



Pension Reserves Investment Management Board

To: All Retirement Systems
From: PRIM Client Services
Subject: 2024 GASB 67 and 68 Information
Date: March 20, 2025

We are providing information for your use in complying with the financial reporting and disclosure requirements of GASB 67 and GASB 68. Enclosed, please find:

- The calendar 2024 money-weighted IRR report for your investments in the PRIT Fund. This return was generated by our custodian bank based upon your investments in PRIT. If you have investments outside of the PRIT Fund, you will need to calculate the money-weighted return for your fund inclusive of those other assets.
- A report of cash flows and valuations for your investments in the PRIT Fund for calendar year 2024.
- A memo from PRIT's asset allocation consultant (NEPC) outlining the PRIT Fund target asset allocation and expected rates-of-return as of 12/31/2024, along with a narrative description of key inputs that underlie return assumptions.
- The PRIT Fund actual asset allocation as of 12/31/2024.
- A memo from PRIT's asset allocation consultant (NEPC) outlining the PRIT Fund target asset allocation and expected rates-of-return as of February 2025, along with a narrative description of key inputs that underlie return assumptions.

If you have any questions, please contact PRIM using the client service email:

clientservice@mapension.com

Deborah B. Goldberg, Treasurer and Receiver General, Chair
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer

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Structure	Account/Security Id	Return Type	Market Value	1 Year - IRR
Prim - Melrose RB	PRMF99600002	TOTAL NET OF FEES	123,562,834.21	8.99

Source Account Number	Source Account Name	Reported Date	Mellon Security ID	Asset Class	Tax Code Description	Trans. Code	Shares/Par	Base Txn Amount
PRMF99600002	PRIM-MELROSE RB	1/2/2024	996104956	Cash Fund III	BUY	B	945,448.240	-945,448.24
PRMF99600002	PRIM-MELROSE RB	2/1/2024	996104956	Cash Fund III	BUY	B	953,187.510	-953,187.51
PRMF99600002	PRIM-MELROSE RB	3/1/2024	996104956	Cash Fund III	BUY	B	953,092.290	-953,092.29
PRMF99600002	PRIM-MELROSE RB	3/4/2024	996104956	Cash Fund III	BUY	B	7.050	-7.05
PRMF99600002	PRIM-MELROSE RB	4/1/2024	996104956	Cash Fund III	BUY	B	952,187.580	-952,187.58
PRMF99600002	PRIM-MELROSE RB	4/3/2024	996104956	Cash Fund III	BUY	B	7.030	-7.03
PRMF99600002	PRIM-MELROSE RB	5/1/2024	996104956	Cash Fund III	BUY	B	975,373.350	-975,373.35
PRMF99600002	PRIM-MELROSE RB	5/31/2024	996104956	Cash Fund III	BUY	B	3.670	-3.67
PRMF99600002	PRIM-MELROSE RB	6/3/2024	996104956	Cash Fund III	BUY	B	963,009.080	-963,009.08
PRMF99600002	PRIM-MELROSE RB	7/1/2024	996104956	Cash Fund III	BUY	B	200,000.000	-200,000.00
PRMF99600002	PRIM-MELROSE RB	8/1/2024	996104956	Cash Fund III	BUY	B	985,000.850	-985,000.85
PRMF99600002	PRIM-MELROSE RB	8/29/2024	996104956	Cash Fund III	BUY	B	7,366,574.000	-7,366,574.00
PRMF99600002	PRIM-MELROSE RB	10/1/2024	996104956	Cash Fund III	BUY	B	981,063.430	-981,063.43
PRMF99600002	PRIM-MELROSE RB	11/1/2024	996104956	Cash Fund III	BUY	B	978,965.010	-978,965.01
PRMF99600002	PRIM-MELROSE RB	12/3/2024	996104956	Cash Fund III	BUY	B	30.230	-30.23
PRMF99600002	PRIM-MELROSE RB	12/4/2024	996104956	Cash Fund III	BUY	B	4,186,251.780	-4,186,251.78
PRMF99600002	PRIM-MELROSE RB	1/31/2024	NA9123459	Cash Fund III	MISC INTEREST	CD	0.000	0.04
PRMF99600002	PRIM-MELROSE RB	8/30/2024	NA9123459	Cash Fund III	MISC INTEREST	CD	0.000	0.03
PRMF99600002	PRIM-MELROSE RB	12/31/2024	NA9123459	Cash Fund III	MISC INTEREST	CD	0.000	156.98
PRMF99600002	PRIM-MELROSE RB	1/2/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	3,808.27
PRMF99600002	PRIM-MELROSE RB	1/31/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	24.81
PRMF99600002	PRIM-MELROSE RB	2/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	4,088.32
PRMF99600002	PRIM-MELROSE RB	3/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	3,773.94
PRMF99600002	PRIM-MELROSE RB	3/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	7.05
PRMF99600002	PRIM-MELROSE RB	4/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	3,754.60
PRMF99600002	PRIM-MELROSE RB	4/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	7.03
PRMF99600002	PRIM-MELROSE RB	4/30/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	21.42
PRMF99600002	PRIM-MELROSE RB	5/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	3,734.08
PRMF99600002	PRIM-MELROSE RB	5/31/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	3.67
PRMF99600002	PRIM-MELROSE RB	6/3/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	4,014.58
PRMF99600002	PRIM-MELROSE RB	6/28/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	5.51
PRMF99600002	PRIM-MELROSE RB	7/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	3,714.42
PRMF99600002	PRIM-MELROSE RB	7/31/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	445.37
PRMF99600002	PRIM-MELROSE RB	8/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	4,865.26
PRMF99600002	PRIM-MELROSE RB	8/30/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	31.93
PRMF99600002	PRIM-MELROSE RB	9/3/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	7,901.24
PRMF99600002	PRIM-MELROSE RB	10/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	6,122.22
PRMF99600002	PRIM-MELROSE RB	11/1/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	4,525.00
PRMF99600002	PRIM-MELROSE RB	11/29/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	30.23
PRMF99600002	PRIM-MELROSE RB	12/2/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	4,441.84
PRMF99600002	PRIM-MELROSE RB	12/31/2024	996104956	Cash Fund III	INTEREST RECEIVED	IT	0.000	309.65
PRMF99600002	PRIM-MELROSE RB	1/29/2024	996104956	Cash Fund III	SELL	S	-953,187.510	953,187.51
PRMF99600002	PRIM-MELROSE RB	2/26/2024	996104956	Cash Fund III	SELL	S	-953,092.290	953,092.29
PRMF99600002	PRIM-MELROSE RB	3/26/2024	996104956	Cash Fund III	SELL	S	-952,194.630	952,194.63
PRMF99600002	PRIM-MELROSE RB	4/26/2024	996104956	Cash Fund III	SELL	S	-975,380.380	975,380.38

PRMF99600002	PRIM-MELROSE RB	5/28/2024	996104956	Cash Fund III	SELL	S	-963,012.750	963,012.75
PRMF99600002	PRIM-MELROSE RB	7/29/2024	996104956	Cash Fund III	SELL	S	-985,000.850	985,000.85
PRMF99600002	PRIM-MELROSE RB	8/26/2024	996104956	Cash Fund III	SELL	S	-979,418.180	979,418.18
PRMF99600002	PRIM-MELROSE RB	9/3/2024	996104956	Cash Fund III	SELL	S	-6,387,155.820	6,387,155.82
PRMF99600002	PRIM-MELROSE RB	9/24/2024	996104956	Cash Fund III	SELL	S	-981,063.430	981,063.43
PRMF99600002	PRIM-MELROSE RB	10/28/2024	996104956	Cash Fund III	SELL	S	-978,965.010	978,965.01
PRMF99600002	PRIM-MELROSE RB	12/23/2024	996104956	Cash Fund III	SELL	S	-977,633.230	977,633.23
PRMF99600002	PRIM-MELROSE RB	9/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	BUY	B	10,727.445	-6,395,089.02
PRMF99600002	PRIM-MELROSE RB	12/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	BUY	B	7.279	-4,441.84
PRMF99600002	PRIM-MELROSE RB	1/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,711.377	941,480.47
PRMF99600002	PRIM-MELROSE RB	2/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,724.845	949,074.34
PRMF99600002	PRIM-MELROSE RB	3/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,693.324	949,318.35
PRMF99600002	PRIM-MELROSE RB	4/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,664.205	948,432.98
PRMF99600002	PRIM-MELROSE RB	5/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,737.536	971,617.85
PRMF99600002	PRIM-MELROSE RB	6/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,671.287	958,994.50
PRMF99600002	PRIM-MELROSE RB	7/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-339.585	196,280.07
PRMF99600002	PRIM-MELROSE RB	8/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,668.706	979,690.22
PRMF99600002	PRIM-MELROSE RB	10/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,614.358	974,941.21
PRMF99600002	PRIM-MELROSE RB	11/1/2024	990014060	PRIM GENERAL ALLOCATION ACCT	SELL	S	-1,637.327	974,440.01



NEPC, LLC

To: MASS PRIM

From: NEPC

Subject: MASS PRIM's Asset Allocation Ranges: December 31, 2024

Overview:

MASS PRIM's asset allocation and approved asset allocation ranges are voted on by the Board of Trustees. As part of the asset allocation process, MASS PRIM utilizes NEPC's annual asset class assumptions. NEPC's assumptions are based on a combination of historical data and forward looking analysis. Historical data is used to frame the current market environment while forward-looking analysis is based on current market pricing and a building blocks approach. Listed below, is a summary of the key drivers of the return assumptions for various asset classes and detail regarding MASS PRIM's asset allocation ranges approved by the Board of Trustees on February 15, 2024.

U.S. Equity

The return assumptions for U.S. equities are driven by real earnings growth, dividend yield, inflation expectations, and changes in various valuation metrics. The real earnings growth assumption is adjusted for forecasted changes in profit margins.

International and Emerging Equities

The return assumptions for international and emerging equities are developed using the same building blocks as the U.S. equity assumption. The building blocks include real earnings growth, dividend yield, inflation expectations, and changes in various valuation metrics. The real GDP growth outlook for developed and emerging markets is also used to inform the real earnings growth assumption.

Core and Value-Added Fixed Income

The return assumptions for Core and Value-Added fixed income are driven by the current 30 year forward interest rate curve, expected changes in future yield and duration, and expected changes in the slope of the yield curve. Credit asset return assumptions also include an interest rate return assumption, an analysis of mean reversion of credit spread levels to long-term averages, and default rate expectations. TIPS return assumptions include the current 30 year forward real interest rate curve, implied breakeven inflation spreads, and expected changes in future yields and duration.

Portfolio Completion Strategies (PCS)

The return assumption for PCS incorporates a building block approach of broad hedge fund categories. These building blocks include the underlying market beta exposure, the return assumptions for each hedge fund category, and an analysis of historical return and correlations for underlying strategies.

Private Equity, Real Estate, and Timberland

The primary drivers of the return assumptions for private equity, real estate, and timberland include the underlying public market beta exposures and return assumptions for each category, correlations, and an additional credit spread premium or illiquidity premium specific to each category.



12/31/2024 Return Assumptions:

The 10-year return assumptions are reflective of a strategic asset allocation time horizon. The 30-year return assumptions are based on a long-term timeframe that is more consistent with the planning horizon of most defined benefit pension plans.

PRIM Asset Allocation Range	
U.S. Equity ¹	
Int'l Equities ²	
Emerging Int'l Equities ³	
Global Equity	31% - 41%
Core Bonds	
Short-Term Fixed Income ⁴	
20+ Yr. Treasury STRIPS	
TIPS/ILBs	
Core Fixed Income	12% - 18%
Value-Added Fixed Income⁵	6% - 12%
Private Equity	13% - 19%
Real Estate⁶	7% - 13%
Timberland⁷	1% - 7%
Portfolio Completion (PCS)⁸	7% - 13%
Total Fund Expected Return⁹	

12/31/24 Asset Class Assumptions	
10 Yr. Expected Return	30 Yr. Expected Return
5.7%	7.2%
5.6%	6.9%
7.9%	9.0%
5.0%	5.3%
4.6%	4.4%
4.8%	5.3%
4.6%	4.7%
7.5%	8.0%
8.6%	10.5%
5.9%	6.8%
6.0%	6.8%
6.4%	6.8%
6.9%	8.0%

1: Blended allocation to large-cap equity, small-cap equity, micro-cap equity

2: Blended allocation to large-cap equity and small-cap equity

3: Blended allocation to large-cap equity and small-cap equity

4: Modeled as Short-Term Treasury

5: Blended allocation to high yield, bank loans, EMD, private debt

6: Blended allocation to Private Real Estate and REITs

7: Timberland is modeled as Private Real Assets Infrastructure/Land

8: Modeled as equal weighted blend of Hedge Fund Equity, Credit, and Macro

9: Asset classes modeled at the midpoint of the asset allocation range



Pension Reserves Investment Management Board

Pension Reserves Investment Trust
Asset Allocation
December 31, 2024

	Actual Allocation %
Domestic Equity	25.5%
International Equity	9.6%
Emerging Markets Equity	4.1%
Core Fixed Income	14.8%
Value-Added Fixed Income	7.7%
Private Equity	16.6%
Real Estate	9.0%
Timberland	2.9%
Hedge Funds Portfolio Completion Strategies	8.7%
Overlay	<u>0.9%</u>
Total Core	100%

*Totals may not add due to rounding.

Deborah B. Goldberg, Treasurer and Receiver General, Chair
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer

mapension.com | 53 State Street, Suite 600, Boston, MA 02109 | (617) 946-8401



NEPC, LLC

To: MASS PRIM

From: NEPC

Subject: MASS PRIM's Asset Allocation Ranges: February 27, 2025

Overview:

MASS PRIM's asset allocation and approved asset allocation ranges are voted on by the Board of Trustees. As part of the asset allocation process, MASS PRIM utilizes NEPC's annual asset class assumptions. NEPC's assumptions are based on a combination of historical data and forward looking analysis. Historical data is used to frame the current market environment while forward-looking analysis is based on current market pricing and a building blocks approach. Listed below, is a summary of the key drivers of the return assumptions for various asset classes and detail regarding MASS PRIM's asset allocation ranges. The current allocation ranges were approved by the Board of Trustees on February 27, 2025.

U.S. Equity

The return assumptions for U.S. equities are driven by real earnings growth, dividend yield, inflation expectations, and changes in various valuation metrics. The real earnings growth assumption is adjusted for forecasted changes in profit margins.

International and Emerging Equities

The return assumptions for international and emerging equities are developed using the same building blocks as the U.S. equity assumption. The building blocks include real earnings growth, dividend yield, inflation expectations, and changes in various valuation metrics. The real GDP growth outlook for developed and emerging markets is also used to inform the real earnings growth assumption.

Core and Value-Added Fixed Income

The return assumptions for Core and Value-Added fixed income are driven by the current 30 year forward interest rate curve, expected changes in future yield and duration, and expected changes in the slope of the yield curve. Credit asset return assumptions also include an interest rate return assumption, an analysis of mean reversion of credit spread levels to long-term averages, and default rate expectations. TIPS return assumptions include the current 30 year forward real interest rate curve, implied breakeven inflation spreads, and expected changes in future yields and duration.

Portfolio Completion Strategies (PCS)

The return assumption for PCS incorporates a building block approach of broad hedge fund categories. These building blocks include the underlying market beta exposure, the return assumptions for each hedge fund category, and an analysis of historical return and correlations for underlying strategies.

Private Equity, Real Estate, and Timberland

The primary drivers of the return assumptions for private equity, real estate, and timberland include the underlying public market beta exposures and return assumptions for each category, correlations, and an additional credit spread premium or illiquidity premium specific to each category.



12/31/2024 Return Assumptions:

The 10-year return assumptions are reflective of a strategic asset allocation time horizon. The 30-year return assumptions are based on a long-term timeframe that is more consistent with the planning horizon of most defined benefit pension plans.

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U.S. Equity ¹	
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4.6%	4.7%
7.5%	8.0%
8.6%	10.5%
5.9%	6.8%
6.0%	6.8%
6.4%	6.8%
6.9%	8.0%

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9: Asset classes modeled at the midpoint of the asset allocation range