%, 4%, 3%, 2%, 1%.

Disability

Wyatt 1985 Disability Study Class 1 unisex rates.

Retirement

Rates at which participants are assumed to retire by age are shown below:

Age	Percentage retiring during the year
55 - 61	5%
62 - 64	10%
65 - 66	45%
67 - 69	30%
70	100%

Terminated vested participants are assumed to retire at 65.

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Benefit commencement dates

Preretirement death benefit	The later of the death of the active participant or the date the participant would have attained age 55.
Deferred vested benefit	Upon termination of employment or age 65.
Disability benefit	Upon disablement.
Retirement benefit	Upon termination of employment.

Form of payment

Of the terminated vested participants as of the census date, 30% are assumed to elect an annuity and 70% elect a lump sum payable at 65. 25% of active participants assumed to terminate prior to age 55 and eligible to elect an immediate lump sum are assumed to do so. For those not assumed to elect an immediate lump sum upon termination, 30% are assumed to elect an annuity and 70% elect a lump sum payable at 65. Of active participants assumed to retire, 50% are assumed to elect a lump sum and 50% elect an annuity. 100% of the active participants assumed to become disabled elect a lump sum payment (100% annuity for prior MH participants). For those electing annuities, 40% are assumed to elect a single life annuity and 60% elect a 50% joint and survivor.

Percent married

For purposes of valuing the pre-retirement surviving spouse's benefit, 60% of participants are assumed to be married.

Spouse age

Male spouses are assumed to be 3 years older than female spouses.

Covered pay

Compensation assumed paid in the current year beginning on the census date is the compensation paid in the prior year increased by the salary increase assumption for the participant's current age.

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Cash flow

Decrement timing	The assumptions used are collectively called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met, or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.
Timing of benefit payments	Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

Methods

Census date	October 1, 2023
Valuation date	October 1, 2023
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost (TNC)	Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC §430.
Actuarial value of assets	Average of the fair market value of assets on the valuation date and the two immediately preceding valuation dates, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of market value, including discounted contributions receivable (discounted using the effective interest rate for the prior plan year.)

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The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets

Benefits not valued

All benefits described in the Plan Provisions section of this report were valued. WTW has reviewed the plan provisions with UMass Memorial Health and, based on that review, is not aware of any significant benefits required to be valued that were not.

The plan pays small benefits (with a present value up to \$1,000) in a single lump sum payment. Such lump sums are not explicitly valued; rather such participants' benefits are valued using the benefit choice assumptions described above.

Sources of Data and Other Information

UMMH, UMMH's third party administrator, and the trustee furnished participant data electronically as of the census date. Information on assets, contributions and plan provisions was supplied by the plan sponsor and trustee.

Data were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date.

In consultation with the plan sponsor, the following assumptions were made for missing or apparently inconsistent data elements:

- Assumed status is the same as prior year if status is missing and prior year's status is deferred beneficiary, beneficiary, retiree, vested term, disability, active on leave, lump sum, death, or non-vested term.
- Assumed status is the same as prior year if status is beneficiary, retiree, vested term or pending term, and lump sum benefit amount is greater than \$0 and prior year's status is lump sum.
- Assumed benefit amount is the same as prior year if benefit and status are both missing.
- Assumed benefit form, pension end date, payment frequency, payment start date are the same as prior year if either of them and the status are both missing.

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- Assumed unknown survivor date of birth for deceased participants is 3 year age adjustment (males older than females) while gender is the opposite gender if they are missing.
- Assumed payment start date is the same as prior year's or the same as the payment date on check register file if it is missing for beneficiary or retiree status; if prior year's payment start date or the check register date are also missing, set the payment start date equals to the normal retirement date for beneficiary or retiree status.
- In cases where an accrued benefit was not provided for a terminated vested participant we have estimated the benefit where data is available to reasonably do so. If data is not available to estimate the benefits, we have used an amount equal to the average accrued benefit for the bargained employees or non-bargained employees, whichever is applicable to the specific employee.
- Changes in participant date of birth, date of hire, sex, benefit form, beneficiary date of birth and/or beneficiary gender are assumed to be correct.
- Participants paid on the check register, but not provided with a payment form were assumed to have a 50% Joint and Survivor annuity.
- Participants provided as in-pay in this year's data, but were valued as deceased last year, were assumed to be deceased.
- Retired participants not provided with payment amounts in the data were valued using their most recent payment amount from the check register if available.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Assumptions Rationale - Significant Economic Assumptions

Discount rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.
Expected return on plan assets	We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions. WTW's determination that this assumption does not significantly conflict with what would be reasonable is informed by WTW's Expected Return Estimator model and by analysis of recent and historical data, including the variability thereof, for CPI, GDP growth, and real returns on the various classes of assets held by the trust and recent trends.

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Lump sum conversion rate	Actuarially equivalent lump-sum values were determined using the valuation interest rate.
Rates of increase in compensation	Assumed increases were chosen by the plan sponsor and, as required by IRC 430, they represent an estimate of future experience.
Administrative expenses	Assumed administrative expenses are estimated based on the prior year's expenses, with adjustment to reflect expected future payments.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Termination	Termination rates were based on an experience study conducted in 2019, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.
Disability	Disability rates are based on plan sponsor expectation for the future with periodic monitoring of observed gains and losses caused by disability patterns different than assumed.
Retirement	Retirement rates were based on an experience study conducted in 2022, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.
Benefit commencement date for deferred benefits:	
Preretirement death benefit	Surviving spouses are assumed to begin benefits at the earliest permitted commencement date because ERISA requires benefits to start then unless the spouse elects to defer. If the spouse elects to defer, actuarial increases from the earliest commencement date must be given, so that a later commencement date is expected to be of approximately equal value, and experience indicates that most spouses do take the benefit as soon as it is available.

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Deferred vested benefit	Deferred vested participants' assumed commencement age is a single age intended to capture the average age at commencement. Deferred vested early commencement factors are not subsidized so that the difference between this approach and using assumed commencement rates at multiple ages is not expected to be significant.
Form of payment	The percentage of retiring participants assumed to take lump sums, joint and survivor annuities, and the assumed survivor percentages, are based on plan sponsor expectations for the future, together with periodic monitoring of observed gains and losses caused by patterns that are different than assumed.

Source of Prescribed Methods

Funding methods	The methods used for funding purposes as described in Appendix A, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430 or were selected by the plan sponsor from a range of methods permitted by IRC §430.
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Changes in Assumptions and Methods

Change in assumptions and methods since prior valuation	The mortality projection scale used to calculate the funding target and target normal cost was updated from MP-2020 to MP-2021 as required by IRC §430. The segment interest rates used to determine the minimum funding requirements and benefit restrictions were updated from an applicable month of June 2022 to June 2023 and reflect the interest rate corridors of ARPA. The mortality assumption for valuing lump sums was updated from the 2022 PPA table to the 2023 PPA table. The salary scale assumption was updated to reflect an additional 4% on top of the current age-graded scale for the current year.
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Schedule SB, Line 24 Change in Actuarial Assumptions

The salary scale assumption was updated to reflect an additional 4% on top of the current age-graded scale for the current year.

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Summary of Plan Provisions

UMass Memorial Health Care Pension Plan

Plan Provisions

The plan was originally effective October 1, 1969. The plan was amended and restated effective January 1, 2017. The plan was amended in 2017, 2018, 2019, 2020 and 2021 (including the plan merger with the Marlborough Hospital Retirement Plan effective December 1, 2019). These changes are reflected in the results contained in this report. The provisions were amended via Board Resolution for the non-union active participants, and through union contracts for the active participants covered by collective bargaining agreements. The most recent amendment reflected in the following plan provisions is effective October 1, 2021.

Covered employees Employees are eligible for participation in the plan on the first day of the month coincident with or next following the completion of a 12-month, 1,000-hour year of service.

Physicians and clinical PhD staff members who waived accrual of future benefits in the pension plan or were hired after January 1, 2000 are participating and accruing benefits in another retirement program sponsored by the Hospital.

Employees who elect to be covered under the enhanced employer Matching Contribution under the UMass Memorial Health Care 401(k) Plan are not eligible for participation in this plan.

Definitions

Vesting service In general, a year of vesting service is earned for each plan year in which a participant completes at least 1,000 hours of service as an eligible employee

Pension service In general, a year of credited service is earned for each plan year in which a participant completes at least 1,000 hours of service as an eligible employee

Final average compensation/salary The greater of the total of the participant's compensation for the high five consecutive Plan Years divided by five or the average of the last 60 consecutive months immediately preceding the participant's termination of employment.

Normal retirement date (NRD) First of month coinciding with or next following the attainment of age 65

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Monthly pension benefit

For years of service before January 1, 2017, the annuity benefit formula is \$3.60 plus 1.25% of average monthly earnings in excess of \$550 multiplied by credited service before 2017 subject to a maximum of 30 years. Average monthly earnings are calculated as greater of 1) the average of the highest consecutive five years of total earnings before the date of determination and 2) the average of the final 60 months of earnings immediately preceding the date of determination. Average monthly earnings are frozen as of December 31, 2016.

For years of service after December 31, 2016, the annuity benefit formula is 1.25% of monthly earnings.

For the physicians and clinical PhD staff members described above who elected to waive future benefit accruals in the pension plan, the annuity benefit is offset by the annuitized value of their profit sharing balances from another retirement program sponsored by the Hospital.

Monthly preretirement death benefit

The beneficiary may receive a lump sum payment equal to 55% of the benefit the participant would have received had he elected to retire on the day of his death and chosen the lump sum option. If the participant is married on the date of death, the spouse will receive the greater of 55% of the lump sum benefit or the lump sum value of the 50% survivor annuity the spouse would have received had the participant retired on the day before his death, selected the 50% joint and survivor annuity and then died. The spouse may choose to take this lump sum pre-retirement death benefit as a life annuity instead.

Eligibility for Benefits

Normal retirement

Retirement on NRD

Early retirement

Retirement before NRD

Postponed retirement

Retirement after NRD

Vested termination

Termination for reasons other than death or retirement after completing three years of vesting service (5 years for certain collectively bargained employees)

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Disability Permanent and total disability prior to NRD after attaining age 50 and 10 or more years of vesting service, and participant is receiving a Social Security disability benefit

Preretirement death benefit Death while eligible for normal, early, postponed, or deferred vested retirement benefits, with a surviving spouse

Benefits Paid Upon the Following Events

Normal retirement The monthly pension benefit determined as of NRD

Early retirement The monthly pension benefit determined as of the early retirement date, reduced in conjunction with the table set forth below for each year that the employee's early retirement date precedes his NRD:

Number of Years by which ERD Precedes NRD	Early Retirement Percentage
0	100%
1	93%
2	86%
3	80%
4	75%
5	70%
6	66%
7	62%
8	58%
9	54%
10	51%

Larger reductions apply for earlier retirement ages.

If a participant chooses the lump sum optional form of benefit before age 65, the lump sum will be at least equal to the lump sum payable at age 65, reduced according to the following table (selected ages illustrated):

Age When Benefit is Paid	Early Retirement Percentage
65 or after	100%
60	85%
55	70%
50	55%
45	40%
40	25%
35	20%
30	15%
25	10%

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Postponed retirement

The monthly pension benefit determined as of the actual retirement date. If employees work beyond age 65 and do not begin receiving an annuity while still actively employed, benefits will be increased at the late retirement date to reflect a shorter life expectancy. Benefits will be increased according to the following table (selected ages illustrated):

Age at Commencement	Actuarial Increase of Late Retirement Annuity
66	1.0212
67	1.0441
68	1.0687
69	1.0951
70	1.1236

Vested termination

The monthly pension benefit determined as of the termination date, actuarially reduced if payment precedes the participant's NRD

Disablement

The monthly pension benefit determined as of the date of the disablement, payable 6 months after retiring due to disability, without reduction for early commencement but reduced by any worker's compensation sponsored by the employer. Payments will stop after the earliest of (a) an employee's death, (b) Normal Retirement, or (c) the date on which the participant is no longer permanently and totally disabled.

Preretirement death

The monthly preretirement death benefit payable within a reasonable time after the plan administrator receives an application for the benefit and proof of death

Other Plan Provisions

Forms of payment

Benefits are normally payable monthly with payments ceasing at the retired employee's death (except if a death benefit is applicable). However, employees may choose other methods of payment which will provide a continuation of monthly payments to their beneficiaries.

Optional forms of payment include:

- Life Annuity (normal form for unmarried participants)
- 50% Joint and Survivor (normal form for married participants)
- 66 2/3%, 75%, 100% Joint and Survivor
- Ten-Year, Five-Year Certain and Continuous
- Lump Sum

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

If no election to the contrary is made by a married employee, the joint and 50% survivor option will be effective. Election to the contrary requires witnessed or notarized spousal consent.

The lump sum payable at normal retirement date is equal to the greater of:

- a. \$380 plus 11% of average annual earnings in excess of \$6,600 times credited service as of December 31, 2016 subject to a maximum of 30 years PLUS for each calendar year of employment after December 31, 2016 during which the participant earns Benefit Service, 11% of their earnings for that calendar year or
- b. the lump sum value of the participant's accrued benefit.

Optional forms are determined on an actuarial equivalent basis using 1983 Group Annuity Table set back 4 years with Projection H, with mortality rates based on calendar year of birth of 1930, and an interest rate of 7.0%. Lump sums are determined based upon Code Section 417(e)(3).

Pension Increases None

Plan participants' contributions None

Maximum on benefits and pay All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are assumed for determining pension cost but not for determining contributions.

Future Plan Changes

No future plan changes were recognized in determining pension cost or in determining minimum and maximum contributions. WTW is not aware of any future plan changes that are required to be reflected.

Changes in Benefits Valued Since Prior Year

None.

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Former Marlborough Hospital Retirement Plan

Plan Provisions

The plan was originally effective January 1, 1971. The most recent amendment reflected in the following plan provisions is effective October 1, 2021.

Covered employees	Employees of the Hospital
Participation date	Covered employees are eligible for participation in the Plan on the April 1 or October 1 following the completion of a 12-month, 1,000-hour year of service. Employees must have been eligible as of October 1, 2004. Employees participating in the plan on October 1, 2004 and October 1, 2005 were given an opportunity to elect to freeze benefits on that date and transfer participation to a defined contribution plan.

Definitions

Vesting service	One year for each 1,000-hour plan year of employment by Marlborough Hospital.
Pension service	One year for each 1,000-hour plan year of employment by Marlborough Hospital.
Pensionable pay	W-2 earnings including deferrals to a 401(k) or section 125 plan.
Average earnings	The average of the highest five consecutive calendar years of pensionable pay during the ten-year period ending on the earlier of the participant's termination date or retirement date.
Social Security benefit	Not applicable.
Normal retirement date (NRD)	First of month coinciding with or next following the attainment of age 65 with five years of pension service.

Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Monthly pension benefit	One-twelfth of 1/2% of average earnings up to \$7,800 multiplied by pension benefit service, plus 1% of the excess of average earnings over \$7,800, multiplied by pension service subject to a maximum of 35 years. For employees who elected as of October 1, 2004 to freeze their benefits, no further changes in average earnings or pension service is permitted.
Monthly preretirement death benefit	Same as early retirement or normal retirement, as applicable, assuming the employee had retired on the first day of the month of his death and elected the joint and 100% survivor option.

Eligibility for Benefits

Normal retirement	Retirement on NRD
Early retirement	Employees with 5 or more years of service may retire any time after age 62, while employees with 10 or more years of service may retire any time after age 60.
Postponed retirement	Retirement after NRD
Deferred vested termination	Termination for reasons other than death or retirement after completing five years of vesting service.
Disability	Employees with 15 or more years of service who are totally and permanently disabled are eligible for a disability retirement benefit. An employee will be considered totally and permanently disabled when they are eligible for and in receipt of Social Security disability benefits.
Preretirement death benefit	Employees or terminated vested participants who are married and who die after having completed 5 or more years of service.

Benefits Paid Upon the Following Events

Normal retirement	The monthly pension benefit determined as of NRD.
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Plan Name:	UMass Memorial Health Care Pension Plan
EIN / PN:	04-3358566 / 005
Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Early retirement

The monthly pension benefit determined as of the early retirement date, reduced by 5/9 of 1% for each complete calendar month that the employee's early retirement date precedes his normal retirement date. If an employee retires after age 60 but before age 62 with 15 years of service, the reduction is the same as if the employee were retiring at exact age 62.

Postponed retirement

The amount of benefit shall be the greater of:

- i) the actuarial equivalent of his or her normal retirement benefit and
- ii) the accrued benefit determined as of his or her late retirement date

Deferred vested termination

The monthly pension benefit determined as of the termination date, payable at the participant's NRD.

Disablement

The monthly pension benefit determined as of the date of disablement, reduced by any workers' compensation or any Hospital-paid monthly or weekly sickness and accident benefits. Payments will commence the first day of the month during which the employee becomes eligible for and begins receiving Social Security disability benefits and submits the proper application. Payments shall be retroactive to the extent that Social Security payments are retroactive.

Preretirement death

The monthly preretirement death benefit, payable the first day of the month of the employee's death or early retirement date, if later.

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Other Plan Provisions

Forms of payment

Preretirement death benefits are payable only as described above. Monthly pension benefits are paid as described above as a life annuity, if the participant has no spouse as of the date payments begin, or if the participant so elects. Otherwise, benefits are paid in the form of 100% joint and survivor annuity option or, if the participant elects and the spouse consents, another actuarially equivalent optional form offered by the plan. Optional forms are a 66-2/3% joint and survivor annuity, 50% joint and survivor annuity, a ten-year certain and life annuity, a life annuity (for married participants), or a lump sum (if eligible for early retirement).

Optional forms are determined on an actuarial equivalent basis using UP-1984 Mortality Table, with a 3-year setback for the participant, no setback for beneficiary and an interest rate of 8.0%. Lump sums are determined based upon Code Section 417(e)(3).

Pension Increases

None

Plan participants' contributions

None

Limits on benefits and pay

All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are assumed for determining pension cost, but not for determining contributions.

Future Plan Changes

No future plan changes were recognized in determining pension cost or in determining minimum and maximum contributions. WTW is not aware of any future plan changes.

Changes in Benefits Valued Since Prior Year

None

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26a Schedule of Active Participant Data as of October 1, 2023

Attained Age	Attained Years of Credited Service ²										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	0	111	5	0	0	0	0	0	0	0	116
	-	37,557	-	-	-	-	-	-	-	-	37,382
25-29	0	480	133	2	0	0	0	0	0	0	615
	-	59,385	60,096	-	-	-	-	-	-	-	59,467
30-34	0	440	375	102	2	0	0	0	0	0	919
	-	66,630	76,025	71,594	-	-	-	-	-	-	71,010
35-39	0	353	353	177	117	5	0	0	0	0	1,005
	-	66,936	83,467	85,032	76,780	-	-	-	-	-	77,037
40-44	0	257	263	150	192	104	9	0	0	0	975
	-	66,535	81,825	86,381	93,103	99,466	-	-	-	-	82,502
45-49	0	227	234	137	177	148	33	4	0	0	960
	-	72,258	82,729	90,264	98,357	95,607	104,652	-	-	-	86,935
50-54	0	233	233	126	190	166	75	32	2	0	1,057
	-	70,427	86,422	92,194	96,346	100,854	107,668	95,921	-	-	89,429
55-59	0	220	229	131	187	196	111	85	50	2	1,211
	-	82,867	90,001	93,946	92,337	108,860	118,485	116,964	111,210	-	97,976
60-64	0	122	183	127	145	190	142	64	57	44	1,074
	-	73,833	85,230	89,456	87,913	90,195	117,703	100,746	105,333	100,563	92,589
65-69	0	42	65	41	58	53	56	23	10	18	366
	-	95,823	77,987	89,116	88,069	90,482	111,432	123,247	-	-	94,822
70 & over	0	19	15	7	13	9	12	2	2	2	81
	-	-	-	-	-	-	-	-	-	-	92,315
Total	0	2,504	2,088	1,000	1,081	871	438	210	121	66	8,379
	-	67,138	81,266	87,345	91,304	98,015	115,082	108,525	107,093	104,832	83,815

² Age and service for purposes of determining category are based on exact (not rounded) values.

Plan Name: UMass Memorial Health Care Pension Plan

EIN / PN: 04-3358566 / 005

Plan Sponsor: UMass Memorial Health Care, Inc.

Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26b

Schedule of Projection of Expected Benefit Payments

Plan Year	Active Participants	Terminated Vested Participants	Retired Participants and Beneficiaries Receiving Payments	Total
2023	4,603,620	1,844,257	27,838,329	34,286,206
2024	12,171,820	4,012,685	27,548,165	43,732,670
2025	17,928,155	4,830,798	27,188,807	49,947,760
2026	23,232,407	5,609,021	26,778,130	55,619,558
2027	28,235,799	6,275,500	26,368,905	60,880,204
2028	32,976,124	6,894,372	25,909,796	65,780,292
2029	37,259,463	7,526,102	25,382,793	70,168,358
2030	41,025,057	8,072,199	24,806,497	73,903,753
2031	44,313,152	8,454,500	24,184,990	76,952,642
2032	47,196,063	8,852,159	23,496,058	79,544,280
2033	49,607,750	9,232,201	22,743,952	81,583,903
2034	51,616,717	9,547,924	21,955,458	83,120,099
2035	53,383,967	9,866,350	21,100,332	84,350,649
2036	54,922,186	10,129,525	20,178,850	85,230,561
2037	56,240,379	10,271,787	19,192,896	85,705,062
2038	57,358,939	10,377,179	18,146,091	85,882,209
2039	58,223,563	10,466,904	17,044,039	85,734,506
2040	58,858,512	10,595,120	15,894,474	85,348,106
2041	59,265,659	10,753,264	14,707,324	84,726,247
2042	59,488,931	10,846,491	13,494,613	83,830,035
2043	59,588,786	10,881,672	12,270,132	82,740,590
2044	59,484,549	10,859,634	11,049,070	81,393,253
2045	59,185,052	10,827,386	9,847,603	79,860,041
2046	58,655,559	10,772,878	8,682,185	78,110,622
2047	57,832,899	10,682,810	7,568,795	76,084,504
2048	56,789,500	10,572,860	6,522,205	73,884,565
2049	55,494,232	10,455,086	5,555,048	71,504,366
2050	53,935,735	10,321,553	4,677,098	68,934,386
2051	52,253,311	10,150,337	3,894,591	66,298,239
2052	50,486,250	9,962,438	3,209,923	63,658,611
2053	48,567,097	9,741,775	2,621,860	60,930,732
2054	46,490,579	9,475,367	2,126,035	58,091,981
2055	44,301,921	9,175,158	1,715,640	55,192,719
2056	42,089,563	8,885,978	1,382,056	52,357,597
2057	39,871,209	8,611,617	1,115,535	49,598,361
2058	37,609,866	8,274,528	905,893	46,790,287
2059	35,327,169	7,884,492	743,133	43,954,794
2060	33,047,876	7,480,286	617,945	41,146,107
2061	30,828,343	7,073,760	522,054	38,424,157
2062	28,673,786	6,668,900	448,419	35,791,105
2063	26,580,472	6,270,351	391,286	33,242,109
2064	24,561,286	5,884,155	346,120	30,791,561
2065	22,632,545	5,510,509	309,485	28,452,539
2066	20,804,224	5,149,516	278,857	26,232,597
2067	19,075,124	4,801,183	252,453	24,128,760

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

2068	17,441,537	4,464,561	229,057	22,135,155
2069	15,899,855	4,138,919	207,866	20,246,640
2070	14,446,719	3,823,763	188,366	18,458,848
2071	13,078,625	3,518,832	170,236	16,767,693
2072	11,792,689	3,224,094	153,280	15,170,063

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 32
Schedule of Amortization Bases
as of October 1, 2023

Type of Base	Date Established	Initial Amount	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
Shortfall	10/01/2023	44,457,342	15.00000	44,457,342	4,071,435
Shortfall	10/01/2022	87,980,809	14.00000	84,672,454	8,130,434
Shortfall	10/01/2021	36,769,703	13.00000	33,886,742	3,428,465
Shortfall	10/01/2020	(14,254,101)	12.00000	(12,482,178)	(1,338,270)
Shortfall	01/01/2020	(5,347,778)	11.25000	(4,394,910)	(494,444)
Shortfall	01/01/2019	50,138,294	10.25000	38,392,647	4,635,679
Total				184,532,097	18,433,299

Plan Name: UMass Memorial Health Care Pension Plan
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Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26b

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2058	37,609,866	8,274,528	905,893	46,790,287
2059	35,327,169	7,884,492	743,133	43,954,794
2060	33,047,876	7,480,286	617,945	41,146,107
2061	30,828,343	7,073,760	522,054	38,424,157
2062	28,673,786	6,668,900	448,419	35,791,105
2063	26,580,472	6,270,351	391,286	33,242,109
2064	24,561,286	5,884,155	346,120	30,791,561
2065	22,632,545	5,510,509	309,485	28,452,539
2066	20,804,224	5,149,516	278,857	26,232,597
2067	19,075,124	4,801,183	252,453	24,128,760

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

2068	17,441,537	4,464,561	229,057	22,135,155
2069	15,899,855	4,138,919	207,866	20,246,640
2070	14,446,719	3,823,763	188,366	18,458,848
2071	13,078,625	3,518,832	170,236	16,767,693
2072	11,792,689	3,224,094	153,280	15,170,063

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	UMass Memorial Health Care, Inc.
EIN/PN	04-3358566 / 005
Plan Name	UMass Memorial Health Care Pension Plan
Valuation Date	October 1, 2023
Enrolled Actuary	Eric Geissler
Enrollment Number	23-07911

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 22 Description of Weighted Average Retirement Age as of October 1, 2023

See Schedule SB, Part V - Statement of Actuarial Assumptions/Methods for retirement rates. The average retirement age for Line 22 was calculated by creating a hypothetical life table with retirement as the only decrement, and then computing the average retirement age for the table.

x	q_x^r	l_x	${}_{x-55}p_{55} = l_x / l_{55}$	$q_x^r * l_x / l_{55}$	$x * q_x^r * l_x / l_{55}$
55	0.05	1,000	1.000000	0.050000	2.750000
56	0.05	950	0.950000	0.047500	2.660000
57	0.05	903	0.902500	0.045125	2.572125
58	0.05	857	0.857375	0.042869	2.486388
59	0.05	815	0.814506	0.040725	2.402793
60	0.05	774	0.773781	0.038689	2.321343
61	0.05	735	0.735092	0.036755	2.242030
62	0.10	698	0.698337	0.069834	4.329691
63	0.10	629	0.628504	0.062850	3.959572
64	0.10	566	0.565653	0.056565	3.620181
65	0.45	509	0.509088	0.229090	14.890821
66	0.45	280	0.279998	0.125999	8.315951
67	0.30	154	0.153999	0.046200	3.095382
68	0.30	108	0.107799	0.032340	2.199107
69	0.30	75	0.075460	0.022638	1.562013
70	1.00	53	0.052822	0.052822	3.697518
Average age at retirement					63.104914
Rounded for Schedule SB item 22					63

Plan Name: UMass Memorial Health Care Pension Plan
 EIN / PN: 04-3358566/005
 Plan Sponsor: UMass Memorial Health Care, Inc.
 Valuation Date: October 1, 2023

Plan Name	UMass Memorial Health Care Pension Plan
Plan Sponsor EIN	04-3358566
ERISA Plan #	005
Plan Year Ending	September 30, 2024

The required attachment marked with an “X” in the Attachment column is included within the Accountant’s Opinion attachment to Sch. H, Part III, Line 3, which consists of the entire audit report issued by the plan’s Independent Qualified Public Accountant (IQPA).

Form/Schedule	Line #	Description	Attachment
5500 Sch. H	Line 3	Financial statements used in formulating the IQPA's opinion	X
5500 Sch. H	Line 4i	Schedule of Assets (Held at End of Year)	X
5500 Sch. H	Line 4i	Schedule of Assets (Acquired and Disposed of Within Year)	X
5500 Sch. H	Line 4j	Schedule of Reportable Transactions	X
5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	

SCHEDULE SB ATTACHMENTS

Summary of Plan Provisions

UMass Memorial Health Care Pension Plan

Plan Provisions

The plan was originally effective October 1, 1969. The plan was amended and restated effective January 1, 2017. The plan was amended in 2017, 2018, 2019, 2020 and 2021 (including the plan merger with the Marlborough Hospital Retirement Plan effective December 1, 2019). These changes are reflected in the results contained in this report. The provisions were amended via Board Resolution for the non-union active participants, and through union contracts for the active participants covered by collective bargaining agreements. The most recent amendment reflected in the following plan provisions is effective October 1, 2021.

Covered employees Employees are eligible for participation in the plan on the first day of the month coincident with or next following the completion of a 12-month, 1,000-hour year of service.

Physicians and clinical PhD staff members who waived accrual of future benefits in the pension plan or were hired after January 1, 2000 are participating and accruing benefits in another retirement program sponsored by the Hospital.

Employees who elect to be covered under the enhanced employer Matching Contribution under the UMass Memorial Health Care 401(k) Plan are not eligible for participation in this plan.

Definitions

Vesting service In general, a year of vesting service is earned for each plan year in which a participant completes at least 1,000 hours of service as an eligible employee

Pension service In general, a year of credited service is earned for each plan year in which a participant completes at least 1,000 hours of service as an eligible employee

Final average compensation/salary The greater of the total of the participant's compensation for the high five consecutive Plan Years divided by five or the average of the last 60 consecutive months immediately preceding the participant's termination of employment.

Normal retirement date (NRD) First of month coinciding with or next following the attainment of age 65

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Valuation Date: October 1, 2023

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Monthly pension benefit

For years of service before January 1, 2017, the annuity benefit formula is \$3.60 plus 1.25% of average monthly earnings in excess of \$550 multiplied by credited service before 2017 subject to a maximum of 30 years. Average monthly earnings are calculated as greater of 1) the average of the highest consecutive five years of total earnings before the date of determination and 2) the average of the final 60 months of earnings immediately preceding the date of determination. Average monthly earnings are frozen as of December 31, 2016.

For years of service after December 31, 2016, the annuity benefit formula is 1.25% of monthly earnings.

For the physicians and clinical PhD staff members described above who elected to waive future benefit accruals in the pension plan, the annuity benefit is offset by the annuitized value of their profit sharing balances from another retirement program sponsored by the Hospital.

Monthly preretirement death benefit

The beneficiary may receive a lump sum payment equal to 55% of the benefit the participant would have received had he elected to retire on the day of his death and chosen the lump sum option. If the participant is married on the date of death, the spouse will receive the greater of 55% of the lump sum benefit or the lump sum value of the 50% survivor annuity the spouse would have received had the participant retired on the day before his death, selected the 50% joint and survivor annuity and then died. The spouse may choose to take this lump sum pre-retirement death benefit as a life annuity instead.

Eligibility for Benefits

Normal retirement

Retirement on NRD

Early retirement

Retirement before NRD

Postponed retirement

Retirement after NRD

Vested termination

Termination for reasons other than death or retirement after completing three years of vesting service (5 years for certain collectively bargained employees)

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Disability Permanent and total disability prior to NRD after attaining age 50 and 10 or more years of vesting service, and participant is receiving a Social Security disability benefit

Preretirement death benefit Death while eligible for normal, early, postponed, or deferred vested retirement benefits, with a surviving spouse

Benefits Paid Upon the Following Events

Normal retirement The monthly pension benefit determined as of NRD

Early retirement The monthly pension benefit determined as of the early retirement date, reduced in conjunction with the table set forth below for each year that the employee's early retirement date precedes his NRD:

Number of Years by which ERD Precedes NRD	Early Retirement Percentage
0	100%
1	93%
2	86%
3	80%
4	75%
5	70%
6	66%
7	62%
8	58%
9	54%
10	51%

Larger reductions apply for earlier retirement ages.

If a participant chooses the lump sum optional form of benefit before age 65, the lump sum will be at least equal to the lump sum payable at age 65, reduced according to the following table (selected ages illustrated):

Age When Benefit is Paid	Early Retirement Percentage
65 or after	100%
60	85%
55	70%
50	55%
45	40%
40	25%
35	20%
30	15%
25	10%

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Postponed retirement

The monthly pension benefit determined as of the actual retirement date. If employees work beyond age 65 and do not begin receiving an annuity while still actively employed, benefits will be increased at the late retirement date to reflect a shorter life expectancy. Benefits will be increased according to the following table (selected ages illustrated):

Age at Commencement	Actuarial Increase of Late Retirement Annuity
66	1.0212
67	1.0441
68	1.0687
69	1.0951
70	1.1236

Vested termination

The monthly pension benefit determined as of the termination date, actuarially reduced if payment precedes the participant's NRD

Disablement

The monthly pension benefit determined as of the date of the disablement, payable 6 months after retiring due to disability, without reduction for early commencement but reduced by any worker's compensation sponsored by the employer. Payments will stop after the earliest of (a) an employee's death, (b) Normal Retirement, or (c) the date on which the participant is no longer permanently and totally disabled.

Preretirement death

The monthly preretirement death benefit payable within a reasonable time after the plan administrator receives an application for the benefit and proof of death

Other Plan Provisions

Forms of payment

Benefits are normally payable monthly with payments ceasing at the retired employee's death (except if a death benefit is applicable). However, employees may choose other methods of payment which will provide a continuation of monthly payments to their beneficiaries.

Optional forms of payment include:

- Life Annuity (normal form for unmarried participants)
- 50% Joint and Survivor (normal form for married participants)
- 66 2/3%, 75%, 100% Joint and Survivor
- Ten-Year, Five-Year Certain and Continuous
- Lump Sum

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If no election to the contrary is made by a married employee, the joint and 50% survivor option will be effective. Election to the contrary requires witnessed or notarized spousal consent.

The lump sum payable at normal retirement date is equal to the greater of:

- a. \$380 plus 11% of average annual earnings in excess of \$6,600 times credited service as of December 31, 2016 subject to a maximum of 30 years PLUS for each calendar year of employment after December 31, 2016 during which the participant earns Benefit Service, 11% of their earnings for that calendar year or
- b. the lump sum value of the participant's accrued benefit.

Optional forms are determined on an actuarial equivalent basis using 1983 Group Annuity Table set back 4 years with Projection H, with mortality rates based on calendar year of birth of 1930, and an interest rate of 7.0%. Lump sums are determined based upon Code Section 417(e)(3).

Pension Increases None

Plan participants' contributions None

Maximum on benefits and pay All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are assumed for determining pension cost but not for determining contributions.

Future Plan Changes

No future plan changes were recognized in determining pension cost or in determining minimum and maximum contributions. WTW is not aware of any future plan changes that are required to be reflected.

Changes in Benefits Valued Since Prior Year

None.

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Former Marlborough Hospital Retirement Plan

Plan Provisions

The plan was originally effective January 1, 1971. The most recent amendment reflected in the following plan provisions is effective October 1, 2021.

Covered employees	Employees of the Hospital
Participation date	Covered employees are eligible for participation in the Plan on the April 1 or October 1 following the completion of a 12-month, 1,000-hour year of service. Employees must have been eligible as of October 1, 2004. Employees participating in the plan on October 1, 2004 and October 1, 2005 were given an opportunity to elect to freeze benefits on that date and transfer participation to a defined contribution plan.

Definitions

Vesting service	One year for each 1,000-hour plan year of employment by Marlborough Hospital.
Pension service	One year for each 1,000-hour plan year of employment by Marlborough Hospital.
Pensionable pay	W-2 earnings including deferrals to a 401(k) or section 125 plan.
Average earnings	The average of the highest five consecutive calendar years of pensionable pay during the ten-year period ending on the earlier of the participant's termination date or retirement date.
Social Security benefit	Not applicable.
Normal retirement date (NRD)	First of month coinciding with or next following the attainment of age 65 with five years of pension service.

Plan Name:	UMass Memorial Health Care Pension Plan
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Plan Sponsor:	UMass Memorial Health Care, Inc.
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Monthly pension benefit	One-twelfth of 1/2% of average earnings up to \$7,800 multiplied by pension benefit service, plus 1% of the excess of average earnings over \$7,800, multiplied by pension service subject to a maximum of 35 years. For employees who elected as of October 1, 2004 to freeze their benefits, no further changes in average earnings or pension service is permitted.
Monthly preretirement death benefit	Same as early retirement or normal retirement, as applicable, assuming the employee had retired on the first day of the month of his death and elected the joint and 100% survivor option.

Eligibility for Benefits

Normal retirement	Retirement on NRD
Early retirement	Employees with 5 or more years of service may retire any time after age 62, while employees with 10 or more years of service may retire any time after age 60.
Postponed retirement	Retirement after NRD
Deferred vested termination	Termination for reasons other than death or retirement after completing five years of vesting service.
Disability	Employees with 15 or more years of service who are totally and permanently disabled are eligible for a disability retirement benefit. An employee will be considered totally and permanently disabled when they are eligible for and in receipt of Social Security disability benefits.
Preretirement death benefit	Employees or terminated vested participants who are married and who die after having completed 5 or more years of service.

Benefits Paid Upon the Following Events

Normal retirement	The monthly pension benefit determined as of NRD.
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Plan Name:	UMass Memorial Health Care Pension Plan
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Plan Sponsor:	UMass Memorial Health Care, Inc.
Valuation Date:	October 1, 2023

SCHEDULE SB ATTACHMENTS

Early retirement

The monthly pension benefit determined as of the early retirement date, reduced by 5/9 of 1% for each complete calendar month that the employee's early retirement date precedes his normal retirement date. If an employee retires after age 60 but before age 62 with 15 years of service, the reduction is the same as if the employee were retiring at exact age 62.

Postponed retirement

The amount of benefit shall be the greater of:

- i) the actuarial equivalent of his or her normal retirement benefit and
- ii) the accrued benefit determined as of his or her late retirement date

Deferred vested termination

The monthly pension benefit determined as of the termination date, payable at the participant's NRD.

Disablement

The monthly pension benefit determined as of the date of disablement, reduced by any workers' compensation or any Hospital-paid monthly or weekly sickness and accident benefits. Payments will commence the first day of the month during which the employee becomes eligible for and begins receiving Social Security disability benefits and submits the proper application. Payments shall be retroactive to the extent that Social Security payments are retroactive.

Preretirement death

The monthly preretirement death benefit, payable the first day of the month of the employee's death or early retirement date, if later.

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Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Other Plan Provisions

Forms of payment

Preretirement death benefits are payable only as described above. Monthly pension benefits are paid as described above as a life annuity, if the participant has no spouse as of the date payments begin, or if the participant so elects. Otherwise, benefits are paid in the form of 100% joint and survivor annuity option or, if the participant elects and the spouse consents, another actuarially equivalent optional form offered by the plan. Optional forms are a 66-2/3% joint and survivor annuity, 50% joint and survivor annuity, a ten-year certain and life annuity, a life annuity (for married participants), or a lump sum (if eligible for early retirement).

Optional forms are determined on an actuarial equivalent basis using UP-1984 Mortality Table, with a 3-year setback for the participant, no setback for beneficiary and an interest rate of 8.0%. Lump sums are determined based upon Code Section 417(e)(3).

Pension Increases

None

Plan participants' contributions

None

Limits on benefits and pay

All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are assumed for determining pension cost, but not for determining contributions.

Future Plan Changes

No future plan changes were recognized in determining pension cost or in determining minimum and maximum contributions. WTW is not aware of any future plan changes.

Changes in Benefits Valued Since Prior Year

None

Plan Name: UMass Memorial Health Care Pension Plan
EIN / PN: 04-3358566 / 005
Plan Sponsor: UMass Memorial Health Care, Inc.
Valuation Date: October 1, 2023

Plan Name	UMass Memorial Health Care Pension Plan
Plan Sponsor EIN	04-3358566
ERISA Plan #	005
Plan Year Ending	September 30, 2024

The required attachment marked with an “X” in the Attachment column is included within the Accountant’s Opinion attachment to Sch. H, Part III, Line 3, which consists of the entire audit report issued by the plan’s Independent Qualified Public Accountant (IQPA).

Form/Schedule	Line #	Description	Attachment
5500 Sch. H	Line 3	Financial statements used in formulating the IQPA's opinion	X
5500 Sch. H	Line 4i	Schedule of Assets (Held at End of Year)	X
5500 Sch. H	Line 4i	Schedule of Assets (Acquired and Disposed of Within Year)	X
5500 Sch. H	Line 4j	Schedule of Reportable Transactions	X
5500 Sch. H	Line 4a	Schedule of Delinquent Participant Contributions	

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 32
Schedule of Amortization Bases
as of October 1, 2023

Type of Base	Date Established	Initial Amount	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
Shortfall	10/01/2023	44,457,342	15.00000	44,457,342	4,071,435
Shortfall	10/01/2022	87,980,809	14.00000	84,672,454	8,130,434
Shortfall	10/01/2021	36,769,703	13.00000	33,886,742	3,428,465
Shortfall	10/01/2020	(14,254,101)	12.00000	(12,482,178)	(1,338,270)
Shortfall	01/01/2020	(5,347,778)	11.25000	(4,394,910)	(494,444)
Shortfall	01/01/2019	50,138,294	10.25000	38,392,647	4,635,679
Total				184,532,097	18,433,299

Plan Name: UMass Memorial Health Care Pension Plan
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Valuation Date: October 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 24 Change in Actuarial Assumptions

The salary scale assumption was updated to reflect an additional 4% on top of the current age-graded scale for the current year.

Plan Name: UMass Memorial Health Care Pension Plan
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Valuation Date: October 1, 2023