



To: Cash Management Policy Board
From: Jennifer Appel, Kevin Leonard & Alexandra Sollers
Date: October 10, 2023
Subject: Delaware Budget Reserve Account Reserve Analysis

Background

NEPC was asked to update the Delaware Budget Reserve Account (Rainy Day Fund) analysis to ensure that an adequate reserve, or cushion, above the statutorily required amount was maintained. The minimum amount that must be maintained in the Budget Reserve Account for Fiscal Year 2024 is \$328,750,000, which is an increase of \$12,305,000 from the Fiscal Year 2023 level of \$316,445,000. The reserve or cushion for Fiscal Year 2023 was \$6,000,000 bringing the total for Fiscal Year 2023 to \$322,445,000.

Consistent with previous reviews, JP Morgan and NEPC prepared analyses that considered increases in interest rates and other market shocks. The results of these separate analyses are presented in the following section and result in a recommendation for consideration by the Cash Management Policy Board.

Analysis

JP Morgan prepared the following analysis of the reserve based upon interest rate increases of 0.25%, 0.50%, and 1.00%.

NEPC conducted a second analysis using NEPC’s 2023 Capital Market Assumptions to determine expected volatility and confidence intervals. The analysis, presented below, shows a “Gross Decline”, which mirrors the JP Morgan analysis as it presents the immediate results of a market shock, and the “Net Decline”, which presents the results (gain or loss) one-year forward – accounting for the yield accrued on the portfolio during that time.

**State of Delaware
 Budget Reserve Account “Rainy Day Fund”
 Data as of July 31, 2023**

Required Balance \$328,750,000

	<u>Return</u>	<u>Volatility</u>	Gross Decline with a		
			<u>1 SD Event</u>	<u>2 SD Event</u>	<u>3 SD Event</u>
NEPC Capital Market Assumptions	4.84%	2.29%	\$ (7,528,375)	\$ (15,056,750)	\$ (22,585,125)

	<u>Return</u>	<u>Volatility</u>	Net Decline with a		
			<u>1 SD Event</u>	<u>2 SD Event</u>	<u>3 SD Event</u>
NEPC Capital Market Assumptions	4.84%	2.29%	\$ 9,205,000	\$ 1,676,625	\$ (5,851,750)

Net Decline is a 1-year forward looking decline assuming the portfolio earns a 5.09% yield.

The table below summarizes the results of the two analyses. Historically JP Morgan’s Interest Rate analysis (50 bps and 100 bps increase) and NEPC’s Gross Decline (1 Standard Deviation and 2 Standard Deviation) results have been reasonably consistent. Similar to last year’s analysis, the results deviate more significantly as NEPC’s capital market assumptions incorporate expectations for higher long-term interest rates and a slightly higher credit widening event.

State of Delaware				
Budget Reserve Account “Rainy Day Fund”				
Comparative Analysis				
		<u>25bps</u>	<u>50 bps</u>	<u>100 bps</u>
JP Morgan Results	-	\$ (1,571,425)	\$ (3,142,850)	\$ (6,285,700)
		<u>1 SD Event</u>	<u>2 SD Event</u>	<u>3 SD Event</u>
NEPC Gross Decline	\$	(7,528,375)	\$ (15,056,750)	\$ (22,585,125)
NEPC Net Decline	\$	9,205,000	\$ 1,676,625	\$ (5,851,750)

In recent meetings with fixed income investment managers, the consensus outlook is that interest rates are at, or near, peak levels following consecutive interest rate increases by the Federal Reserve. Fed Funds expectations, reflecting the market’s pricing for interest rates, are forecasting four rate cuts through the end of 2024.

Summary & Recommendation

Based on the analyses provided and the expectations of interest rates being at or near peak levels, NEPC recommends no changes to the reserve amount of \$328,750,000 for Fiscal Year 2024.

We look forward to discussing the analysis with the full Board at the next meeting of the Cash Management Policy Board.

