ERISA 408(b)(2) Disclosure Retirement Plans Serviced by Putnam May 2025

A. Background

Section 408(b)(2) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA") requires a "covered service provider" to a retirement plan ("Plan") to disclose the compensation that it receives in connection with providing services to the Plan. This report is designed to meet Putnam's disclosure obligations under ERISA Section 408(b)(2).

Putnam is an indirect, wholly-owned subsidiary of Franklin Resources, Inc. ("Franklin Resources"). Franklin Resources is a global investment management organization operating, together with its subsidiaries, as Franklin Templeton.

B. Explanation of Services

As described below, Putnam provides services to your Plan through several of its affiliates.

Putnam Investor Services, Inc. provides administrative services for the Plan. The administrative services generally include: establishing and maintaining an account for each individual enrolled in the Plan; crediting contributions for allocation to participant accounts; processing investment transfers or exchanges; processing distributions to participants; performing income tax withholding and reporting for distributions.

Putnam Fiduciary Trust Company, LLC ("PFTC") provides non-discretionary directed trustee and custodial services for the Plan. As trustee, PFTC is responsible for maintaining custody of the Plan assets, for investing those assets as directed by participants or the Plan sponsor, and for making distributions to payees as directed by the Plan sponsor.

C. Fiduciary Status

PFTC is a fiduciary in its capacity as directed trustee for the Plan.

D. Compensation

<u>Administration Fees</u>. Account maintenance fees are annual fees that are deducted directly from each participant's account in the following amounts:

- Profit sharing or money purchase pension plans -- \$20 per participant
- 401(k) plans -- \$35 per participant

If your plan includes both profit sharing contributions and elective deferrals, both the \$20 and the \$35 fees will apply.

<u>Delivery Charges</u>. There is also an overnight mail delivery charge of \$20 that will be deducted from a participant's account or deducted from the amount of the distribution (as elected by the participant) if a participant elects to receive a distribution via overnight delivery.

<u>Bank Account Earnings</u>. Putnam and its affiliates may earn additional compensation in the form of "float" (income earnings or bank fee credits) generated from investors' balances in the Putnam bank accounts used for subscriptions and redemptions for the Putnam mutual

funds. The item numbers in the description below correspond to the disclosure requirements listed under the "Obligations of Service Providers" as set forth in the Department of Labor's *Field Assistance Bulletin 2002-3*.

1. Disclose the specific circumstances under which float will be earned and retained.

All plan contributions, distributions, and transfers to or from the Putnam mutual funds are initially deposited in one or more demand deposit accounts ("DDA"). The funds remain in the DDA only to the extent needed to process the particular transaction, as described in items 2 and 3 below.

Depending on the size of the overall balance in the DDA at the end of each business day and the current interest rate environment, a portion of the balance may be invested on an overnight basis in a money market mutual fund or other short term investment vehicle. The balance not invested remains in the DDA as a "buffer" for subscription/redemption activity. Balances invested overnight generate a short-term investment return.

Under current practice, any balances in the DDA that are not invested overnight generate bank fee credits, which are used to offset general banking expenses of Putnam. Accordingly, to the extent the float reduces these expenses, it forms part of the compensation payable to Putnam or its affiliates for the services it provides.

2. In the case of float on contributions pending investment direction, establish, disclose and adhere to specific time frames within which cash pending investment direction will be invested following direction from the plan fiduciary, as well as any exceptions that might apply.

If a purchase order is placed via a direct trade or the National Securities Clearing Corporation ("NSCC"), the transaction receives the share price for the day on which the order is placed, but the settlement with the mutual fund generally occurs on the following business day. This means that the funds usually remain in the DDA for one business day and float is earned for that time period. If the purchase order is placed through the Defined Contribution Clearing and Settlement ("DCC&S") system, the funds generally do not generate float, because the funds and purchase order are transmitted to the mutual fund on the same day. In certain cases, direct orders may generate float for several days for trades settling on a delayed basis.

Putnam agrees to adhere to the foregoing procedures.

3. In the case of float on distributions, disclose when the float period commences (e.g., the date the check is requested, the date the check is written, the date the check is mailed) and ends (the date the check is presented for payment). Also disclose, and adhere to, time frames for mailing and any other administrative practices that might affect the duration of the float period.

If a redemption or transfer is made by wire or NSCC, there is no float because Putnam sends the funds on the same day as the settlement. Transactions via ACH typically generate one day of float. If a redemption or transfer is made by check, funds remain in the DDA until the check is presented for payment, which can be an extended period of time if the shareholder has an undeliverable address or fails to cash the check. Float generated in these circumstances may be credited back to the mutual funds, rather than retained by Putnam. In certain other cases, direct orders may generate float for several days for trades settling on a delayed basis.

4. Disclose the rate of the float or the specific manner in which such rate will be determined. For example, earnings on cash pending investment and earnings on uncashed checks are generally at a money market interest rate.

Amounts that are invested on an overnight basis are generally invested in a money market mutual fund or similar investment vehicle. Investment returns are generally at money market rates.

Under current practice, any balances in the DDA that are not invested overnight do not earn explicit interest or other amounts; instead, the float is used to offset general banking expenses of Putnam based on a "credit" rate set by the bank holding the account. Depending on current interest rates, credits may be higher and lower than overnight cash returns, generally by a small margin (for example, rates may be based on a 3-month Treasury Bill rate after deducting a margin for bank capital requirements).

For information about the most recent returns and any investment vehicles used, as well as any relevant credit rates, please contact Putnam.

Soft Dollar Arrangements. Putnam, consistent with the safe harbor provisions of Section 28(e) under the Securities Exchange Act of 1934, obtains "research" from broker-dealers ("proprietary research") or third parties paid by broker-dealers ("third-party research") using commissions generated by security trades on behalf of clients. At present, Putnam generally does not use "soft dollars" to obtain "brokerage services." The research so obtained includes: economic analysis, investment research, industry and company reviews, statistical information, market data, evaluations of investments, recommendations as to the purchase and sale of investments, access to company management, attendance at industry seminars, and performance measurement services. Any given broker-dealer or third-party research firm may provide Putnam with one or more of the above categories of research, and Putnam may acquire different research services from a firm over different periods. With the exception of market data, which is generally obtained as third-party research, there generally is no categorical distinction between third-party research and proprietary research. Third-party research may be provided by firms that are registered broker dealers but with whom Putnam does not trade. For additional information regarding soft dollars and/or brokerage and research services, please refer to the mutual fund's SAI (including the section in Part II titled "Management").

Below is a list of the top 20 third-party and proprietary research providers from whom Putnam received research in 2024. The research was not provided to Putnam with respect to any specific Putnam investment product or retirement plan client and, if applicable, is generally not provided in relation to fixed income transactions. As a result, it is impracticable to provide a reasonable estimate of the value of the services received applicable to any specific plan. Putnam received research from other providers in 2024 which was of insubstantial value with respect to any plan and therefore not provided below.

Top 20 proprietary research providers for 2024	Top 20 third-party research providers for 2024
Barclays	Axioma
Bank of America Merrill	Bernstein
Citigroup	Bloomberg
Cowen & Co.	Bank of America Merrill

Evercore ISI	Citigroup
Exane BNP Paribas	Coleman Research
Goldman Sachs	CoStar
Jefferies & Co.	Deutsche Bank
JP Morgan	Empirical
Mizuho Securities	Gerson Lehrman
Morgan Stanley	Goldman Sachs
Piper Sandler	Jeffries & Co.
Raymond James & Associates	JP Morgan
RBC Capital Markets	Nomura/Instinet
Robert W. Baird	Refinitiv (RKIM) (formerly Thomson Reuters)
Stephens Inc.	Robert W. Baird
Stifel Nicolaus	Sustainalytics
UBS	UBS
Wells Fargo Capital Markets	Wolfe Research
William Blair & Co.	Yipit, LLC

For future changes to this list, please refer to the most recent Schedule C Disclosure provided by Putnam.

Gifts and Entertainment. Putnam may receive indirect compensation from parties other than the Plan or the Fund in connection with managing the Fund. Putnam employees, including portfolio managers, may receive limited gifts and entertainment from third parties. Under Putnam's policies and procedures, any gifts and entertainment must be of a reasonable value so they do not influence the nature of the investment advice given to clients, the selection of broker-dealers to execute portfolio trades, or other business decisions.

Investment Fees. Each mutual fund included in the Plan has various fees and expenses that are included in its expense ratio. As part of the expense ratio, Putnam Investment Management, LLC collects the management fees for managing the assets in the mutual fund. Other fees that are included in the expense ratio may be paid to a Putnam company (including 12b-1 fees and shareholder servicing fees, described below) or to other service providers such as auditors and legal counsel. Please see the sections titled "404(a) Mutual Fund Chart" and "Annual Reports, Prospectuses, SAIs" and www.putnam.com/retirement/fee-disclosure for the expense ratio for each of the Putnam funds available under your Plan.

Termination Fee. There is no fee for termination.

E. Compensation Paid Among Related Parties

Putnam is part of a large group of related companies. The following entities are affiliates of Putnam and they may receive compensation in connection with providing services to the Plan.

- Putnam Investment Management, LLC
- Putnam Investor Services, Inc.

- Putnam Retail Management, LP
- Putnam Fiduciary Trust Company, LLC

Putnam Retail Management receives 12b-1 fees from the Putnam mutual funds and generally passes these on to a Plan's broker-dealer. Additionally, if there is a sales charge, Putnam Retail Management generally passes on a substantial portion of the sales charges it receives to certain broker-dealers for sales of shares and the maintenance of shareholder accounts. However, Putnam Retail Management would retain all sales charges and 12b-1 distribution fees for accounts with no assigned dealer. In addition, Putnam Retail Management retains 12b-1 fees on some share classes to compensate it for commissions paid to a plan broker.

Putnam Investor Services, Inc. acts as servicing agent for the Putnam mutual funds, for which it receives fees that are paid monthly by the fund as an expense of all its shareholders. Please see each Putnam mutual fund's SAI for more information on the servicing fees paid to Putnam Investor Services, Inc.

All of the above fees except sales charges are included in the total annual operating expenses for each fund. For more information, please refer to the funds' prospectuses, statements of additional information, and annual reports.

F. Investment Disclosures

The table below provides a guide for locating additional information for each Putnam fund. For access to the current versions of the statutory prospectuses and additional fee disclosure information referenced in this report, please visit www.putnam.com/retirement/fee-disclosure

Investment Information	Where can you find it?
The name of the mutual fund.	The name of the fund is on the front cover of the statutory prospectus.
The category of the mutual fund.	The "Investment Category" of the fund is on the front cover of the statutory prospectus.
The average annual total return of the mutual fund for 1, 5, and 10-calendar year periods (or for the life of the alternative, if shorter).	Please refer to the section titled "Your fund's expenses" of the fund's Annual Report.
The name and returns of an appropriate broad based benchmark over the same 1, 5, and 10-calendar year periods (or for the life of the alternative, if shorter) as above.	Please refer to the section titled "Your fund's expenses" of the fund's Annual Report.
Updated annual total return of the mutual fund for 1, 5, and 10-periods (or for the life of the alternative, if shorter) for the most recently completed calendar quarter .	Please refer to the section titled "Your fund's expenses" of the fund's Annual Report.

The amount and description of each shareholder type fees (fees charged against investment – such as commissions, sales loads, sales charges, redemption fees, surrender charges, exchange fees, account fees and purchase fees, which are not included in the total annual operating expenses).	The sub-sections titled "Shareholder fees" in the "Fund summary" section; "Initial sales charges for class A shares" in the "how do I buy fund shares?" section; and "Deferred sales charges for class B, class C and certain class A shares" in the "How do I sell or exchange fund shares?" section.
A description of any restriction or limitation that may be applicable to a purchase, transfer or withdrawal of the investment in whole or in part (such as round trip, equity wash, or other restrictions).	The section titled "Policy on excessive short-term trading" in the fund's statutory prospectus.
Total annual operating expenses of the mutual fund.	Please refer to the section titled "Your fund's expenses" of the fund's Annual Report.
Total annual operating expenses of the mutual fund for a one year period expressed as a dollar amount for a \$1,000 investment.	Please refer to the section titled "Your fund's expenses" of the fund's Annual Report.
Name of the issuer of the mutual fund.	The name of the fund is on the front cover of the statutory prospectus.
The mutual fund's objectives or goals .	The sub-section titled "Goal" in the "Fund summary" section of the fund's statutory Prospectus.
The mutual fund's principal strategies and risks.	The section titled "What are the fund's main investment strategies and related risks?" of the statutory prospectus.
The mutual fund's portfolio turnover rate .	The sub-section titled "Portfolio turnover" in the "Fund summary" section of the fund's statutory prospectus.

G. Questions

If you have any additional questions regarding the fees associated with your plan or the information in this report, please contact Putnam Investments at 1-800-662-0019.