

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500.	OMB Nos. 1210-0110 1210-0089 2021 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2021 or fiscal plan year beginning <u>01/01/2021</u> and ending <u>12/31/2021</u>	

A This return/report is for: ☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)

☒ a single-employer plan ☐ a DFE (specify) _____

B This return/report is: ☐ the first return/report ☐ the final return/report

☐ an amended return/report ☐ a short plan year return/report (less than 12 months)

C If the plan is a collectively-bargained plan, check here. ▶ ☐

D Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program

☐ special extension (enter description) _____

E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. ▶ ☐

Part II	Basic Plan Information —enter all requested information		
1a Name of plan <u>ARROWSTREET INC. 401K PROFIT SHARING</u> 2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) <u>ARROWSTREET, INC.</u> <u>10 POST OFFICE SQUARE</u> <u>SUITE 700N</u> <u>BOSTON, MA 02109</u>	1b Three-digit plan number (PN) ▶	<u>001</u>	
	1c Effective date of plan	<u>01/01/1986</u>	
	2b Employer Identification Number (EIN)	<u>04-2323820</u>	
	2c Plan Sponsor's telephone number	<u>617-623-5555</u>	
	2d Business code (see instructions)	<u>541310</u>	

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

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/11/2022	NANCY L. NEVILLE
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/11/2022	NANCY L. NEVILLE
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

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

3a Plan administrator's name and address ☒ Same as Plan Sponsor		3b Administrator's EIN	
		3c Administrator's telephone number	
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name		4b EIN 4d PN	
5 Total number of participants at the beginning of the plan year		5	140
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.....		6a(1)	69
a(2) Total number of active participants at the end of the plan year		6a(2)	79
b Retired or separated participants receiving benefits.....		6b	4
c Other retired or separated participants entitled to future benefits		6c	55
d Subtotal. Add lines 6a(2) , 6b , and 6c		6d	138
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.		6e	0
f Total. Add lines 6d and 6e		6f	138
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)		6g	136
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested		6h	0
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: 2A 2E 2G 2J 2K 2S 2T 3D			
b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:			
9a Plan funding arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor		9b Plan benefit arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	
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		b General Schedules (1) ☒ H (Financial Information) (2) ☐ I (Financial Information – Small Plan) (3) ☒ <u>1</u> A (Insurance Information) (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 2021 Form M-1 annual report. If the plan was not required to file the 2021 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 A (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Insurance 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. ▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).	OMB No. 1210-0110 2021 This Form is Open to Public Inspection
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For calendar plan year 2021 or fiscal plan year beginning 01/01/2021 and ending 12/31/2021	
A Name of plan ARROWSTREET INC. 401K PROFIT SHARING	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 ARROWSTREET, INC.	D Employer Identification Number (EIN) 04-2323820

Part I	Information Concerning Insurance Contract Coverage, Fees, and Commissions	Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A.
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1 Coverage Information:

(a) Name of insurance carrier
MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY

(b) EIN	(c) NAIC code	(d) Contract or identification number	(e) Approximate number of persons covered at end of policy or contract year	Policy or contract year	
				(f) From	(g) To
04-1590850	65935	MR 615571	136	01/01/2021	12/31/2021

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid.

(a) Total amount of commissions paid	(b) Total amount of fees paid
0	0

3 Persons receiving commissions and fees. (Complete as many entries as needed to report all persons).

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

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	(c) Amount	(d) Purpose	

Part II Investment and Annuity Contract Information

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

4	Current value of plan's interest under this contract in the general account at year end	4																																																									
5	Current value of plan's interest under this contract in separate accounts at year end.....	5																																																									
6	Contracts With Allocated Funds:																																																										
a	State the basis of premium rates ▶																																																										
b	Premiums paid to carrier	6b																																																									
c	Premiums due but unpaid at the end of the year	6c																																																									
d	If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount. Specify nature of costs ▶	6d																																																									
e	Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity (3) ☐ other (specify) ▶																																																										
f	If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ▶ ☐																																																										
7	Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)																																																										
a	Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee (3) ☐ guaranteed investment (4) ☒ other ▶ GROUP ANNUITY CONTRACT																																																										
b	Balance at the end of the previous year	7b	1882686																																																								
c	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">(1) Contributions deposited during the year</td> <td style="width: 10%;">7c(1)</td> <td style="width: 10%; text-align: right;">23462</td> <td rowspan="5" style="width: 10%;"></td> </tr> <tr> <td>(2) Dividends and credits.....</td> <td>7c(2)</td> <td></td> </tr> <tr> <td>(3) Interest credited during the year.....</td> <td>7c(3)</td> <td style="text-align: right;">18503</td> </tr> <tr> <td>(4) Transferred from separate account.....</td> <td>7c(4)</td> <td></td> </tr> <tr> <td>(5) Other (specify below)</td> <td>7c(5)</td> <td style="text-align: right;">2310</td> </tr> <tr> <td colspan="3" style="height: 40px; vertical-align: top;">▶ LOAN INTEREST, LOAN PRINCIPAL</td> <td></td> </tr> <tr> <td colspan="2">(6) Total additions</td> <td>7c(6)</td> <td style="text-align: right;">44275</td> </tr> <tr> <td>d</td> <td>Total of balance and additions (add lines 7b and 7c(6))</td> <td>7d</td> <td style="text-align: right;">1926961</td> </tr> <tr> <td>e</td> <td> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3">Deductions:</td> <td rowspan="5" style="width: 10%;"></td> </tr> <tr> <td style="width: 5%;">(1) Disbursed from fund to pay benefits or purchase annuities during year</td> <td style="width: 10%;">7e(1)</td> <td style="width: 10%; text-align: right;">184912</td> </tr> <tr> <td>(2) Administration charge made by carrier.....</td> <td>7e(2)</td> <td style="text-align: right;">154</td> </tr> <tr> <td>(3) Transferred to separate account.....</td> <td>7e(3)</td> <td style="text-align: right;">115951</td> </tr> <tr> <td>(4) Other (specify below)</td> <td>7e(4)</td> <td></td> </tr> <tr> <td colspan="3" style="height: 40px; vertical-align: top;">▶</td> <td></td> </tr> <tr> <td colspan="2">(5) Total deductions</td> <td>7e(5)</td> <td style="text-align: right;">301017</td> </tr> <tr> <td>f</td> <td>Balance at the end of the current year (subtract line 7e(5) from line 7d)</td> <td>7f</td> <td style="text-align: right;">1625944</td> </tr> </table> </td> </tr> </table>	(1) Contributions deposited during the year	7c(1)	23462		(2) Dividends and credits.....	7c(2)		(3) Interest credited during the year.....	7c(3)	18503	(4) Transferred from separate account.....	7c(4)		(5) Other (specify below)	7c(5)	2310	▶ LOAN INTEREST, LOAN PRINCIPAL				(6) Total additions		7c(6)	44275	d	Total of balance and additions (add lines 7b and 7c(6))	7d	1926961	e	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3">Deductions:</td> <td rowspan="5" style="width: 10%;"></td> </tr> <tr> <td style="width: 5%;">(1) Disbursed from fund to pay benefits or purchase annuities during year</td> <td style="width: 10%;">7e(1)</td> <td style="width: 10%; text-align: right;">184912</td> </tr> <tr> <td>(2) Administration charge made by carrier.....</td> <td>7e(2)</td> <td style="text-align: right;">154</td> </tr> <tr> <td>(3) Transferred to separate account.....</td> <td>7e(3)</td> <td style="text-align: right;">115951</td> </tr> <tr> <td>(4) Other (specify below)</td> <td>7e(4)</td> <td></td> </tr> <tr> <td colspan="3" style="height: 40px; vertical-align: top;">▶</td> <td></td> </tr> <tr> <td colspan="2">(5) Total deductions</td> <td>7e(5)</td> <td style="text-align: right;">301017</td> </tr> <tr> <td>f</td> <td>Balance at the end of the current year (subtract line 7e(5) from line 7d)</td> <td>7f</td> <td style="text-align: right;">1625944</td> </tr> </table>	Deductions:				(1) Disbursed from fund to pay benefits or purchase annuities during year	7e(1)	184912	(2) Administration charge made by carrier.....	7e(2)	154	(3) Transferred to separate account.....	7e(3)	115951	(4) Other (specify below)	7e(4)		▶				(5) Total deductions		7e(5)	301017	f	Balance at the end of the current year (subtract line 7e(5) from line 7d)	7f	1625944
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Part III Welfare Benefit Contract Information

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

8 Benefit and contract type (check all applicable boxes)

- a** ☐ Health (other than dental or vision)
 b ☐ Dental
 c ☐ Vision
 d ☐ Life insurance
e ☐ Temporary disability (accident and sickness)
 f ☐ Long-term disability
 g ☐ Supplemental unemployment
 h ☐ Prescription drug
i ☐ Stop loss (large deductible)
 j ☐ HMO contract
 k ☐ PPO contract
 l ☐ Indemnity contract
m ☐ Other (specify) ▶

9 Experience-rated contracts:

a Premiums: (1) Amount received	9a(1)		
(2) Increase (decrease) in amount due but unpaid	9a(2)		
(3) Increase (decrease) in unearned premium reserve	9a(3)		
(4) Earned ((1) + (2) - (3))		9a(4)	
b Benefit charges (1) Claims paid	9b(1)		
(2) Increase (decrease) in claim reserves	9b(2)		
(3) Incurred claims (add (1) and (2))		9b(3)	
(4) Claims charged		9b(4)	
c Remainder of premium: (1) Retention charges (on an accrual basis) --			
(A) Commissions	9c(1)(A)		
(B) Administrative service or other fees	9c(1)(B)		
(C) Other specific acquisition costs	9c(1)(C)		
(D) Other expenses	9c(1)(D)		
(E) Taxes	9c(1)(E)		
(F) Charges for risks or other contingencies	9c(1)(F)		
(G) Other retention charges	9c(1)(G)		
(H) Total retention		9c(1)(H)	
(2) Dividends or retroactive rate refunds. (These amounts were ☐ paid in cash, or ☐ credited.)		9c(2)	
d Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement		9d(1)	
(2) Claim reserves		9d(2)	
(3) Other reserves		9d(3)	
e Dividends or retroactive rate refunds due. (Do not include amount entered in line 9c(2).)		9e	

10 Nonexperience-rated contracts:

a Total premiums or subscription charges paid to carrier	10a	
b If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount. Specify nature of costs.	10b	

Part IV Provision of Information

11 Did the insurance company fail to provide any information necessary to complete Schedule A? ☐ Yes ☒ No

12 If the answer to line 11 is "Yes," specify the information not provided. ▶

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2021
		This Form is Open to Public Inspection.
For calendar plan year 2021 or fiscal plan year beginning 01/01/2021 and ending 12/31/2021		
A Name of plan ARROWSTREET INC. 401K PROFIT SHARING	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 ARROWSTREET, INC.	D Employer Identification Number (EIN) 04-2323820	

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

1 Information on Persons Receiving Only Eligible Indirect Compensation

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

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

MASSACHUSETTS MUTUAL LIFE INSURANCE

04-1590850

(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?
52 60 62 63 64 68 72	NONE	1445	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☒ No ☐

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

GLOBAL RETIREMENT PARTNERS LLC

47-1411118

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	17890	Yes ☐ No ☒

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

RESOURCES INVESTMENT ADVISORS INC.

43-1451524

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	16491	Yes ☐ No ☒

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

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

DAVIS

36-2926440

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

PUTNAM

04-6746612

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

CALVERT

52-1233223

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

INVESCO

93-6305075

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

VICTORY

31-6364605

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

COLUMBIA

36-3376651

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

COLUMBIA

56-0906609

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

COLUMBIA

94-1687665

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

VANGUARD

23-1945930

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

BLACKROCK

13-3806694

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

JP MORGAN

33-1043149

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

RIDGEWORTH

95-6981193

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

PIMCO FUNDS

95-2632339

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

JOHN HANCOCK

04-3279774

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

T. ROWE PRICE

52-1827505

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

T. ROWE PRICE

52-1952906

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

AMERICAN FUNDS

95-1411037

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

FIDELITY ADVISOR

04-6444002

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

PGIM INVESTMENTS

22-3468527

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

FRANKLIN TEMPLETON

59-6865210

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

VIRTUS MUTUAL FUNDS

95-6981193

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

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

GREAT WEST LIFE & ANNUITY INSURANCE

84-0467907

(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?
49	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

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

MFS INVESTMENT MANAGEMENT

04-3158862

(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?
52	NONE	0	Yes ☒ No ☐	Yes ☐ No ☒	0	Yes ☒ No ☐

(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 ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

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

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
DAVIS	52	0
(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.	
DAVIS FINANCIAL FUND 36-2926440	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
PIMCO FUNDS	52	0
(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.	
PIMCO INCOME FUND 95-2632339	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
VANGUARD	52	0
(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.	
VANGUARD ENERGY FUND 23-1945930	BASIS POINTS * PLAN ASSETS	

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
JP MORGAN	52	0
(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.	
JP MORGAN US EQUITY FUND	BASIS POINTS * PLAN ASSETS	
33-1043149		
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
PIMCO FUNDS	52	0
(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.	
PIMCO REAL RETURN FUND	BASIS POINTS * PLAN ASSETS	
95-2632339		
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
COLUMBIA	52	0
(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.	
COLUMBIA MID CAP INDEX FUND	BASIS POINTS * PLAN ASSETS	
94-1687665		

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
COLUMBIA	52	0
(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.	
COLUMBIA DIVIDEND INCOME FUND 36-3376651	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
COLUMBIA	52	0
(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.	
COLUMBIA SMALL CAP INDEX FUND 56-0906609	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
COLUMBIA	52	0
(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.	
COLUMBIA LARGE CAP INDEX FUND 94-1687665	BASIS POINTS * PLAN ASSETS	

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
PUTNAM	52	0
(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.	
PUTNAM ASSET ALLOC BAL PRTFL FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
PUTNAM	52	0
(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.	
PUTNAM ASSET ALLOC CONS PORT FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
INVESCO	52	0
(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.	
INVESCO DEVELOPING MARKETS FUND 93-6305075	BASIS POINTS * PLAN ASSETS	

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
PUTNAM	52	0
(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.	
PUTNAM ASSET ALLOC GRWTH PORT FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN US SMALL COMPANY FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
RIDGEWORTH	52	0
(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.	
VIRTUS CEREDEx MID CP VAL EQ FD 95-6981193	BASIS POINTS * PLAN ASSETS	

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
VICTORY	52	0
(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.	
VICTORY INTEGRITY SMALL-CAP VAL FD 31-6364605	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
CALVERT	52	0
(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.	
CALVERT US LRG CAP CORE RESP IND FD 52-1233223	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
BLACKROCK	52	0
(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.	
BLACKROCK STRATEGIC GLOBAL BOND FD 13-3806694	BASIS POINTS * PLAN ASSETS	

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
FRANKLIN TEMPLETON	52	0
(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.	
TEMPLETON GLOBAL BOND FUND	BASIS POINTS * PLAN ASSETS	
59-6865210		
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MFS INVESTMENT MANAGEMENT	52	0
(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.	
MFS UTILITIES FUND	BASIS POINTS * PLAN ASSETS	
04-3158862		
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
PGIM INVESTMENTS	52	0
(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.	
PGIM TOTAL RETURN BOND FUND	BASIS POINTS * PLAN ASSETS	
22-3468527		

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
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2020 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2025 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2030 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	

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
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2035 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2040 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2045 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	

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
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2050 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT 2055 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
JP MORGAN	52	0
(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.	
JP MORGAN SMARTRETIREMENT INCM FUND 33-1043149	BASIS POINTS * PLAN ASSETS	

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
JOHN HANCOCK	52	0
(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.	
JHANCOCK3 DISCIPLINED VALUE FUND 04-3279774	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
T. ROWE PRICE	52	0
(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.	
T. ROWE PRICE HEALTH SCIENCES FUND 52-1952906	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
AMERICAN FUNDS	52	0
(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.	
AMER FUNDS EUROPACIFIC GROWTH FUND 95-1411037	BASIS POINTS * PLAN ASSETS	

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
FIDELITY ADVISOR	52	0
(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.	
FIDELITY ADVISOR TECHNOLOGY FUND 04-6444002	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
T. ROWE PRICE	52	0
(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.	
T. ROWE PRICE BLUE CHIP GROWTH FUND 52-1827505	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
VIRTUS MUTUAL FUNDS	52	0
(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.	
VIRTUS DUFF & PHELPS REAL EST SC FD 95-6981193	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	49	0
(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.	
MILLENNIUM TRUST COMPANY, LLC 36-4400066	REFERRAL FEE	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MFS INVESTMENT MANAGEMENT	52	0
(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.	
MFS INTERNATIONAL INTRINSIC VAL FD 04-3158862	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
PIMCO INCOME FUND 95-2632339	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0
(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.	
PIMCO INCOME FUND 95-2632339	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
MFS UTILITIES FUND 04-3158862	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
DAVIS FINANCIAL FUND 36-2926440	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0

(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.
DAVIS FINANCIAL FUND 36-2926440	BASIS POINTS * PLAN ASSETS

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0

(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.
PIMCO REAL RETURN FUND 95-2632339	BASIS POINTS * PLAN ASSETS

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN US EQUITY FUND 33-1043149	BASIS POINTS * PLAN ASSETS

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
GLOBAL RETIREMENT PARTNERS LLC	27	17890
(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.	
GREAT WEST LIFE & ANNUITY INSURANCE 84-0467907	PLAN RELATED EXPENSES	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	52	0
(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.	
MASSMUTUAL HIGH YIELD FUND 04-3520009	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
TEMPLETON GLOBAL BOND FUND 59-6865210	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	72	0
(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.	
MASSMUTUAL HIGH YIELD FUND 04-3520009	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
COLUMBIA MID CAP INDEX FUND 94-1687665	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
PGIM TOTAL RETURN BOND FUND 22-3468527	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
COLUMBIA DIVIDEND INCOME FUND 36-3376651	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
COLUMBIA LARGE CAP INDEX FUND 94-1687665	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
COLUMBIA SMALL CAP INDEX FUND 56-0906609	BASIS POINTS * PLAN ASSETS	

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
RESOURCES INVESTMENT ADVISORS INC	27	16491
(d) Enter name and EIN (address) of source of indirect compensation GREAT WEST LIFE & ANNUITY INSURANCE 84-0467907		
(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation. PLAN RELATED EXPENSES		
(a) Enter service provider name as it appears on line 2 MASSACHUSETTS MUTUAL LIFE INSURANCE 04-3512596		
(b) Service Codes (see instructions) 52		
(c) Enter amount of indirect compensation 0		
(d) Enter name and EIN (address) of source of indirect compensation MASSMUTUAL MID CAP GROWTH FUND 04-3512596		
(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation. BASIS POINTS * PLAN ASSETS		
(a) Enter service provider name as it appears on line 2 MASSACHUSETTS MUTUAL LIFE INSURANCE 04-3512596		
(b) Service Codes (see instructions) 60		
(c) Enter amount of indirect compensation 0		
(d) Enter name and EIN (address) of source of indirect compensation JP MORGAN US SMALL COMPANY FUND 33-1043149		
(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation. BASIS POINTS * PLAN ASSETS		

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	72	0
(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.	
MASSMUTUAL MID CAP GROWTH FUND 04-3512596	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
INVESCO DEVELOPING MARKETS FUND 93-6305075	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
INVESCO OPPENHEIMER DEVELOPING MARK 93-6305075	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
PUTNAM ASSET ALLOC BAL PRFL FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
PUTNAM ASSET ALLOC CONS PORT FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
VIRTUS CEREDX MID CP VAL EQ FD 95-6981193	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0
(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.	
PUTNAM ASSET ALLOC BAL PRFL FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0
(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.	
PUTNAM ASSET ALLOC CONS PORT FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
FIDELITY ADVISOR TECHNOLOGY FUND 04-6444002	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
JHANCOCK3 DISCIPLINED VALUE FUND 04-3279774	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
PUTNAM ASSET ALLOC GRWTH PORT FD 04-6746612	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0
(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.	
PUTNAM ASSET ALLOC GRWTH PORT FD 04-6746612	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
AMER FUNDS EUROPACIFIC GROWTH FUND 95-1411037	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
BLACKROCK STRATEGIC GLOBAL BOND FD 13-3806694	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
MFS INTERNATIONAL INTRINSIC VAL FD 04-3158862	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
T ROWE PRICE HEALTH SCIENCES FUND 52-1952906	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
VICTORY INTEGRITY SMALL-CAP VAL FD 31-6364605	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	63	0
(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.	
AMER FUNDS EUROPACIFIC GROWTH FUND 95-1411037	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	52	0
(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.	
MM S&P 500 INDEX FD(NORTHERN TRUST) 04-3410047	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	52	0
(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.	
MM S&P 500 INDEX FD(NORTHERN TRUST) 45-5349772	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	52	0
(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.	
MASSMUTUAL US GOVERNMENT MNY MKT FD 04-3212059	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
CALVERT US LRG CAP CORE RESP IND FD 52-1233223	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
JP MORGAN SMARTRETIREMENT 2020 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
JP MORGAN SMARTRETIREMENT 2025 FUND 33-1043149	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN SMARTRETIREMENT 2030 FUND 33-1043149	BASIS POINTS * PLAN ASSETS

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN SMARTRETIREMENT 2035 FUND 33-1043149	BASIS POINTS * PLAN ASSETS

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN SMARTRETIREMENT 2040 FUND 33-1043149	BASIS POINTS * PLAN ASSETS

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN SMARTRETIREMENT 2045 FUND 33-1043149	BASIS POINTS * PLAN ASSETS

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN SMARTRETIREMENT 2050 FUND 33-1043149	BASIS POINTS * PLAN ASSETS

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0

(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.
JP MORGAN SMARTRETIREMENT 2055 FUND 33-1043149	BASIS POINTS * PLAN ASSETS

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
JP MORGAN SMARTRETIREMENT INCM FUND 33-1043149	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
T. ROWE PRICE BLUE CHIP GROWTH FUND 52-1827505	BASIS POINTS * PLAN ASSETS	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
MASSACHUSETTS MUTUAL LIFE INSURANCE	60	0
(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.	
VIRTUS DUFF & PHELPS REAL EST SC FD 95-6981193	BASIS POINTS * PLAN ASSETS	

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
MASSACHUSETTS MUTUAL LIFE INSURANCE	72	0
(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.	
MASSMUTUAL US GOVERNMENT MNY MKT FD 04-3212059	BASIS POINTS * PLAN ASSETS	
(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:	DICICCO, GULMAN AND COMPANY LLP	b EIN:	04-3296226
c Position:	ACCOUNTANT		
d Address:	175 FEDERAL STREET, SUITE 200 BOSTON, MA 02110	e Telephone:	781-937-5300

Explanation: ACCOUNTANT MERGED WITH PKF O'CONNOR DAVIES, LLP EFFECTIVE 1/1/2022

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 H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2021 This Form is Open to Public Inspection
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For calendar plan year 2021 or fiscal plan year beginning 01/01/2021 and ending 12/31/2021		
A Name of plan ARROWSTREET INC. 401K PROFIT SHARING	B Three-digit plan number (PN) ►	001
C Plan sponsor's name as shown on line 2a of Form 5500 ARROWSTREET, INC.	D Employer Identification Number (EIN) 04-2323820	

Part I	Asset and Liability Statement
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1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash.....	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)	80451	82454
(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)	73466	57077
(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)		
(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)	19423452	22853627
(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)	1882686	1625945
(15) Other.....	1c(15)		

		(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:		
(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	21460055 24619103
Liabilities			
g	Benefit claims payable	1g	0
h	Operating payables	1h	
i	Acquisition indebtedness.....	1i	
j	Other liabilities.....	1j	
k	Total liabilities (add all amounts in lines 1g through 1j)	1k	0 0
Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	21460055 24619103

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.

		(a) Amount	(b) Total
Income			
a	Contributions:		
(1)	Received or receivable in cash from: (A) Employers	2a(1)(A)	82454
	(B) Participants	2a(1)(B)	706628
	(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)	789082
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)	5055
	(F) Other	2b(1)(F)	18503
	(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)	23558
(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)		
(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)		3376226
c Other income.....	2c		
d Total income. Add all income amounts in column (b) and enter total.....	2d		4188866
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers.....	2e(1)	1028373	
(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)		1028373
f Corrective distributions (see instructions).....	2f		
g Certain deemed distributions of participant loans (see instructions).....	2g		
h Interest expense.....	2h		
i Administrative expenses: (1) Professional fees.....	2i(1)	1445	
(2) Contract administrator fees.....	2i(2)		
(3) Investment advisory and management fees.....	2i(3)		
(4) Other.....	2i(4)		
(5) Total administrative expenses. Add lines 2i(1) through (4).....	2i(5)		1445
j Total expenses. Add all expense amounts in column (b) and enter total.....	2j		1029818
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d.....	2k		3159048
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: PKF O'CONNOR DAVIES, LLP

(2) EIN: 27-1728945

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, 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.

During the plan year:

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.).....

	Yes	No	Amount
4a		X	

	Yes	No	Amount
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.)			
4b		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.)			
4c		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.)			
4d		X	
e Was this plan covered by a fidelity bond?	X		1000000
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	
4f		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?			
4g		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?			
4h		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		
4i	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.)			
4j		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?			
4k		X	
l Has the plan failed to provide any benefit when due under the plan?			
4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
4m		X	
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.			
4n			
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 _____.			

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2021 This Form is Open to Public Inspection.
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For calendar plan year 2021 or fiscal plan year beginning 01/01/2021 and ending 12/31/2021

A Name of plan <u>ARROWSTREET INC. 401K PROFIT SHARING</u>	B Three-digit plan number (PN) ▶ <u>001</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>ARROWSTREET, INC.</u>	D Employer Identification Number (EIN) <u>04-2323820</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>04-1590850</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	

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
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9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box.....	☐ Increase	☐ Decrease	☐ Both	☐ No
--	-----------------------------------	-----------------------------------	-------------------------------	-----------------------------

Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.
----------------	---

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?	☐ Yes	☐ No
11 a Does the ESOP hold any preferred stock?	☐ Yes	☐ No
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.)	☐ Yes	☐ No
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?	☐ Yes	☐ No

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

Schedule R (Form 5500) 2021
v. 201209

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

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

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

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

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

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

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

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

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

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

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

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

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

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

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

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

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

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

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

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

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

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

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

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

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

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

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

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

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

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

- 14** Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:

a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment).....

14a

b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment).....

14b

c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment).....

14c

- 15** Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year.....

15a

b The corresponding number for the second preceding plan year

15b

- 16** Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year

16a

b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers.....

16b

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

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

- 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) through (c)

a Enter the percentage of plan assets held as:

Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:

☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?

☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): _____

- 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 _____

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

FINANCIAL STATEMENTS

DECEMBER 31, 2021 AND 2020

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

FINANCIAL STATEMENTS

DECEMBER 31, 2021 AND 2020

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** Certain schedules provided for in the regulations of the Employee Retirement Income Security Act of 1974 have been omitted as not required or not applicable.*

Independent Auditors' Report

To the Plan Administrator and Participants
Arrowstreet, Inc. 401(k) Profit Sharing Retirement Plan

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit of the 2021 Financial Statements

We have performed an audit of the financial statements of the Arrowstreet, Inc. 401(k) Profit Sharing Retirement Plan (the "Plan"), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 ("ERISA"), as permitted by ERISA Section 103(a)(3)(C) ("ERISA Section 103(a)(3)(C) audit"). The financial statements comprise the statement of net assets available for benefits as of December 31, 2021, and the related statement of changes in net assets available for benefits for the year then ended, and the related notes to the financial statements ("2021 Financial Statements").

Management, having determined it is permissible in the circumstances, has elected to have the audit of the 2021 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 audit need not extend to any statements or information related to assets held for investment of the Plan ("investment information") by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA ("qualified institution").

Management has obtained certifications from qualified institutions as of and for the year ended December 31, 2021, stating that the certified investment information, as described in Note 3 to the financial statements, is complete and accurate.

Opinion on the 2021 Financial Statements

In our opinion, based on our audit and on the procedures performed as described in the Auditors' Responsibilities for the Audit of the 2021 Financial Statements section:

- the amounts and disclosures in the accompanying 2021 Financial Statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

PKF O'CONNOR DAVIES, LLP

155 Federal Street, Suite 200, Boston, MA 02110 | Tel: 781.937.5300 | Fax: 781.937.5100 | pkfod.com

PKF O'Connor Davies, LLP is a member firm of the PKF International Limited network of legally independent firms and does not accept any responsibility or liability for the actions or inactions on the part of any other individual member firm or firms.

- the information in the accompanying 2021 Financial Statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion on the 2021 Financial Statements

We conducted our audit 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 2021 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 2021 Financial Statements

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

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

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

Auditors’ Responsibilities for the Audit of the 2021 Financial Statements

Except as described in the Scope and Nature of the ERISA Section 103(a)(3)(C) Audit of the 2021 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 include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audit 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 2021 financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

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

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

Other Matters

2021 Supplemental Schedule Required by ERISA

The supplemental schedule of Form 5500 - Schedule H, Part IV, Line 4(i) - Schedule of Assets (Held at End of Year) is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedule, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in

the supplemental schedule that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

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

In our opinion

- the form and content of the supplemental schedule, other than the information in the supplemental schedule that agreed to or is derived from the certified investment information, is presented, in all material respects, in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.
- the information in the supplemental schedule 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).

Auditors' Report on the 2020 Financial Statements

We were engaged to audit the 2020 financial statements of the Plan. As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA, the plan administrator instructed us not to perform and we did not perform any auditing procedures with respect to the information certified by a qualified institution. In our report dated October 11, 2021, we indicated that (a) because of the significance of the information that we did not audit, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion and accordingly, we did not express an opinion on the 2020 financial statements, and (b) the form and content of the information included in the 2020 financial statements other than that derived from the certified information were presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

PKF O'Connor Davies, LLP

Boston, Massachusetts
October 6, 2022

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

December 31,	2021	2020
Assets:		
Investments:		
Mutual funds, at fair value	\$ 22,853,627	\$ 19,423,452
Guaranteed interest account, at contract value	<u>1,625,945</u>	<u>1,882,686</u>
Total investments	<u>24,479,572</u>	<u>21,306,138</u>
Receivables:		
Notes receivable from participants	57,077	73,466
Employer profit sharing contribution	<u>82,454</u>	<u>80,451</u>
Total receivables	<u>139,531</u>	<u>153,917</u>
Net assets available for benefits	<u><u>\$ 24,619,103</u></u>	<u><u>\$ 21,460,055</u></u>

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

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

For the year ended December 31,	2021
Additions to net assets:	
Investment income:	
Net appreciation in fair value of investments	\$ 3,376,226
Interest income from guaranteed interest account	<u>18,503</u>
Total investment income	<u>3,394,729</u>
Interest income on notes receivable from participants	<u>5,055</u>
Contributions:	
Participant deferrals	706,627
Employer profit sharing	<u>82,454</u>
Total contributions	<u>789,081</u>
Total additions to net assets	<u>4,188,865</u>
Deductions from net assets:	
Benefits paid to participants	1,028,372
Administrative expenses	<u>1,445</u>
Total deductions from net assets	<u>1,029,817</u>
Net increase in net assets available for benefits	3,159,048
Net assets available for benefits, beginning of year	<u>21,460,055</u>
Net assets available for benefits, end of year	<u><u>\$ 24,619,103</u></u>

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

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 1 - Description of the Plan

The following description of the Arrowstreet, Inc. 401(k) Profit Sharing Retirement Plan (the “Plan”) is provided for general information purposes only. More complete information regarding the Plan’s provisions may be found in the Plan document.

General

The Plan is a defined contribution profit sharing plan with a cash deferred arrangement covering all employees of Arrowstreet, Inc. (the “Employer”), except for non-resident aliens who have not earned income from sources within the United States and those employees whose employment is governed by a collective bargaining agreement (“Participants”). Employees may enter the Plan on the first day of employment.

Reliance Trust Company (the “Trustee”) provides trustee and custodial services to the Plan. Massachusetts Mutual Life Insurance Company (“Mass Mutual”) provided recordkeeping and served as the insurance company for the plan through December 31, 2020. On December 31, 2020, Empower Retirement LLC acquired the retirement business of Mass Mutual and as of this date, all material provided by Mass Mutual will be considered to be provided by Great-West Life & Annuity Insurance Company, an affiliate of Empower Retirement LLC, (“Great-West”). Mass Mutual and Great-West herein are referred to as the Insurance Company. As of December 31, 2020, Great-West provides asset custodian services for the Plan and Empower Retirement LLC provides recordkeeping services for the Plan.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”). All investments are Participant-directed.

Plan Administration

The Employer is the plan administrator and has the authority to appoint person(s) or entities to carry out the operation of the Plan. Individual Participant accounts may be charged with an allocation of administrative expenses, if not paid by the Employer. Individual Participant accounts are charged directly for loan recordkeeping, if applicable.

Participant Contributions

Each year, Participants may defer up to 100% of their eligible compensation as defined by the Plan, up to a dollar limit established under the Internal Revenue Code (the “Code”). Participants may make pre-tax or Roth contributions to their accounts. Participants who have attained age 50 before the end of the Plan year are eligible to make catch-up contributions. Participants may also contribute amounts representing distributions from other qualified plans (“Participant Rollovers”).

Employees, upon eligibility to participate in the Plan, are automatically enrolled to defer 5% of their eligible compensation, as defined. A Participant may choose not to defer or may choose a different percentage once enrolled. A Participant’s deferral rate is automatically increased on an annual basis by one percentage point up to a maximum of 8%. Automatic enrollment deferrals are invested in the applicable lifecycle fund based on the employee’s birth date. The automatic pre-tax deferral election, automatic deferral escalation, and the default investment option remain in effect until the Participant changes them.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 1 - Description of the Plan (Continued)

Employer Contributions

Employer Matching Contributions

The Employer may make matching contributions equal to a discretionary percentage of the Participants' elective deferral as determined by the Board of Directors annually. The annual maximum employer matching contribution is \$2,000 per Participant. To be eligible for employer matching contributions Participants must have attained twenty-one years of age, completed at least one year of service (defined as twelve consecutive months worked) and be employed by the Employer on the last day of the Plan year unless their employment has terminated due to death, total and permanent disability, or retirement, as defined by the Plan. For the year ended December 31, 2021, the Employer elected not to make an employer matching contribution.

Employer Profit Sharing Contributions

The Employer may elect to make a discretionary profit sharing contribution as determined by the Board of Directors annually. To be eligible for Employer profit sharing contributions Participants must have attained twenty-one years of age, completed at least one year of service (defined as twelve consecutive months worked) and be employed by the Employer on the last day of the Plan year, unless their employment has terminated due to death, total and permanent disability, or retirement, as defined by the Plan. Profit sharing contributions are allocated among all eligible Participants based on employee classification, as defined in the Plan. For the year ended December 31, 2021, the Employer elected to make a discretionary profit sharing contribution in the amount of \$82,454. The amount was funded to the Plan during 2022.

Participant Accounts

Each Participant's account is credited with the Participant's deferral contributions, their respective employer contributions, an allocation of the Plan's investment earnings and losses, and is charged with an allocation of certain administrative expenses, if applicable. Allocations are based on Participants compensation or account balances, as defined. The benefit to which a Participant is entitled is the benefit that can be provided from the Participant's vested account balance.

Vesting

Participants are immediately vested in all contributions and the investment earnings thereon.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 1 - Description of the Plan (Continued)

Notes Receivable from Participants

Subject to approval by the plan administrator, Participants may borrow from their vested accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50% of their vested account balance, both reduced by any outstanding loan balance. Loan terms range from one to five years (or longer for the purchase of a primary residence). A Participant may have up to two loans outstanding at a time. Loans are secured by the vested balance in the Participant's account and bear interest at a rate commensurate with local prevailing rates as determined by the plan administrator. Loans are considered due and payable upon termination of employment. Principal and interest are paid ratably through payroll deductions. If a Participant ceases to make loan repayments and the plan administrator deems the loan to be in default, the Participant's loan balance is reduced, and a benefit payment is recorded as soon as a distributable event occurs. Interest rates on loans outstanding at December 31, 2021 and 2020 range from 5.25% to 7.00%, and mature at various dates through December 2031.

Payment of Benefits

Participants are entitled to their vested account balance upon death, disability, retirement, or termination of employment. A Participant may elect to receive either a lump-sum amount equal to the value of his or her account or installment payments of such amounts, frequency, and duration as the Participant or beneficiary may elect. The payment can either be a cash distribution to the Participant or beneficiary, subject to income tax withholdings, a tax-free rollover into an Individual Retirement Account ("IRA") or another qualified plan. Upon termination, if a Participant's account balance is less than \$1,000, the plan administrator, after notification, may distribute to the Participant his or her entire account balance. If a balance is less than \$5,000 but greater than \$1,000 the plan administrator, after notification, may deposit the balance into an individual retirement account.

In-service withdrawals are allowed from a Participant's contribution and rollover accounts at any time. In-service withdrawals upon reaching age 59 ½ are allowed from all Participant's accounts. Hardship withdrawals may be taken from the Participant's elective deferral account and rollover account if certain criteria are met.

Forfeited Accounts

A Participant who leaves the employment of the Employer forfeits any non-vested balance. Non-vested balances relate to employer contributions from prior periods. Forfeited balances of terminated Participants' accounts are first used to pay administrative expenses and then to reduce Employer contributions in the year of forfeiture. At December 31, 2021 and 2020, unused forfeiture balances amounted to \$878.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 1 - Description of the Plan (Continued)

Administrative Expenses

Expenses resulting from participant loans, certain investment fees, and fees related to distributions are deducted directly from participant accounts. All other administrative expenses are paid by the Employer.

Note 2 - Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements have been prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America ("GAAP").

Use of Estimates

The preparation of financial statements in conformity with GAAP requires plan management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from these estimates.

Investments, Investment Valuation, and Income Recognition

Investments are reported at fair value except for the fully benefit-responsive investment contract, which is reported at contract value, see Note 5 for discussion of the investment contract. 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. See Note 4 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Net appreciation in fair value of investments includes the Plan's gains and losses on investments bought and sold as well as held during the year. Interest income is recognized on the accrual basis of accounting.

Notes Receivable from Participants

Notes receivable from Participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income on notes receivable from Participants is recognized on the accrual basis of accounting. Related fees are recorded as administrative expenses and are expensed when incurred. No allowance for credit losses has been recorded as of December 31, 2021 and 2020.

Payments of Benefits

Benefits payments to participants are recorded during the period in which the Participant is paid.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 3 - Information Prepared and Certified by the Plan's Trustee and Insurance Company

The Plan administrator has elected the method of annual reporting compliance permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Accordingly, Great-West and Reliance Trust Company have certified that the following data included in the accompanying financial statements and supplemental schedule is completed and accurate:

- Investments and notes receivable from participants, as showing in the statements of net assets available for benefits as of December 31, 2021 and 2020.
- Investment income and interest income on notes receivable from participants, as shown in the statement of changes in net assets available for benefits for the year ended December 31, 2021.
- Form 5500 - Schedule H, Part IV, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2021.

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 and supplemental schedule.

Note 4 - Fair Value Measurements

Under GAAP, a framework for measuring fair values has been established to clarify the definition of those fair values and expand disclosures about assets and liabilities measured at 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 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

The three levels of the fair value hierarchy described under GAAP are 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; and 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.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 4 - Fair Value Measurements (Continued)

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 used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

There have been no changes in the methodologies used at December 31, 2021 and 2020. The following is a description of the valuation methodologies used for assets measured at fair value.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

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 Plan 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.

The following tables sets forth by level, within the fair value hierarchy, the Plan's investments at fair value as of December 31, 2021 and 2020:

Investments at Fair Value as of December 31, 2021

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Mutual funds	<u>\$ 22,853,627</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 22,853,627</u>

Investments at Fair Value as of December 31, 2020

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Mutual funds	<u>\$ 19,423,452</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 19,423,452</u>

Note 5 - Group Annuity Contract with Insurance Company

The Plan has a fully benefit-responsive group annuity contract ("GAC") with the Insurance Company. The Insurance Company maintains the contributions in a general account. The account is credited with earnings on the underlying investments and charged for Participant withdrawals and administrative expenses. The GAC issuer is contractually obligated to repay the principal and a specified interest rate that is guaranteed to the Plan. Participants invest in the GAC through a guaranteed interest account.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 5 - Group Annuity Contract with Insurance Company (Continued)

Since the GAC is fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the GAC. Contract value, as reported to the Plan by the Insurance Company, represents contributions made under the contract, plus earnings, less Participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The average yield and crediting interest rate for the year ended December 31, 2021 was approximately 1.05%. The crediting interest rate is based on a formula agreed upon with the Trustee. Such interest rates are reviewed on an annual basis for resetting.

Certain events limit the ability of the Plan to transact at contract value with the Insurance Company. Such events include the following: (i) amendments to the Plan documents (including complete or partial plan termination or merger with another plan), (ii) changes to the Plan's prohibition on competing investment options or deletion of equity wash provisions, (iii) bankruptcy of the plan sponsor or other plan sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause significant withdrawal from the Plan, or (iv) the failure of the trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The plan administrator does not believe that any events which would limit the Plan's ability to transact at contract value with plan Participants are probable of occurring.

In addition, certain events allow the issuer to terminate the contract with the Plan and settle at an amount different from contract value. Such events include (i) certain instances of a participant termination of employment as listed in the contract, (ii) removal from the Plan of one or more groups or classifications of participants, (iii) partial or complete plan termination, or (iv) plan disqualification.

Note 6 - Risk and Uncertainties

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

Note 7 - Party-In-Interest Transactions

Plan investments include the guaranteed interest account and five mutual funds managed by MassMutual Retirement Services, an affiliate of Great-West, and therefore, these transactions qualify as exempt party-in-interest transactions as defined by ERISA. Administrative fees of \$1,445 were paid to Great-West during 2021. Notes receivable from Participants also qualify as exempt party-in-interest transactions as defined by ERISA. The employer pays directly for any other fees related to the Plan's operations.

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 8 - Plan Termination

Although it has not expressed any intent to do so, the Employer has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, any unallocated assets of the Plan shall be allocated to Participant accounts and distributed in such a manner as the employer may determine.

Note 9 - Tax Status

The underlying volume submitter profit sharing plan had received an opinion letter from the Internal Revenue Service (“IRS”) dated March 31, 2014, in which the IRS stated that the form of the plan is qualified under Section 401(a) of the Code, is exempt from federal income taxes under Section 501(a) of the Code and that the plan, as then designed, was in compliance with the applicable requirements of the Code. Any employer adopting this form of the plan will be considered to have a plan qualified under Section 401(a) of the Code. The Plan has been amended since receiving the opinion letter; however, the plan administrator believes the Plan is currently designed and being operated in compliance with the applicable requirements of the Code and that the Plan is qualified and the related trust is tax-exempt as of the date of this report.

GAAP requires plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the organization has taken an uncertain position that more likely than not would not be sustained upon examination by the taxing authorities. It is the Plan’s policy to account for any uncertainties as described under the income tax laws. Under the income tax laws, the tax-exempt status of an entity is considered a tax position. No such uncertain tax positions have been recognized by the Plan.

The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The plan administrator believes it is no longer subject to income tax examinations for years prior to 2018.

Note 10 - Subsequent Events

The Plan administrator has evaluated subsequent events through October 6, 2022, the date the financial statements were available to be issued, and determined that, except as disclosed in Note 1, there have been no subsequent events, that would require recognition in, or disclosure in the notes to, the financial statements.

SUPPLEMENTAL SCHEDULE

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

FORM 5500 - SCHEDULE H, PART IV, LINE 4(i) -
SCHEDULE OF ASSETS (HELD AT END OF YEAR)
DECEMBER 31, 2021

EIN: 04-2323820

Plan No. 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment	(d) Cost	(e) Current value
	T.Rowe Price Blue Chip Growth Fund	Mutual Fund	**	\$ 2,953,026
	Fidelity Advisor Tech Fund	Mutual Fund	**	2,041,721
	MassMutual S&P 500 Index Fund (Northern Trust)	Mutual Fund	**	1,816,160
	Putnam Asset Allocation: Growth Portfolio Fund	Mutual Fund	**	1,778,641
	JPMorgan SmartRetirement 2045 Fund	Mutual Fund	**	1,296,375
	MassMutual Selected Mid Cap Growth Equity II Fund	Mutual Fund	**	1,140,140
	Columbia Dividend Income Fund	Mutual Fund	**	1,027,704
	JPMorgan SmartRetirement 2035 Fund	Mutual Fund	**	870,257
	Putnam Asset Allocation: Balanced Portfolio Fund	Mutual Fund	**	858,600
	Columbia Small Cap Index Fund	Mutual Fund	**	791,953
	JPMorgan SmartRetirement 2050 Fund	Mutual Fund	**	724,156
	T. Rowe Price Health Sciences Fund	Mutual Fund	**	670,043
	JPMorgan US Equity Fund	Mutual Fund	**	663,841
	MFS International Intrinsic Value Fund	Mutual Fund	**	629,043
	JPMorgan SmartRetirement 2030 Fund	Mutual Fund	**	596,345
	JPMorgan SmartRetirement 2055 Fund	Mutual Fund	**	579,130
	American Funds EuroPacific Growth Fund	Mutual Fund	**	551,200
	JPMorgan US Small Company Fund	Mutual Fund	**	482,003
	JPMorgan SmartRetirement 2040 Fund	Mutual Fund	**	474,525
	PIMCO Income Fund	Mutual Fund	**	463,494
	Virtus Ceredex Mid-Cap Value Equity Fund	Mutual Fund	**	365,487
	PGIM Total Return Bond Fund	Mutual Fund	**	355,007
	PIMCO Real Return Fund	Mutual Fund	**	271,707
	MassMutual S&P Mid Cap Index Fund	Mutual Fund	**	266,110
	MassMutual Premier High Yield Fund (Barings)	Mutual Fund	**	261,819
	Virtus Duff & Phelps Real Estate Securities Fund	Mutual Fund	**	250,469
	Invesco Oppenheimer Developing Markets Fund	Mutual Fund	**	160,854
	Calvert US Large Cap Core Responsible Index Fund	Mutual Fund	**	148,250
	BlackRock Strategic Global Bond Fd	Mutual Fund	**	117,320
	Victory Integrity Small-Cap Value Fund	Mutual Fund	**	78,454
	Vanguard Energy Fund	Mutual Fund	**	78,185
	MFS Utilities Fund	Mutual Fund	**	48,137
	Davis Financial Fund	Mutual Fund	**	30,663
	MassMutual US Government Money Market Fund	Mutual Fund	**	12,808
				<u>22,853,627</u>
	MassMutual Life Insurance Company Guaranteed			
*	Interest Account	Guaranteed Interest Account	**	1,625,945
*	Notes Receivable from Participants	Interest rates (5.25% - 7.00%)	-0-	<u>57,077</u>
				<u>\$ 24,536,649</u>

* Represents party-in-interest as defined by ERISA.

** Cost information is not required for participant-directed investments and therefore has not been included.

See independent auditors' report

ARROWSTREET, INC.
401(k) PROFIT SHARING RETIREMENT PLAN

FORM 5500 - SCHEDULE H, PART IV, LINE 4(i) -
SCHEDULE OF ASSETS (HELD AT END OF YEAR)
DECEMBER 31, 2021

EIN: 04-2323820

Plan No. 001

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	Columbia Dividend Income Fund	Mutual Fund	**	1,027,704
	JPMorgan SmartRetirement 2035 Fund	Mutual Fund	**	870,257
	Putnam Asset Allocation: Balanced Portfolio Fund	Mutual Fund	**	858,600
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	JPMorgan SmartRetirement 2050 Fund	Mutual Fund	**	724,156
	T. Rowe Price Health Sciences Fund	Mutual Fund	**	670,043
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	JPMorgan SmartRetirement 2055 Fund	Mutual Fund	**	579,130
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	PIMCO Income Fund	Mutual Fund	**	463,494
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	Virtus Duff & Phelps Real Estate Securities Fund	Mutual Fund	**	250,469
	Invesco Oppenheimer Developing Markets Fund	Mutual Fund	**	160,854
	Calvert US Large Cap Core Responsible Index Fund	Mutual Fund	**	148,250
	BlackRock Strategic Global Bond Fd	Mutual Fund	**	117,320
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	Davis Financial Fund	Mutual Fund	**	30,663
	MassMutual US Government Money Market Fund	Mutual Fund	**	12,808
				<u>22,853,627</u>
	MassMutual Life Insurance Company Guaranteed			
*	Interest Account	Guaranteed Interest Account	**	1,625,945
*	Notes Receivable from Participants	Interest rates (5.25% - 7.00%)	-0-	<u>57,077</u>
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See independent auditors' report