

Form 5500

Annual Return/Report of Employee Benefit Plan

OMB Nos. 1210-0110 1210-0089

2023

This Form is Open to Public Inspection

Department of the Treasury Internal Revenue Service

Department of Labor Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

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.

Part I Annual Report Identification Information

For calendar plan year 2023 or fiscal plan year beginning 07/01/2023 and ending 06/30/2024

- A This return/report is for: [] a multiemployer plan [] a multiple-employer plan... [X] a single-employer plan [] a DFE... B This return/report is: [] the first return/report [] the final return/report... C If the plan is a collectively-bargained plan, check here... [X] D Check box if filing under: [X] Form 5558 [] automatic extension [] the DFVC program... 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: RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA
1b Three-digit plan number (PN): 003
1c Effective date of plan: 01/01/1948
2a Plan sponsor's name (employer, if for a single-employer plan): TRUSTEES OF THE UNIVERSITY OF PA
2b Employer Identification Number (EIN): 23-1352685
2c Plan Sponsor's telephone number: 215-898-9947
2d Business code (see instructions): 611000

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.

Table with 4 columns: SIGN HERE, Signature of plan administrator, Date, Enter name of individual signing as plan administrator. Includes entries for MATTHEW V. PRIMUS dated 04/15/2025.

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2023) v. 230707

3a Plan administrator's name and address <input checked="" type="checkbox"/> 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	4309
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)	959
	6a(2)	894
	6b	2129
	6c	960
	6d	3983
	6e	274
	6f	4257
	6g(1)	
6g(2)		
6h		3
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)	9b Plan benefit arrangement (check all that apply)
(1) <input type="checkbox"/> Insurance	(1) <input type="checkbox"/> Insurance
(2) <input type="checkbox"/> Code section 412(e)(3) insurance contracts	(2) <input type="checkbox"/> Code section 412(e)(3) insurance contracts
(3) <input checked="" type="checkbox"/> Trust	(3) <input checked="" type="checkbox"/> Trust
(4) <input type="checkbox"/> General assets of the sponsor	(4) <input type="checkbox"/> General assets of the sponsor

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) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection
---	--	--

For calendar plan year 2023 or fiscal plan year beginning 07/01/2023 and ending 06/30/2024

▶ **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 <u>RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA</u>	B Three-digit plan number (PN) ▶	<u>003</u>
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>TRUSTEES OF THE UNIVERSITY OF PA</u>	D Employer Identification Number (EIN) <u>23-1352685</u>	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input checked="" type="checkbox"/> More than 500	

Part I Basic Information			
1 Enter the valuation date:	Month <u>07</u>	Day <u>01</u>	Year <u>2023</u>
2 Assets:			
a Market value	2a	<u>207892446</u>	
b Actuarial value	2b	<u>207892446</u>	
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	<u>2325</u>	<u>121186751</u>	<u>121186751</u>
b For terminated vested participants	<u>1795</u>	<u>47709024</u>	<u>47709024</u>
c For active participants	<u>189</u>	<u>26057111</u>	<u>26127198</u>
d Total	<u>4309</u>	<u>194952886</u>	<u>195022973</u>
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)	<input type="checkbox"/>		
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	<u>5.22 %</u>	
6 Target normal cost			
a Present value of current plan year accruals	6a	<u>1552618</u>	
b Expected plan-related expenses	6b	<u>713000</u>	
c Target normal cost	6c	<u>2265618</u>	

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 <u>J. STEVEN PAK</u> Type or print name of actuary <u>WILLIS TOWERS WATSON US LLC</u> Firm name <u>1900 MARKET STREET</u> <u>FLOOR 8</u> <u>PHILADELPHIA, PA 19103-3527</u> Address of the firm	<u>03/11/2025</u> Date <u>23-05793</u> Most recent enrollment number <u>215-246-6000</u> Telephone number (including area code)
--	--

Part II Beginning of Year Carryover and Prefunding Balances		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	24608818
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	24608818
10	Interest on line 9 using prior year's actual return of <u>-1.45</u> %	0	-356828
11	Prior year's excess contributions to be added to prefunding balance:		
a	Present value of excess contributions (line 38a from prior year)		0
b(1)	Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.39</u> %		0
b(2)	Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c	Total available at beginning of current plan year to add to prefunding balance		0
d	Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d - line 12)	0	24251990

Part III Funding Percentages			
14	Funding target attainment percentage	14	94.16 %
15	Adjusted funding target attainment percentage	15	106.59 %
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	103.58 %
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		
Totals ▶			18(b)	0	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 0
20	Quarterly contributions and liquidity shortfalls:	
a	Did the plan have a "funding shortfall" for the prior year?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b	If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	<input type="checkbox"/> Yes <input type="checkbox"/> No
c	If line 20a is "Yes," see instructions and complete the following table as applicable:	
Liquidity shortfall as of end of quarter of this plan year		
(1) 1st	(2) 2nd	(3) 3rd
(4) 4th		

Part V Assumptions Used to Determine Funding Target and Target Normal Cost				
21	Discount rate:			
a	Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %
		<input type="checkbox"/> N/A, full yield curve used		
b	Applicable month (enter code).....	21b	0	
22	Weighted average retirement age	22	62	
23	Mortality table(s) (see instructions)	<input type="checkbox"/> Prescribed - combined	<input checked="" type="checkbox"/> Prescribed - separate	<input type="checkbox"/> 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..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
25	Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
b	Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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	2265618	
b	Excess assets, if applicable, but not greater than line 31a	31b	0	
32	Amortization installments:	Outstanding Balance	Installment	
a	Net shortfall amortization installment	11382517	1042419	
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	3308037	
35	Balances elected for use to offset funding requirement	Carryover balance	Prefunding balance	Total balance
		0	3308037	3308037
36	Additional cash requirement (line 34 minus line 35).....	36	0	
37	Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	0	
38	Present value of excess contributions for current year (see instructions)			
a	Total (excess, if any, of line 37 over line 36)	38a	0	
b	Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0	
39	Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40	Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under 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. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input checked="" type="checkbox"/> 2021			

SCHEDULE C (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection.
--	--	---

For calendar plan year 2023 or fiscal plan year beginning **07/01/2023** and ending **06/30/2024**

A Name of plan RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA	B Three-digit plan number (PN) ▶	003
C Plan sponsor's name as shown on line 2a of Form 5500 TRUSTEES OF THE UNIVERSITY OF PA	D Employer Identification Number (EIN) 23-1352685	

Part I Service Provider Information (see instructions)

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

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

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

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

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

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

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

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

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

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

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

(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)

TIAA

13-1624203

(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?
12 38	NONE	89000	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	0	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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

(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?
			Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes <input type="checkbox"/> No <input type="checkbox"/>

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

(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?
			Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes <input type="checkbox"/> No <input type="checkbox"/>

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) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small>	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.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection.
---	--	---

For calendar plan year 2023 or fiscal plan year beginning 07/01/2023 and ending 06/30/2024

A Name of plan <u>RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA</u>	B Three-digit plan number (PN)	<u>003</u>
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>TRUSTEES OF THE UNIVERSITY OF PA</u>	D Employer Identification Number (EIN) <u>23-1352685</u>	

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)
---------------	--

a Name of MTIA, CCT, PSA, or 103-12 IE:	<u>UPENN RAP TRADING POOL</u>		
b Name of sponsor of entity listed in (a):	<u>TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA</u>		
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)	
<u>04-3574136-047</u>	<u>M</u>		<u>0</u>
a Name of MTIA, CCT, PSA, or 103-12 IE:	<u>U OF PA FIXED INCOME POOL</u>		
b Name of sponsor of entity listed in (a):	<u>TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA</u>		
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)	
<u>04-3574136-032</u>	<u>M</u>		<u>63959045</u>
a Name of MTIA, CCT, PSA, or 103-12 IE:	<u>UPENN CASH POOL</u>		
b Name of sponsor of entity listed in (a):	<u>TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA</u>		
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)	
<u>04-3574136-037</u>	<u>M</u>		<u>0</u>
a Name of MTIA, CCT, PSA, or 103-12 IE:	<u>UPENN RAP POOL</u>		
b Name of sponsor of entity listed in (a):	<u>TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA</u>		
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)	
<u>04-3574136-050</u>	<u>M</u>		<u>131211227</u>
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)	
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)	
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)	

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)

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)

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)

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)

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)

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)

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)

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)

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)

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)

SCHEDULE H (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection
--	--	--

For calendar plan year 2023 or fiscal plan year beginning **07/01/2023** and ending **06/30/2024**

A Name of plan RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA	B Three-digit plan number (PN)	003
C Plan sponsor's name as shown on line 2a of Form 5500 TRUSTEES OF THE UNIVERSITY OF PA	D Employer Identification Number (EIN) 23-1352685	

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.

		(a) Beginning of Year	(b) End of Year
Assets			
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(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)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)	207892446	195170272
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)		
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

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	207892446	195170272
Liabilities			
g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j	12190	5248
k Total liabilities (add all amounts in lines 1g through 1j)	1k	12190	5248
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	207880256	195165024

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)		
(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)		0
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)		
(F) Other	2b(1)(F)		
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		0
(2) Dividends:			
(A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)		
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		0
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets:			
(A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		0
(5) Unrealized appreciation (depreciation) of assets:			
(A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts.....	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts.....	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts.....	2b(8)		552860
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds).....	2b(10)		
c Other income.....	2c		
d Total income. Add all income amounts in column (b) and enter total.....	2d		552860

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers.....	2e(1)	12517001	
(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)		12517001
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)		
(4) IQPA audit fees.....	2i(4)		
(5) Investment advisory and investment management fees.....	2i(5)	22091	
(6) Bank or trust company trustee/custodial fees.....	2i(6)	5813	
(7) Actuarial fees.....	2i(7)		
(8) Legal fees.....	2i(8)	8335	
(9) Valuation/appraisal fees.....	2i(9)		
(10) Other trustee fees and expenses.....	2i(10)		
(11) Other expenses.....	2i(11)	714852	
(12) Total administrative expenses. Add lines 2i(1) through (11)	2i(12)		751091
j Total expenses. Add all expense amounts in column (b) and enter total.....	2j		13268092

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		-12715232
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: **MGS LLP**

(2) EIN: **46-2568909**

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.)		X	
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.).....		X	
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.)		X	
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.).....		X	
e Was this plan covered by a fidelity bond?.....	X		15000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
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?		X	
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?.....		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.).....		X	
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.).....		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?		X	
l Has the plan failed to provide any benefit when due under the plan?		X	
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 534244.

SCHEDULE R (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection.
--	---	---

For calendar plan year 2023 or fiscal plan year beginning 07/01/2023 and ending 06/30/2024

A Name of plan <u>RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA</u>	B Three-digit plan number (PN) ▶	<u>003</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>TRUSTEES OF THE UNIVERSITY OF PA</u>	D Employer Identification Number (EIN) <u>23-1352685</u>	

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	<u>0</u>
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): <u>13-1624203</u>		
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	<u>5</u>

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

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: <input type="checkbox"/> last contributing employer <input type="checkbox"/> alternative <input type="checkbox"/> reasonable approximation (see instructions for required attachment)	14a	
b The plan year immediately preceding the current plan year. <input type="checkbox"/> 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. <input type="checkbox"/> 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

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: 7.8 % Private Equity: 18.4 % Investment-Grade Debt and Interest Rate Hedging Assets: 50.5 %
 High-Yield Debt: 0.0 % Real Assets: 5.0 % Cash or Cash Equivalents: 2.5 % Other: 15.8 %

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

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 _____.

**Retirement Allowance Plan of
the University of
Pennsylvania**
Financial Statements
June 30, 2024 and 2023



Retirement Allowance Plan of the University of Pennsylvania

Contents

June 30, 2024 and 2023

	Page(s)
Independent Auditors' Report	1-3
Financial Statements	
Statements of Net Assets Available for Benefits.....	4
Statements of Changes in Net Assets Available for Benefits.....	5
Notes to Financial Statements	6-17

Supplemental schedules required by Section 2520.103-10 of the Department of Labor Rules and Regulations for Reporting and Disclosure under Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable. Plans with all of their assets in a Master Trust are exempt from the requirement to include supplemental schedules as part of their financial statements.



Independent Auditors' Report

To the Participants and Administrator of
The Retirement Allowance Plan of
The University of Pennsylvania

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

We have performed audits of the accompanying financial statements of the Retirement Allowance Plan of the University of Pennsylvania (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). The financial statements comprise the statements of net assets available for benefits as of June 30, 2024 and 2023, and the related statements of changes in net assets available for benefits for the years then ended, 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 insurance 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 qualified institutions as of June 30, 2024 and 2023, and for the years then ended, stating that the certified investment information, as described in Notes 5 and 6 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 Auditors' Responsibilities for the Audit of the Financial Statements section—

- the amounts and disclosures in the financial statements referred to above, 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 financial statements referred to above 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).

MGS LLP

CERTIFIED PUBLIC ACCOUNTANTS

995 Old Eagle School Road, Suite 307 ♦ Wayne, PA 19087 ♦ Phone: 610-688-6162 ♦ Fax: 484-580-6475

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 Auditors’ 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 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.

Auditors’ 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 of the Financial Statements 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 auditors’ 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 substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

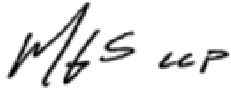
In performing an audit in accordance with GAAS, we:

- 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 including 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 the 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.

A handwritten signature in black ink that reads "MGS LLP". The letters are stylized and slanted.

MGS LLP

Wayne, Pennsylvania

April 14, 2025

Retirement Allowance Plan of The University of Pennsylvania
Statements of Net Assets Available for Benefits
June 30, 2024 and 2023

	<u>2024</u>	<u>2023</u>
Assets		
Investments at fair value:		
Plan interest in the University of Pennsylvania Master Retirement Trust	<u>\$ 195,170,272</u>	<u>\$ 207,892,446</u>
Total assets	<u>195,170,272</u>	<u>207,892,446</u>
Liabilities		
Accrued expenses	<u>5,248</u>	<u>12,190</u>
Total liabilities	<u>5,248</u>	<u>12,190</u>
Net assets available for benefits	<u><u>\$ 195,165,024</u></u>	<u><u>\$ 207,880,256</u></u>

The accompanying notes are an integral part of these financial statements.

Retirement Allowance Plan of The University of Pennsylvania
Statements of Changes in Net Assets Available for Benefits
Years Ended June 30, 2024 and 2023

	<u>2024</u>	<u>2023</u>
Additions to net assets attributed to:		
Plan interest in the University of Pennsylvania Master Retirement Trust investment income (loss)	\$ 552,860	\$ (3,117,291)
Total investment income (loss)	<u>552,860</u>	<u>(3,117,291)</u>
Total additions (reductions), net	<u>552,860</u>	<u>(3,117,291)</u>
Deductions from net assets attributed to:		
Benefits paid directly to participants	12,517,001	12,481,406
Administrative expenses	<u>751,091</u>	<u>712,025</u>
Total deductions	<u>13,268,092</u>	<u>13,193,431</u>
Net decrease	(12,715,232)	(16,310,722)
Net assets available for benefits:		
Beginning of year	<u>207,880,256</u>	<u>224,190,978</u>
End of year	<u>\$ 195,165,024</u>	<u>\$ 207,880,256</u>

The accompanying notes are an integral part of these financial statements.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

1. Description of the Plan

The following brief description of the Retirement Allowance Plan of the University of Pennsylvania (the “Plan”) is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General

The Plan was established on January 1, 1948 and is a noncontributory defined benefit pension plan covering substantially all hourly employees and certain salaried employees of the University of Pennsylvania (the “University”). Effective July 1, 2000, the Plan was amended to allow participants to elect out of the Plan and into a 403(b)/401(a) plan for future accruals, and to close the Plan to all full time employees hired on and after July 1, 2000 (new employees become participants in the 403(b)/401(a) plan). Prior to July 1, 2018, hourly employees were eligible to participate in the Plan after completing 1,000 hours of service in 12 months and attaining age 21. Effective July 1, 2018, the Plan was closed to all new participants. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”).

Pension Benefits

Employees are fully vested and entitled to annual pension benefits (beginning at normal retirement age of 65) after completing 5 years of service. The annual pension benefit is equal to the sum of 1.25% of the participant’s average monthly compensation, based on the highest 5 years during the previous 10 Plan years, multiplied by the years of credited service.

Reduced early retirement benefits may be elected by a participant who has reached age 55 and has at least 5 years of credited service. The amount of the reduced benefit is computed in the same manner as a normal retirement pension, except that it will be reduced in accordance with factors set forth in the Plan.

Employees who terminate their employment before obtaining 5 years of service forfeit the right to receive their accrued benefits under the Plan.

The normal form of benefit distribution is a single life annuity for an unmarried participant and a qualified joint and survivor annuity for married participants. Benefits are paid monthly. Participants may elect optional payment forms of actuarially-equivalent annuities subject to the Plan’s spousal consent requirements.

Disability Benefits

A participant will continue to be credited with years of credited service and vesting service while he/she remains a disabled participant.

When a disabled participant ceases to be such, he/she shall cease to be credited with years of vesting service and credited service, and will be entitled to a pension under the same provisions applied as if separation from service had occurred on the date he/she ceased to be a disabled participant. However, in no event shall a disabled participant’s benefit payment date be later than his/her required beginning date.

Death Benefits

If an employee dies after benefits begin, the payment form elected before death will determine whether any benefits will be paid to the spouse after death.

If a vested participant dies before their benefits begin, a monthly death benefit will be paid to the surviving spouse for life. The amount will be equal to the monthly payment the spouse would have received if the participant had been eligible for, and elected to receive, a qualified joint and survivor annuity before death.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

Termination Priorities

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

Should the Plan terminate at some future time, its net assets generally will not be available on a pro rata basis to provide participants' benefits. Whether a particular participant's accumulated plan benefits will be paid depends on both the priority of those benefits and the level of benefits guaranteed by the Pension Benefit Guaranty Corporation ("PBGC") at that time. Some Plan benefits may be fully or partially provided for with the then existing Plan assets and the PBGC guarantee, while other Plan benefits may not be provided for at all.

2. Summary of Significant Accounting Policies

This summary of significant accounting policies of the Plan is presented to assist in understanding the Plan's financial statements. The financial statements and notes are representations of the Plan's management who is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America ("GAAP") and have been consistently applied in the preparation of the financial statements.

Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting.

Investment Valuation and Income Recognition

The Plan's interest in The University of Pennsylvania Master Retirement Trust (the "Master Trust") is stated at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

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.

The Plan's interest in the Master Trust is based on the beginning of year value of the Plan's interest in the Master Trust plus actual contributions and allocated investment income less actual distributions.

The Plan presents, in the Statements of Changes in Net Assets Available for Benefits, the increase (decrease) in value of participation in the Master Trust which consists of appreciation (depreciation) which includes both unrealized and realized gains and losses, and interest and dividend income earned on those investments.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires the Plan administrator to make estimates and assumptions that affect the reported amounts of net assets available for benefits at the date of the financial statements and the actuarial present value of accumulated plan benefits as of the benefit information date, the changes in net assets available for benefits during the reporting period and, when applicable, the disclosures of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Administrative Expenses

Certain administrative expenses of the Plan are paid directly by the Master Trust and allocated to the Plan based upon its pro rata share of Master Trust net assets. Plan specific administrative expenses are charged directly to the Plan.

Payment of Benefits

Benefit payments paid to participants are recorded upon distribution.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

3. Funding Policy

The University contributes amounts as recommended by its consulting actuaries who perform annual valuations of the Plan. The actuarial method used in determining the Plan's contributions is the projected unit credit actuarial cost method. The contributions of the University are designed to provide for normal cost on a current basis and funding of prior service cost over a period of thirty years up to the full funding limitation in accordance with ERISA. For fiscal years 2024 and 2023, the University complied with the minimum funding requirements of ERISA. No contributions were made by the University in the 2024 and 2023 Plan years.

4. 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 employees have rendered. Accumulated plan benefits include benefits expected to be paid to: (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who have died, and (c) present employees or their beneficiaries. Benefits payable under all circumstances – retirement, death, disability, and termination of employment – are included, to the extent they are deemed attributable to employee service rendered to the valuation date. Benefits to be provided via annuity contracts are excluded from Plan assets and accumulated Plan benefits.

The actuarial present value of accumulated plan benefits is determined as of July 1, 2023 and 2022 and is that 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 disability, death, withdrawal, or retirement) between the valuation date and the expected date of payment.

The significant actuarial assumptions used in the valuation as of July 1, 2023 and 2022 were as follows:

	<u>July 1, 2023</u>	<u>July 1, 2022</u>
Discount Rate	4.000% compounded annually.	3.500% compounded annually.
Mortality Basis	Pri-2012 gender specific healthy employee and healthy annuitant mortality tables with no collar adjustment and applying scale MP-2021 mortality improvements from Pri-2012 on a generational basis for healthy lives were used.	Pri-2012 gender specific healthy employee and healthy annuitant mortality tables with no collar adjustment and applying scale MP-2021 mortality improvements from Pri-2012 on a generational basis for healthy lives were used.
Retirement Age - Active	Scale ranging from 7.5% for age 55-59 to 100% if older than age 69.	Scale ranging from 7.5% for age 55-59 to 100% if older than age 69.
Retirement Age - Deferred Benefits	65 or on the valuation date if current age is older than age 65.	65 or on the valuation date if current age is older than age 65.

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.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

The actuarial present value of accumulated benefits as of July 1, 2023 and 2022 has been calculated by the Plan's consulting actuaries as follows:

	<u>July 1, 2023</u>	<u>July 1, 2022</u>
Actuarial present value of accumulated plan benefits:		
Vested benefits:		
Participants currently receiving payments	\$ 129,767,582	\$ 133,515,984
Other participants	89,647,963	101,151,987
Total vested benefits	219,415,545	234,667,971
Nonvested benefits	-	-
Total actuarial present value of accumulated plan benefits	<u>\$ 219,415,545</u>	<u>\$ 234,667,971</u>

The increase in the actuarial present value of accumulated plan benefits for the years ending July 1, 2023 and 2022 are as follows:

	<u>July 1, 2023</u>	<u>July 1, 2022</u>
Actuarial present value of accumulated plan benefits at beginning of year	\$ 234,667,971	\$ 204,384,906
Changes during the plan year attributable to:		
Benefits accumulated	2,091,334	1,927,532
Actuarial (gains) losses	(569,509)	20,331
Decrease in the discount period	8,068,151	9,515,600
Change in assumptions (1)	(12,360,996)	30,787,633
Benefits paid	(12,481,406)	(11,968,031)
Net (decrease) increase	<u>(15,252,426)</u>	<u>30,283,065</u>
Actuarial present value of accumulated plan benefits at end of year	<u>\$ 219,415,545</u>	<u>\$ 234,667,971</u>

(1) In 2023, the discount rate assumption changed. In 2022, the mortality assumption changed.

5. Investment Information Certified by Trustee

The Plan administrator has elected the method of compliance permitted by 29 CFR 2520.103-8 of the Department of Labor's ("DOL") Rules and Regulations for Reporting and Disclosure under ERISA. Accordingly, State Street Bank and Trust Company ("State Street"), the trustee, certified the completeness and accuracy of investments reported on the Statements of Net Assets Available for Benefits as of June 30, 2024 and 2023. Additionally, the completeness and accuracy of the related investment activity reported on the Statements of Changes in Net Assets Available for Benefits for the years ended June 30, 2024 and 2023 have been certified by the trustee.

The Plan's independent auditors did not perform auditing procedures with respect to this information, except for comparing such information to the related information included in the financial statements.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

6. Interest in the University of Pennsylvania Master Retirement Trust

The Plan's only investment at June 30, 2024 and 2023 is held in the Master Trust, which was established for the investment of assets of the Plan, and other University sponsored retirement plans. Each participating retirement plan has an individual interest in a portion of the Master Trust. The assets of the Master Trust at June 30, 2024 and 2023 were held by State Street, the trustee. The investment policy creates investment pools within the Master Trust to account for the participating plans' interest in the underlying Master Trust investments on a differentiated investment basis. Investment income and administrative expenses relating to the Master Trust are allocated to the individual plans based upon average monthly balances invested by each plan. The Plan's undivided interest in the net assets of the Master Trust was approximately 7% at both June 30, 2024 and 2023.

The following is a summary of the Master Trust's financial information certified by State Street as complete and accurate in accordance with Section 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA:

Statements of Net Assets Available for Benefits

	As of June 30,	
	2024	2023
Assets		
Investments, at fair value:		
Cash and cash equivalents	\$ 56,167,154	\$ 152,235,818
Equity investments	223,868,900	375,399,057
Debt instruments	1,473,805,610	1,316,694,002
Absolute return portfolio (hedge funds)	468,861,414	544,386,910
Real estate	146,069,520	127,661,566
Private equity	545,003,708	507,400,296
Natural resources	729,473	60,813,377
Total investments	<u>2,914,505,779</u>	<u>3,084,591,026</u>
Receivables:		
Due from brokers for securities sold	18,580,812	14,448,190
Accrued interest and dividends	7,322,840	5,704,042
Total receivables	<u>25,903,652</u>	<u>20,152,232</u>
Total assets	<u>2,940,409,431</u>	<u>3,104,743,258</u>
Liabilities		
Due from brokers for securities sold	8,363,177	2,629,002
Unrealized depreciation on derivative instruments	-	12,971,681
Total liabilities	<u>8,363,177</u>	<u>15,600,683</u>
Net assets available for benefits	<u>\$ 2,932,046,254</u>	<u>\$ 3,089,142,575</u>

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

	Year ended June 30,	
	2024	2023
Additions to net assets attributed to:		
Dividend income	\$ 27,301,969	\$ 16,800,081
Interest income	27,802,819	20,476,922
Net (depreciation) appreciation in fair value of investments	(96,032,052)	(43,461,054)
Net investment (loss) income	(40,927,264)	(6,184,051)
Other income	8,596,792	8,075,050
Assets transferred in	20	180,177,338
Contributions	16,916,000	16,953,000
Total (reductions) additions	(15,414,452)	199,021,337
Deductions from net assets attributed to:		
Retirement benefit payments	135,962,667	121,444,703
Investment expenses	3,407,053	6,275,166
Administrative expenses	2,312,149	6,073,235
Total deductions	141,681,869	133,793,104
Net (decrease) increase	(157,096,321)	65,228,233
Net assets available for benefits:		
Beginning of year	3,089,142,575	3,023,914,342
End of year	\$ 2,932,046,254	\$ 3,089,142,575

The Plan's interest in the Master Trust balances are as follows:

	As of June 30,	
	2024	2023
Assets		
Investments, at fair value:		
Cash and cash equivalents	\$ 5,630,211	\$ 10,071,447
Equity investments	19,821,867	19,922,765
Debt instruments	169,718,194	177,898,234
Total investments	195,170,272	207,892,446
Net assets available for benefits	\$ 195,170,272	\$ 207,892,446

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

7. Fair Value Measurements

Accounting Standards Codification (“ASC”) 820, *Fair Value Measurements and Disclosures* (“ASC 820”), establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy under ASC 820 are described as follows:

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset’s or liability’s fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

Overall Master Trust Investment Strategy

The principal investment objectives for the Master Trust is to ensure the availability of funds to pay pension benefits as they become due under a broad range of future economic scenarios; to maximize long-term investment returns with an acceptable level of risk based on the pension obligations; and to invest the Master Trust in a diversified manner across equity and debt investments. The equity investments are diversified, and comprised predominantly of developed market liquid assets, across a range of investment styles.

Net Asset Values

As a practical expedient, the Master Trust is permitted under GAAP to estimate the fair value of an investment at the measurement date using the reported net asset value (“NAV”) without further adjustment unless the entity expects to sell the investment at a value other than NAV or if the NAV is not calculated in accordance with GAAP. The fair value of the Master Trust’s investments in certain equity investments are generally based on the most current NAV received. The Master Trust performs additional procedures including due diligence reviews on its investments in investment companies and other procedures with respect to the capital account or NAV provided to ensure conformity with GAAP. The Master Trust has assessed factors including, but not limited to, managers’ compliance with ASC 820, price transparency and valuation procedures in place, the ability to redeem at NAV at the measurement date and the existence of certain redemption restrictions at the measurement date.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

The Plan has adopted the provisions of Accounting Standards Update No. 2015-07, *Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)*, an amendment to ASC 820 (“ASU 2015-07”), which removes the requirement to categorize, within the fair value hierarchy, all investments for which fair value is measured using NAV per share as a practical expedient.

Cash and cash equivalents

Cash and cash equivalents include cash equivalents and fixed income investments with maturities of less than one year. These short-term investments are valued using observable market data and are categorized as Level 1 to the degree that they can be valued based on quoted market prices in active markets. The majority of these short-term investments are held in a U.S. treasury money market account.

Equity Investments

Equity investments in the Plan assets consist of direct holdings of securities in managed accounts, mutual funds, exchange traded funds, and limited partnerships. The securities held in managed accounts, exchange traded funds, and mutual funds are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1, with no valuation adjustments applied. Limited partnership interests are valued at NAV with redemption periods ranging from weekly to annually with varying notice periods. Lock-up provisions range from 0 to 5 years, excluding side pocket investments.

Debt Investments

Debt investments consist of direct holdings of securities in managed accounts, mutual funds, and a limited partnership that invest in credit instruments. Securities such as U.S. Treasuries, which are held in managed accounts, are valued based on quoted market prices in active markets and are categorized as Level 1. Securities such as corporate and high yield bonds, also held in managed accounts, are valued based on quoted market prices or dealer or broker quotations and are categorized as Level 2 or in the case where they trade infrequently as Level 3.

Absolute Return Portfolio

The absolute return portfolio is made up of investments of limited partnership interests in hedge funds. The fund managers invest in a variety of securities based on the strategy of the fund, which may or may not be quoted in an active market. Illiquid investments, if any, are generally designated as a side pocket by hedge fund managers and may be valued based on an appraised value, discounted cash flow, industry comparables or some other method. Limited partnership interests are valued at NAV. Redemption terms are monthly to annually with varying notice periods, excluding certain close-ended limited partnerships with no redemptions permitted. Distributions received as underlying investments are liquidated. Lock-up provisions ranging from 0 to 5 years with some earlier redemptions permitted, subject to redemption fees. Lock-up provisions excludes close-end funds with no redemptions permitted and side pocket investments. At June 30, 2024, the Master Trust had an unfunded commitment balance of \$39,031,294 to 6 hedge funds.

Real Estate

Investments in real estate include close-ended limited partnership interests. The fund managers of the close-ended limited partnership primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV. Redemptions are not permitted, except for 1 fund with quarterly liquidity on a 65 day notice period. Distributions are received as underlying investments are liquidated. The remaining life of the funds are from 2 to 13 years. At June 30, 2024, the Master Trust had an unfunded commitment balance of \$40,206,578 to 17 real estate investments.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

Private Equity

Investments in private equity are in the form of close-ended limited partnership interests. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV. Redemptions are not permitted. Distributions are received as underlying investments are liquidated. Redemptions are not permitted and investments have a remaining life ranging from 2 to 13 years. At June 30, 2024, the Master Trust had an unfunded commitment balance of \$117,028,441 to 78 limited partnerships.

Natural Resources

Investments in natural resources include limited partnership interest and direct holdings of securities in managed accounts. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. The limited partnership investments are valued at NAV. Limited partnership interests have remaining lives ranging from 2 to 13 years and redemptions are not permitted. Distributions are received as underlying investments are liquidated. At June 30, 2024, the Master Trust had an unfunded commitment balance of \$8,726,404 to 5 limited partnerships.

Methodology

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Master Trust believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date. There have been no changes in the methodologies used at June 30, 2024 and 2023.

The following tables summarize the Master Trust's assets reported at fair value and related hierarchy for such assets under ASC 820. The NAV column includes investments for which fair value is measured using NAV per share as a practical expedient in order to reconcile to the statements of net assets available for benefits:

	Assets and Liabilities at Fair Value as of June 30, 2024				
	Level 1	Level 2	Level 3	NAV	Total
Cash and cash equivalents	\$ 56,167,154	\$ -	\$ -	\$ -	\$ 56,167,154
Equity investments	22,252,949	-	-	201,615,951	223,868,900
Debt instruments	1,446,939,744	26,865,866	-	-	1,473,805,610
Absolute return portfolio (hedge funds)	-	-	-	468,861,414	468,861,414
Real estate	-	-	-	146,069,520	146,069,520
Private equity	-	-	-	545,003,708	545,003,708
Natural resources	729,473	-	-	-	729,473
Total	<u>\$ 1,526,089,320</u>	<u>\$26,865,866</u>	<u>\$ -</u>	<u>\$ 1,361,550,593</u>	<u>\$ 2,914,505,779</u>

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

	Assets and Liabilities at Fair Value as of June 30, 2023				
	Level 1	Level 2	Level 3	NAV	Total
Cash and cash equivalents	\$ 152,235,818	\$ -	\$ -	\$ -	\$ 152,235,818
Equity investments	50,341,859	-	-	325,057,198	375,399,057
Debt instruments	1,316,670,691	23,311	-	-	1,316,694,002
Absolute return portfolio (hedge funds)	-	-	-	544,386,910	544,386,910
Real estate	-	-	-	127,661,566	127,661,566
Private equity	-	-	-	507,400,296	507,400,296
Natural resources	16,784,458	-	-	44,028,919	60,813,377
Total	\$ 1,536,032,826	\$ 23,311	\$ -	\$ 1,548,534,889	\$ 3,084,591,026
	Level 1	Level 2	Level 3	NAV	Total
Derivative instruments					
Liabilities					
Equity Swap	\$ -	\$ 12,971,681	\$ -	\$ -	\$ 12,971,681
Total	\$ -	\$ 12,971,681	\$ -	\$ -	\$ 12,971,681

The Plan's individual interests in the Master Trust's investment pools are discussed in Note 6.

Transfers between leveled assets are based on the actual date of the event, which caused the transfer. As of June 30, 2024 and 2023, there were no transfers between Level 1 and 2 or Level 3 and Level 2.

8. Derivatives

The Master Trust enters into forward exchange, equity swaps, and equity option contracts for non-trading purposes in order to reduce its exposure to fluctuations in its portfolio holdings. These derivative contracts are categorized as Level 2.

There were no derivative instruments as of and for the year ended June 30, 2024.

The following table sets forth the fair value of the Master Trust's derivative instruments by contract type as of June 30, 2023:

Master Trust Statement of Net Assets Available for Benefits Location		
Equity Swap	Unrealized depreciation on derivative instruments	\$ 12,971,681
Total		\$ 12,971,681

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

The following table sets forth the gains (losses) related to derivative activities for the year ended June 30, 2023:

	Master Trust Statement of Changes in Net Assets Available for Benefits Location	
Equity Swap	Net (depreciation) appreciation in fair value of investments	(12,971,681)
Total		<u><u>\$(12,971,681)</u></u>

9. Tax Status

The Internal Revenue Service has determined and informed the University by a letter dated November 15, 2016 covering the Plan amendments executed through December 17, 2015, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code (“IRC”). The Plan has been amended since receiving the determination letter. However, the Plan administrator believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC.

Accounting principles generally accepted in the United States of America require 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 than likely than not would not be sustained upon examination by taxing authorities. The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of June 30, 2024 and 2023, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions. The Plan administrator believes that it is no longer subject to income tax examinations for years prior to 2021.

10. Related-Party Transactions

The Plan invests in investments of the Master Trust managed by State Street. State Street acts as the trustee for only those investments defined by the Plan. Transactions in such investments qualify as party-in-interest transactions, which are exempt from the prohibited transaction rules of ERISA.

11. Risk and Uncertainties

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

The Master Trust invests in various investments, which are disclosed in Note 7 of the financial statements. Investment securities are exposed to various risks, such as interest rate, currency, market and credit risks. In addition, the Master Trust has entered into contractual agreements related to certain investments, including limited partnerships that may limit its ability to initiate redemptions due to notice periods, lock-ups and gates. Due to the level of risk associated with investment securities, it is at least reasonably possible that changes in the values of the Master Trust will occur in the near term and that such changes could materially affect the amounts reported in the Statements of Net Assets Available for Benefits.

Retirement Allowance Plan of the University of Pennsylvania

Notes to the Financial Statements

June 30, 2024 and 2023

12. Subsequent Events

The Plan has evaluated events and transactions through April 14, 2025, the date these financial statements were available for issuance.



995 Old Eagle School Road, Suite 307
Wayne, PA 19087
Ph: 610-688-6162 Fax: 484-580-6475
mgs-cpa.com

SCHEDULE SB ATTACHMENTS

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

Attained Age	Attained Years of Credited Service ¹										Total	
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	1	0	0	0	0	0	0	0	0	1
30-34	0	0	1	0	0	0	0	0	0	0	0	1
35-39	0	0	1	1	1	0	0	0	0	0	0	3
40-44	0	0	1	2	4	3	0	0	0	0	0	10
45-49	0	0	3	5	2	5	14	0	0	0	0	29
50-54	0	0	3	1	0	11	15	7	1	0	0	38
55-59	0	0	0	1	0	5	17	8	6	0	0	37
60-64	0	0	0	1	1	5	5	10	4	2	0	28
65-69	0	0	2	2	0	3	2	1	7	4	0	21
70 & over	0	0	1	1	2	2	2	4	3	6	0	21
Total	0	0	13	14	10	34	55	30	21	12	0	189

¹ Age and service for purposes of determining category are based on exact (not rounded) values.
 Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis:

- Applicable month July
- Interest rate basis 3-Segment Rates

Interest rates:

	Reflecting Corridors	Not Reflecting Corridors
▪ First segment rate	4.75%	3.22%
▪ Second segment rate	5.00%	4.22%
▪ Third segment rate	5.74%	4.34%
▪ Effective interest rate	5.22%	4.20%

Annual rates of increase

- Compensation:
 - Nondisabled participants

Age	Rate of Increase
< 45	3.50%
50 – 59	3.00%
60 – 64	2.80%
< 65	2.50%

- Future Social Security wage bases N/A

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Demographic Assumptions

Inclusion date The valuation date coincident with or next following the date on which the employee becomes a participant

New or rehired employees It was assumed there will be no new or rehired employees.

Mortality

- **Healthy** Separate rates for non-annuitants based on RP-2014 “Employees” table without collar or amount adjustments, adjusted backward to 2006 with 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 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.
- **Disabled** Same as healthy mortality described above.

Termination Rates of termination vary by years of service during the select period and by age during the ultimate period.

- Rates for participants with fewer than five years of service
- Representative rates for participants with five or more years of service

Years of Service	Percentage leaving during the year
1	40.0%
2	40.0%
3	35.0%
4	35.0%

Attained Age	Percentage leaving during the year
30	31.0%
35	19.0%
40	14.0%
45	8.0%
>50	6.0%

Disability No disability decrements are assumed.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Retirement

Active participants are assumed to retire at the rates as shown below. Participants with deferred benefits are assumed to retire at age 65 or on the valuation date if current age is older than age 65.

Age	Percentage retiring during the year
55 – 59	7.5%
60 – 61	10%
62 – 64	15%
65	35%
66 – 69	30%
> 69	100%

Benefit commencement date:

- Preretirement death benefit The later of the death of the active participant or the date the participant would have attained age 55 (with 10 years of hire service)
- Deferred vested benefit The later of age 65 or termination of employment
- Disability benefit Upon disablement
- Retirement benefit Upon termination of employment

Form of payment

It has been assumed that 60% of retirement benefits will be paid as a single life annuity and 40% of retirement benefits will be paid in a 50% joint and survivor form of payment. To the extent optional forms of payment are elected and conversion are determined under an actuarial basis that differs from the basis used in the valuation, gains and losses will be recognized through the routine application of the actuarial cost method.

Percent married and Spouse age

For all purposes of valuing the pre-retirement surviving spouse's benefit, 80% of eligible participants are assumed to be married and male spouses are assumed to be 3 years older than female spouses.

Covered pay

Compensations used in the valuation is Plan compensation, as provided by the University of Pennsylvania.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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.

Administrative expenses Actual expenses for the prior plan year (other than investment expenses), adjusted for estimated current year PBGC Premiums, etc. (\$713,000 for 2023).

Methods

Valuation date First day of plan year

Funding target Present value of accrued benefits as required by regulations under IRC §430.

Target normal cost 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.

Decrement timing The approach used is 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.

Actuarial value of assets [for determining minimum required contributions] The actuarial value of assets is equal to the market value of assets as of the valuation date plus the discounted present value of contributions made after the valuation date for the 2023 plan year, discounted using the effective interest rate for the 2023 plan year.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Benefits not valued

All benefits described in the Plan Provisions section of this report were valued based on discussions with the University of Pennsylvania regarding the likelihood that these benefits will be paid. WTW has reviewed the plan provisions and, based on that review, is not aware of any significant benefits required to be valued that were not.

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.

Compensation increase

Assumed compensation increases are based on a review of actual plan experience conducted in the 2022 and anticipated future experience.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality

Assumptions used for funding purposes are as prescribed by IRC §430(h).

Disabled Mortality

Assumptions used for funding purposes are as prescribed by IRC §430(h).

Termination

Termination 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.

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

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

approximately equal value, and experience indicates that most spouses do take the benefit as soon as it is available.

- **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 approximately actuarial so that the difference between this approach and using assumed commencement rates at multiple ages is not expected to be significant.

Percent married

The assumed percentage married is based on general population statistics on the marital status of individuals of retirement age.

Spouse age

The assumed age difference for spouses is based on general population statistics of the age difference for married individuals of retirement age.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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.

Changes in Assumptions and Methods

Change in assumptions and methods since prior valuation

The segment interest rates used to calculate the funding target and target normal cost were updated as required by IRC 430 and include ARPA stabilized rates for 2023.

The assumed plan-related expenses added to the target normal cost were changed from \$800,000 for 2022 to \$713,000 for 2023.

The mortality table used to calculate the funding target and target normal cost was updated to include one additional year of projected mortality improvement, as required by IRC Section 430.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	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.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection
---	--	--

For calendar plan year 2023 or fiscal plan year beginning 07/01/2023 and ending 06/30/2024

► **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 RETIREMENT ALLOWANCE PLAN OF THE UNIVERSITY OF PENNSYLVANIA	B Three-digit plan number (PN) ►	003
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA	D Employer Identification Number (EIN) 23-1352685	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input checked="" type="checkbox"/> More than 500	

Part I Basic Information			
1 Enter the valuation date:	Month <u>07</u> Day <u>01</u> Year <u>2023</u>		
2 Assets:			
a Market value.....	2a	207,892,446	
b Actuarial value	2b	207,892,446	
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	2,325	121,186,751	121,186,751
b For terminated vested participants.....	1,795	47,709,024	47,709,024
c For active participants.....	189	26,057,111	26,127,198
d Total	4,309	194,952,886	195,022,973
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>			
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	5.22%	
6 Target normal cost			
a Present value of current plan year accruals.....	6a	1,552,618	
b Expected plan-related expenses	6b	713,000	
c Target normal cost.....	6c	2,265,618	

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	JSPak Signature of actuary <u>J. Steven Pak</u> Type or print name of actuary <u>Willis Towers Watson US LLC</u> Firm name 1900 Market Street Floor 8 Philadelphia PA 19103-3527 Address of the firm	<u>3/11/2025</u> Date <u>2305793</u> Most recent enrollment number <u>215-246-6000</u> Telephone number (including area code)
------------------	--	--

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

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	24,608,818
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	24,608,818
10	Interest on line 9 using prior year's actual return of <u>-1.45%</u>	0	-356,828
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year).....		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.39%</u>		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance.....		0
	d Portion of (c) to be added to prefunding balance.....		0
12	Other reductions in balances due to elections or deemed elections.....	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12).....	0	24,251,990

Part III	Funding Percentages		
14	Funding target attainment percentage.....	14	94.16 %
15	Adjusted funding target attainment percentage.....	15	106.59 %
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	103.58 %
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	
Totals ▶			18(b)	0	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	0

20 Quarterly contributions and liquidity shortfalls:

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

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? Yes No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

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

Part V Assumptions Used to Determine Funding Target and Target Normal Cost				
21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %	<input type="checkbox"/> N/A, full yield curve used
b Applicable month (enter code).....				21b 0
22 Weighted average retirement age				22 62
23 Mortality table(s) (see instructions)	<input type="checkbox"/> Prescribed - combined <input checked="" type="checkbox"/> Prescribed - separate <input type="checkbox"/> 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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 2,265,618
b Excess assets, if applicable, but not greater than line 31a				31b 0
32 Amortization installments:	Outstanding Balance		Installment	
a Net shortfall amortization installment	11,382,517		1,042,419	
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 3,308,037
	Carryover balance	Prefunding balance	Total balance	
35 Balances elected for use to offset funding requirement.....	0	3,308,037	3,308,037	
36 Additional cash requirement (line 34 minus line 35).....				36 0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....				37 0
38 Present value of excess contributions for current year (see instructions)				
a Total (excess, if any, of line 37 over line 36)				38a 0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances				38b 0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37).....				39 0
40 Unpaid minimum required contributions for all years.....				40 0

Part IX Pension Funding Relief Under 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. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input checked="" type="checkbox"/> 2021				

SCHEDULE SB ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	Trustees of The University of Pennsylvania
EIN/PN	23-1352685/003
Plan Name	Retirement Allowance Plan of The University of Pennsylvania
Valuation Date	July 1, 2023
Enrolled Actuary	J. Steven Pak
Enrollment Number	23-05793

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 July 1, 2023

See Appendix A for retirement rates. The average retirement age for Line 22 was calculated by determining the average age at retirement for those current actives participants expected to reach retirement, based on all current decrements assumed.

Each participant is assumed to retire at age 62, or age on the valuation date if greater. Thus, the rate of retirement is equal to 100% at each participant's assumed retirement age of 62.

1	2	3	4	5	6	7	
Age	Number Surviving BOY ^r	Rate of Retirement	Number of Retiring (2*3)	Number Surviving EOY (2-4)	Weighted Retirement by Age (1*4)	Weighted Average Retirement Age (Sum 6/ Sum 4)	
55	1,000	7.5%	75	925	4,125	62	
56	925	7.5%	69	856	3,885		
57	856	7.5%	64	791	3,658		
58	791	7.5%	59	732	3,443		
59	732	7.5%	55	677	3,240		
60	677	10.0%	68	609	4,063		
61	609	10.0%	61	549	3,718		
62	549	15.0%	82	466	5,101		
63	466	15.0%	70	396	4,406		
64	396	15.0%	59	337	3,805		
65	337	35.0%	118	219	7,664		
66	219	30.0%	66	153	4,335		
67	153	30.0%	46	107	3,081		
68	107	30.0%	32	75	2,189		
69	75	30.0%	23	53	1,555		
>69	53	100.0%	53	0	3,680		
Sums			1,000.00		61,946		

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis:

- Applicable month July
- Interest rate basis 3-Segment Rates

Interest rates:

	Reflecting Corridors	Not Reflecting Corridors
▪ First segment rate	4.75%	3.22%
▪ Second segment rate	5.00%	4.22%
▪ Third segment rate	5.74%	4.34%
▪ Effective interest rate	5.22%	4.20%

Annual rates of increase

- Compensation:
 - Nondisabled participants

Age	Rate of Increase
< 45	3.50%
50 – 59	3.00%
60 – 64	2.80%
< 65	2.50%

- Future Social Security wage bases N/A

Demographic Assumptions

Inclusion date The valuation date coincident with or next following the date on which the employee becomes a participant

New or rehired employees It was assumed there will be no new or rehired employees.

Mortality

- Healthy Separate rates for non-annuitants based on RP-2014 “Employees” table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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 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.

- Disabled Same as healthy mortality described above.

Termination

Rates of termination vary by years of service during the select period and by age during the ultimate period.

- Rates for participants with fewer than five years of service

Years of Service	Percentage leaving during the year
1	40.0%
2	40.0%
3	35.0%
4	35.0%

- Representative rates for participants with five or more years of service

Attained Age	Percentage leaving during the year
30	31.0%
35	19.0%
40	14.0%
45	8.0%
>50	6.0%

Disability

No disability decrements are assumed.

Retirement

Active participants are assumed to retire at the rates as shown below. Participants with deferred benefits are assumed to retire at age 65 or on the valuation date if current age is older than age 65.

Age	Percentage retiring during the year
55 – 59	7.5%
60 – 61	10%
62 – 64	15%
65	35%
66 – 69	30%
> 69	100%

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Benefit commencement date:

- Preretirement death benefit The later of the death of the active participant or the date the participant would have attained age 55 (with 10 years of hire service)
- Deferred vested benefit The later of age 65 or termination of employment
- Disability benefit Upon disablement
- Retirement benefit Upon termination of employment

Form of payment

It has been assumed that 60% of retirement benefits will be paid as a single life annuity and 40% of retirement benefits will be paid in a 50% joint and survivor form of payment. To the extent optional forms of payment are elected and conversion are determined under an actuarial basis that differs from the basis used in the valuation, gains and losses will be recognized through the routine application of the actuarial cost method.

Percent married and Spouse age

For all purposes of valuing the pre-retirement surviving spouse's benefit, 80% of eligible participants are assumed to be married and male spouses are assumed to be 3 years older than female spouses.

Covered pay

Compensations used in the valuation is Plan compensation, as provided by the University of Pennsylvania.

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.

Administrative expenses

Actual expenses for the prior plan year (other than investment expenses), adjusted for estimated current year PBGC Premiums, etc. (\$713,000 for 2023).

Methods

Valuation date

First day of plan year

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost	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.
Decrement timing	The approach used is 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.
Actuarial value of assets [for determining minimum required contributions]	The actuarial value of assets is equal to the market value of assets as of the valuation date plus the discounted present value of contributions made after the valuation date for the 2023 plan year, discounted using the effective interest rate for the 2023 plan year.
Benefits not valued	All benefits described in the Plan Provisions section of this report were valued based on discussions with the University of Pennsylvania regarding the likelihood that these benefits will be paid. WTW has reviewed the plan provisions and, based on that review, is not aware of any significant benefits required to be valued that were not.

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.
----------------------	--

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Compensation increase

Assumed compensation increases are based on a review of actual plan experience conducted in the 2022 and anticipated future experience.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality

Assumptions used for funding purposes are as prescribed by IRC §430(h).

Disabled Mortality

Assumptions used for funding purposes are as prescribed by IRC §430(h).

Termination

Termination 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.

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.

- 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 approximately actuarial so that the difference between this approach and using assumed commencement rates at multiple ages is not expected to be significant.

Percent married

The assumed percentage married is based on general population statistics on the marital status of individuals of retirement age.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Spouse age

The assumed age difference for spouses is based on general population statistics of the age difference for married individuals of retirement age.

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.

Changes in Assumptions and Methods

Change in assumptions and methods since prior valuation

The segment interest rates used to calculate the funding target and target normal cost were updated as required by IRC 430 and include ARPA stabilized rates for 2023.

The assumed plan-related expenses added to the target normal cost were changed from \$800,000 for 2022 to \$713,000 for 2023.

The mortality table used to calculate the funding target and target normal cost was updated to include one additional year of projected mortality improvement, as required by IRC Section 430.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 24 Change in Actuarial Assumptions

The assumed plan-related expenses added to the target normal cost were changed from \$800,000 for 2022 to \$713,000 for 2023.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V Summary of Plan Provisions

Plan Provisions

The Plan was originally effective January 1, 1948, restated July 1, 1989 and last amended effective July 1, 2018.

Coverage and Participation Persons, except students, employed by the University of Pennsylvania in a clerical, craft, service or technical position.

Eligibility Provisions for Membership Employees become participants on the July 1 following attainment of age 21 and completion of one year of service. In 2000 participants were able to make a one-time irrevocable election to opt out of the Plan and into the Tax Deferred Annuity Plan ("TDA"). There were limited new participants after 2000 as all new employees (with the exception of part time employees who work more than 1,000 hours) automatically are enrolled in the TDA.

Effective July 1, 2018, participation in the Plan was closed. No employee is eligible to begin (or resume) participation in the plan on or after July 1, 2018.

Definitions

Vesting service Years of service after age 18.

Average annual earnings A participant's annual earnings averaged over his five most highly paid consecutive plan years out of the last 10 years.

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

Monthly pension benefit 1.25% of average annual earnings multiplied by years of benefit accrual service.

Monthly preretirement death benefit 50% of the monthly pension benefit as of the date of death, reduced for the 50% joint and survivor election and reduced for payment as early as the participant's 55th birthday

Eligibility for Benefits

Normal retirement First day of the month next following age 65.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Early retirement	First of any month coincident with or next following 55th birthday with ten years of Vesting Service.
Late retirement	First of any month following Normal Retirement Date.
Vested termination	Termination for reasons other than death or retirement after completing five years of vesting service
Disability	If eligible for the University's Long Term Disability Plan, the first day of the month next following retirement.
Preretirement death benefit	Death while eligible for normal, early, late, 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 benefit payable to the participant is reduced by 5/9 of 1% for each of the first 60 months and 5/18 of 1% for each of the next 60 months by which his/her benefit payment date precedes his/her normal retirement date.
Late retirement	Accrued benefit at date of actual retirement.
Vested termination	Accrued Benefit at termination is payable at Normal Retirement.
Disablement	Early or normal retirement benefit based on benefit accrual service projected to the retirement date and annual earnings as of the date of disability.
Preretirement death	<p>For any member who dies after meeting the requirement for early retirement, the spouse's benefit is 50% of the amount that would have been payable to the member had he retired on the day prior to his death with his benefit payable in a Joint and 50% Survivor form.</p> <p>Prior to eligibility for early retirement, the spouse of any vested participant would be entitled to a Joint and 50% Survivor Annuity in the event of the participant's death. Payments would start at the time the deceased would have attained the Plan's earliest retirement age.</p>

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Other Plan Provisions

Forms of payment

- (a) Life Annuity
- (b) Life with 10 Years Certain
- (c) Joint and Survivor (50%, 75% or 100%)

Actuarial Equivalence of above optional form of payment, effective July 1, 2020, will be determined using the applicable mortality basis specified under IRC §417(e) for the plan year and the average of the applicable interest rates specified under IRC §417(e) for the months of February, March and April prior to the beginning of the plan year.

Plan participants' contributions

None

Maximum on benefits and pay

The retirement benefit cannot exceed the lesser of

- (a) \$220,000 (or such higher amount as determined by regulations) per year, or
- (b) 100% of average compensation for highest three consecutive years.

Future Plan Changes

None.

Changes in Benefits Valued Since Prior Year

There have been no changes in benefits valued since the prior year.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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

Attained Age	Attained Years of Credited Service ¹										Total	
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	1	0	0	0	0	0	0	0	0	1
30-34	0	0	1	0	0	0	0	0	0	0	0	1
35-39	0	0	1	1	1	0	0	0	0	0	0	3
40-44	0	0	1	2	4	3	0	0	0	0	0	10
45-49	0	0	3	5	2	5	14	0	0	0	0	29
50-54	0	0	3	1	0	11	15	7	1	0	0	38
55-59	0	0	0	1	0	5	17	8	6	0	0	37
60-64	0	0	0	1	1	5	5	10	4	2	0	28
65-69	0	0	2	2	0	3	2	1	7	4	0	21
70 & over	0	0	1	1	2	2	2	4	3	6	0	21
Total	0	0	13	14	10	34	55	30	21	12	0	189

¹ Age and service for purposes of determining category are based on exact (not rounded) values.
 Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 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	345,917	639,813	12,448,888	13,434,618
2024	790,474	1,379,237	12,102,545	14,272,256
2025	973,427	1,670,493	11,727,765	14,371,685
2026	1,122,934	1,981,339	11,333,517	14,437,790
2027	1,273,887	2,284,286	10,921,072	14,479,245
2028	1,416,418	2,596,635	10,492,427	14,505,480
2029	1,540,058	2,881,757	10,047,697	14,469,512
2030	1,662,694	3,143,910	9,585,453	14,392,057
2031	1,752,224	3,385,357	9,105,075	14,242,656
2032	1,824,320	3,608,871	8,614,862	14,048,053
2033	1,892,441	3,774,740	8,120,785	13,787,966
2034	1,935,482	3,875,869	7,621,264	13,432,615
2035	1,992,643	3,963,892	7,117,368	13,073,903
2036	2,060,987	4,034,408	6,611,908	12,707,303
2037	2,117,176	4,071,334	6,107,971	12,296,481
2038	2,160,140	4,080,770	5,608,883	11,849,793
2039	2,182,839	4,081,488	5,118,154	11,382,481
2040	2,204,041	4,056,401	4,639,351	10,899,793
2041	2,203,268	4,003,200	4,175,997	10,382,465
2042	2,178,017	3,911,394	3,731,449	9,820,860
2043	2,153,625	3,810,541	3,308,736	9,272,902
2044	2,117,230	3,704,923	2,910,519	8,732,672
2045	2,054,041	3,573,281	2,539,054	8,166,376
2046	1,974,532	3,428,967	2,196,065	7,599,564
2047	1,896,183	3,274,964	1,882,697	7,053,844
2048	1,817,706	3,107,446	1,599,542	6,524,694
2049	1,732,876	2,932,071	1,346,634	6,011,581
2050	1,642,773	2,750,279	1,123,432	5,516,484
2051	1,549,365	2,563,510	928,873	5,041,748

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Plan Year	Active Participants	Terminated Vested Participants	Retired Participants and Beneficiaries Receiving Payments	Total
2052	1,454,821	2,375,732	761,404	4,591,957
2053	1,359,584	2,188,127	619,065	4,166,776
2054	1,265,683	2,001,935	499,605	3,767,223
2055	1,172,156	1,817,488	400,608	3,390,252
2056	1,078,092	1,638,422	319,593	3,036,107
2057	985,691	1,467,554	254,105	2,707,350
2058	895,569	1,306,048	201,781	2,403,398
2059	809,423	1,153,377	160,423	2,123,223
2060	726,619	1,010,023	128,036	1,864,678
2061	646,495	877,685	102,862	1,627,042
2062	570,598	757,392	83,395	1,411,385
2063	499,296	649,151	68,379	1,216,826
2064	432,910	552,713	56,786	1,042,409
2065	371,712	467,616	47,798	887,126
2066	315,911	393,236	40,772	749,919
2067	265,618	328,822	35,215	629,655
2068	220,845	273,543	30,753	525,141
2069	181,504	226,519	27,111	435,134
2070	147,408	186,856	24,088	358,352
2071	118,276	153,669	21,538	293,483
2072	93,755	126,112	19,356	239,223

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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

Type of Base	Date Established	Initial Amount	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
1. Shortfall	07/01/2023	11,382,517	15.00000	11,382,517	1,042,419
Total				11,382,517	1,042,419

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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

See Appendix A for retirement rates. The average retirement age for Line 22 was calculated by determining the average age at retirement for those current actives participants expected to reach retirement, based on all current decrements assumed.

Each participant is assumed to retire at age 62, or age on the valuation date if greater. Thus, the rate of retirement is equal to 100% at each participant's assumed retirement age of 62.

1	2	3	4	5	6	7	
Age	Number Surviving BOY ^r	Rate of Retirement	Number of Retiring (2*3)	Number Surviving EOY (2-4)	Weighted Retirement by Age (1*4)	Weighted Average Retirement Age (Sum 6/ Sum 4)	
55	1,000	7.5%	75	925	4,125	62	
56	925	7.5%	69	856	3,885		
57	856	7.5%	64	791	3,658		
58	791	7.5%	59	732	3,443		
59	732	7.5%	55	677	3,240		
60	677	10.0%	68	609	4,063		
61	609	10.0%	61	549	3,718		
62	549	15.0%	82	466	5,101		
63	466	15.0%	70	396	4,406		
64	396	15.0%	59	337	3,805		
65	337	35.0%	118	219	7,664		
66	219	30.0%	66	153	4,335		
67	153	30.0%	46	107	3,081		
68	107	30.0%	32	75	2,189		
69	75	30.0%	23	53	1,555		
>69	53	100.0%	53	0	3,680		
Sums			1,000.00		61,946		

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
 EIN / PN: 23-1352685/003
 Plan Sponsor: Trustees of The University of Pennsylvania
 Valuation Date: July 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	345,917	639,813	12,448,888	13,434,618
2024	790,474	1,379,237	12,102,545	14,272,256
2025	973,427	1,670,493	11,727,765	14,371,685
2026	1,122,934	1,981,339	11,333,517	14,437,790
2027	1,273,887	2,284,286	10,921,072	14,479,245
2028	1,416,418	2,596,635	10,492,427	14,505,480
2029	1,540,058	2,881,757	10,047,697	14,469,512
2030	1,662,694	3,143,910	9,585,453	14,392,057
2031	1,752,224	3,385,357	9,105,075	14,242,656
2032	1,824,320	3,608,871	8,614,862	14,048,053
2033	1,892,441	3,774,740	8,120,785	13,787,966
2034	1,935,482	3,875,869	7,621,264	13,432,615
2035	1,992,643	3,963,892	7,117,368	13,073,903
2036	2,060,987	4,034,408	6,611,908	12,707,303
2037	2,117,176	4,071,334	6,107,971	12,296,481
2038	2,160,140	4,080,770	5,608,883	11,849,793
2039	2,182,839	4,081,488	5,118,154	11,382,481
2040	2,204,041	4,056,401	4,639,351	10,899,793
2041	2,203,268	4,003,200	4,175,997	10,382,465
2042	2,178,017	3,911,394	3,731,449	9,820,860
2043	2,153,625	3,810,541	3,308,736	9,272,902
2044	2,117,230	3,704,923	2,910,519	8,732,672
2045	2,054,041	3,573,281	2,539,054	8,166,376
2046	1,974,532	3,428,967	2,196,065	7,599,564
2047	1,896,183	3,274,964	1,882,697	7,053,844
2048	1,817,706	3,107,446	1,599,542	6,524,694
2049	1,732,876	2,932,071	1,346,634	6,011,581
2050	1,642,773	2,750,279	1,123,432	5,516,484
2051	1,549,365	2,563,510	928,873	5,041,748

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Plan Year	Active Participants	Terminated Vested Participants	Retired Participants and Beneficiaries Receiving Payments	Total
2052	1,454,821	2,375,732	761,404	4,591,957
2053	1,359,584	2,188,127	619,065	4,166,776
2054	1,265,683	2,001,935	499,605	3,767,223
2055	1,172,156	1,817,488	400,608	3,390,252
2056	1,078,092	1,638,422	319,593	3,036,107
2057	985,691	1,467,554	254,105	2,707,350
2058	895,569	1,306,048	201,781	2,403,398
2059	809,423	1,153,377	160,423	2,123,223
2060	726,619	1,010,023	128,036	1,864,678
2061	646,495	877,685	102,862	1,627,042
2062	570,598	757,392	83,395	1,411,385
2063	499,296	649,151	68,379	1,216,826
2064	432,910	552,713	56,786	1,042,409
2065	371,712	467,616	47,798	887,126
2066	315,911	393,236	40,772	749,919
2067	265,618	328,822	35,215	629,655
2068	220,845	273,543	30,753	525,141
2069	181,504	226,519	27,111	435,134
2070	147,408	186,856	24,088	358,352
2071	118,276	153,669	21,538	293,483
2072	93,755	126,112	19,356	239,223

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	Trustees of The University of Pennsylvania
EIN/PN	23-1352685/003
Plan Name	Retirement Allowance Plan of The University of Pennsylvania
Valuation Date	July 1, 2023
Enrolled Actuary	J. Steven Pak
Enrollment Number	23-05793

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, Part V Summary of Plan Provisions

Plan Provisions

The Plan was originally effective January 1, 1948, restated July 1, 1989 and last amended effective July 1, 2018.

Coverage and Participation Persons, except students, employed by the University of Pennsylvania in a clerical, craft, service or technical position.

Eligibility Provisions for Membership Employees become participants on the July 1 following attainment of age 21 and completion of one year of service. In 2000 participants were able to make a one-time irrevocable election to opt out of the Plan and into the Tax Deferred Annuity Plan ("TDA"). There were limited new participants after 2000 as all new employees (with the exception of part time employees who work more than 1,000 hours) automatically are enrolled in the TDA.

Effective July 1, 2018, participation in the Plan was closed. No employee is eligible to begin (or resume) participation in the plan on or after July 1, 2018.

Definitions

Vesting service Years of service after age 18.

Average annual earnings A participant's annual earnings averaged over his five most highly paid consecutive plan years out of the last 10 years.

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

Monthly pension benefit 1.25% of average annual earnings multiplied by years of benefit accrual service.

Monthly preretirement death benefit 50% of the monthly pension benefit as of the date of death, reduced for the 50% joint and survivor election and reduced for payment as early as the participant's 55th birthday

Eligibility for Benefits

Normal retirement First day of the month next following age 65.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Early retirement	First of any month coincident with or next following 55th birthday with ten years of Vesting Service.
Late retirement	First of any month following Normal Retirement Date.
Vested termination	Termination for reasons other than death or retirement after completing five years of vesting service
Disability	If eligible for the University's Long Term Disability Plan, the first day of the month next following retirement.
Preretirement death benefit	Death while eligible for normal, early, late, 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 benefit payable to the participant is reduced by 5/9 of 1% for each of the first 60 months and 5/18 of 1% for each of the next 60 months by which his/her benefit payment date precedes his/her normal retirement date.
Late retirement	Accrued benefit at date of actual retirement.
Vested termination	Accrued Benefit at termination is payable at Normal Retirement.
Disablement	Early or normal retirement benefit based on benefit accrual service projected to the retirement date and annual earnings as of the date of disability.
Preretirement death	<p>For any member who dies after meeting the requirement for early retirement, the spouse's benefit is 50% of the amount that would have been payable to the member had he retired on the day prior to his death with his benefit payable in a Joint and 50% Survivor form.</p> <p>Prior to eligibility for early retirement, the spouse of any vested participant would be entitled to a Joint and 50% Survivor Annuity in the event of the participant's death. Payments would start at the time the deceased would have attained the Plan's earliest retirement age.</p>

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Other Plan Provisions

Forms of payment

- (a) Life Annuity
- (b) Life with 10 Years Certain
- (c) Joint and Survivor (50%, 75% or 100%)

Actuarial Equivalence of above optional form of payment will be determined using Unisex Pension Mortality Table of 1984 with one year age setback for participants and a two year setback for beneficiaries and an interest rate of 9%.

Plan participants' contributions

None

Maximum on benefits and pay

The retirement benefit cannot exceed the lesser of

- (a) \$220,000 (or such higher amount as determined by regulations) per year, or
- (b) 100% of average compensation for highest three consecutive years.

Future Plan Changes

None.

Changes in Benefits Valued Since Prior Year

There have been no changes in benefits valued since the prior year.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

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

Type of Base	Date Established	Initial Amount	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
1. Shortfall	07/01/2023	11,382,517	15.00000	11,382,517	1,042,419
Total				11,382,517	1,042,419

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 24 Change in Actuarial Assumptions

The assumed plan-related expenses added to the target normal cost were changed from \$800,000 for 2022 to \$713,000 for 2023.

Plan Name: Retirement Allowance Plan of The University of Pennsylvania
EIN / PN: 23-1352685/003
Plan Sponsor: Trustees of The University of Pennsylvania
Valuation Date: July 1, 2023