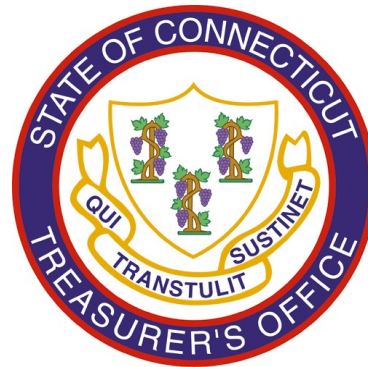

Short-Term Investment Fund
GFOA of CT Spring 2023 Quarterly Meeting
April 6, 2023



Michael M. Terry, CFA
Principal Investment Officer

Pension Funds Management Division

Primary Objectives

STIF's mandate is to provide:

- Safety
- Liquidity
- Yield

Short-Term Investment Fund

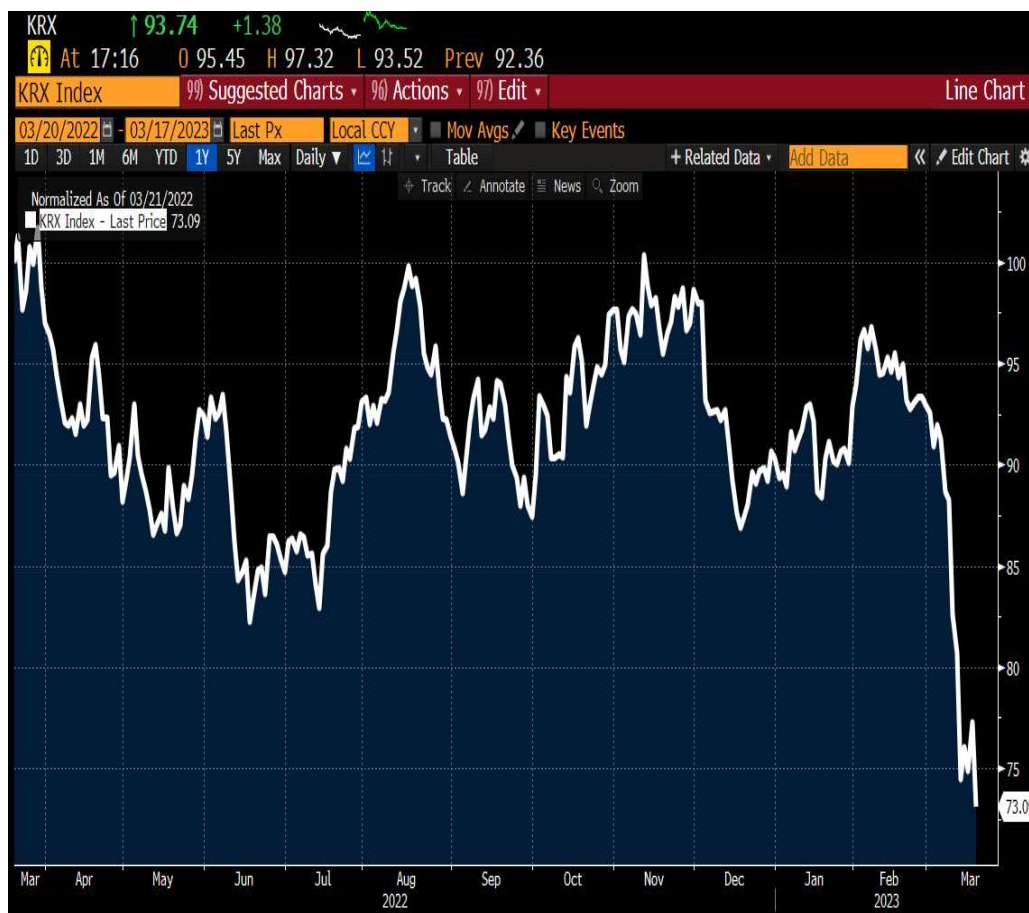
Bank Turmoil Update

As a result the mismatch between assets and liabilities, banks came under pressure near the middle of March 2023. The event can best be described as a liquidity event, or the ability of banks to meet significant withdrawals. Banks generally remain better capitalized than they have been in decades. The STIF has a significant portion of its assets invested in banks, but we note the following:

- The fund has no investments in regional banks that are not backed by a Federal Home Loan Bank letter of credit, the bank sector that experienced the most acute pressure.
- The bank investments remaining in the fund are comprised of larger, well capitalized and highly rated institutions.

Short-Term Investment Fund

Bank Turmoil Update – Regional Bank Index



Source: Bloomberg

- Regional banks have been disproportionately affected during this period.
- We do not believe the issues are systemic, but rather are idiosyncratic and manageable.
- We expect additional regulation and stress testing to result from the issues being addressed.

Short-Term Investment Fund

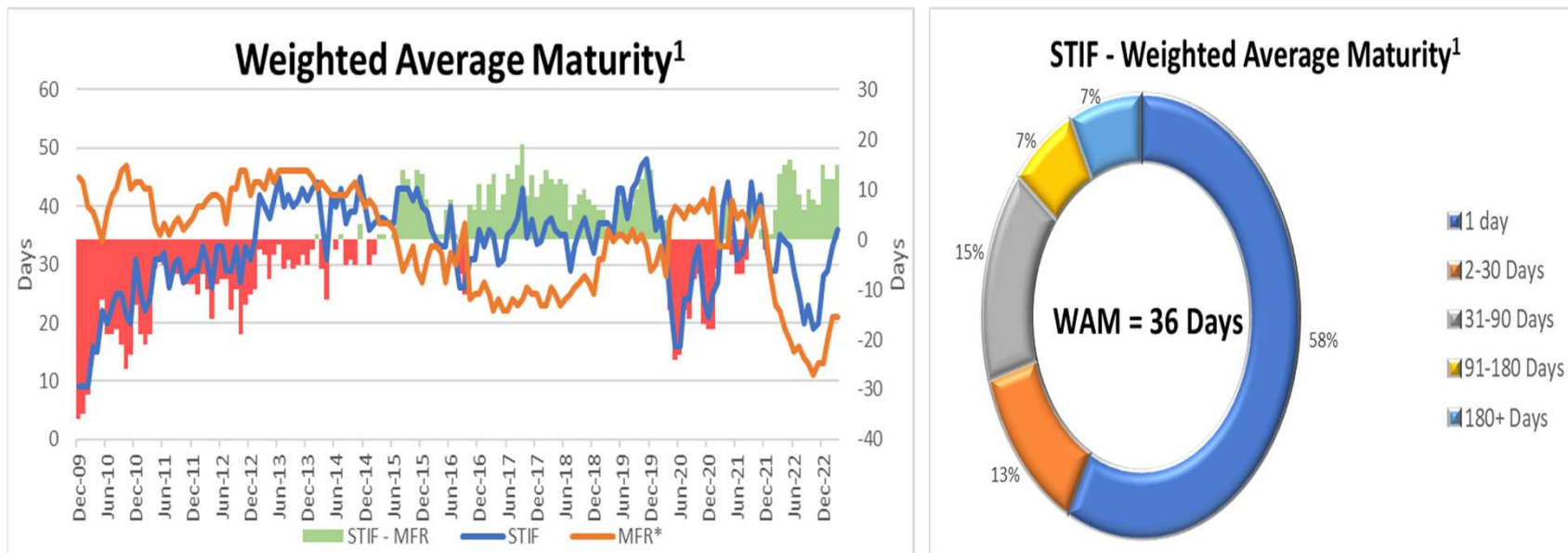
Bank Turmoil Update – Effects on Rate Expectations

As the result of financial market instability and increased probability of a recession, approximately 75 basis points of Federal Reserve Rate hikes have been removed from expectation.



Short-Term Investment Fund – Safety

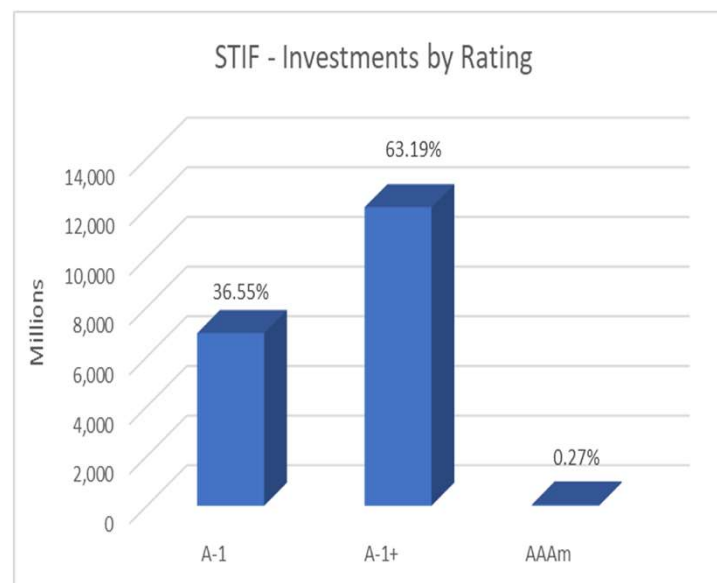
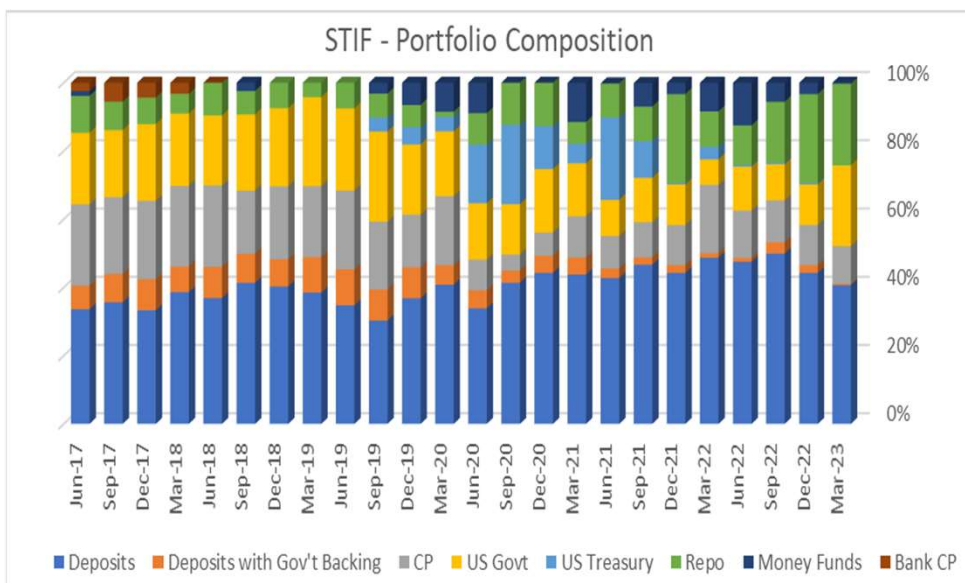
Conservative Maturity Profile



- The fund's WAM was 36 days as of 3/17/2023, 15 days longer than its benchmark, but below its internal guideline of 55 days as well as its rating and GASB maximum of 60 days.
- The fund actively manages its WAM depending on view, not the benchmark.

Short-Term Investment Fund – Safety

Conservative Portfolio Composition

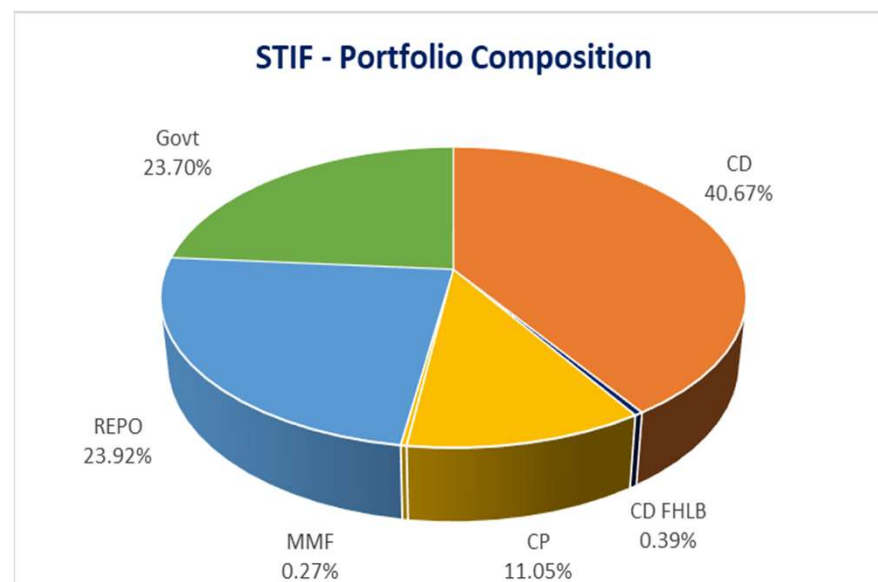


- The STIF portfolio remains conservative with a focus on government/agency, bank and highly rated corporate issuers.
- A-1+ rates investments make up over 63 percent of the fund's holdings.

Short-Term Investment Fund – Safety

Conservative Portfolio Composition

- The fund remains well diversified from a sector and issuer perspective.
- Issuers are limited to a 5 percent limit on a consolidated basis.
- Currently, 48 percent of the portfolio is invested in government or government backed securities.



Short-Term Investment Fund – Safety

Conservative Portfolio Composition – Top Ten

STIF - Top Ten Issuers			
Issuer	Exposure	Percent of Portfolio	Rating
Federal Home Loan Bank	3,020,609,871	16%	AA+/A-1+
Bank of Nova Scotia NY Repo	2,000,000,000	11%	A-1
Federal Farm Credit Bank	1,363,436,572	7%	AA+/A-1+
Bank of America Repo	1,050,000,000	6%	A-1
Mizuho Repo	1,000,000,000	5%	A-1
Nordea Bank NY Branch	850,000,000	4%	A-1+
Cooperatieve Centrale	800,000,000	4%	A-1+
Royal Bank of Canada NY Branch	800,000,000	4%	A-1+
Australia and New Zealand Bank	800,000,000	4%	A-1+
Svenska Handelsbanken	750,000,000	4%	A-1+
Total	12,434,046,443	65%	
Non-Govt/Govt backed Total:	4,000,000,000	21%	

- STIF has been actively diversifying the portfolio across markets while only investing in the strongest issuers.
- The top ten issuers represent 65 percent of the portfolio. Of this, only 20 percent are non-government entities – all of which are highly rated.

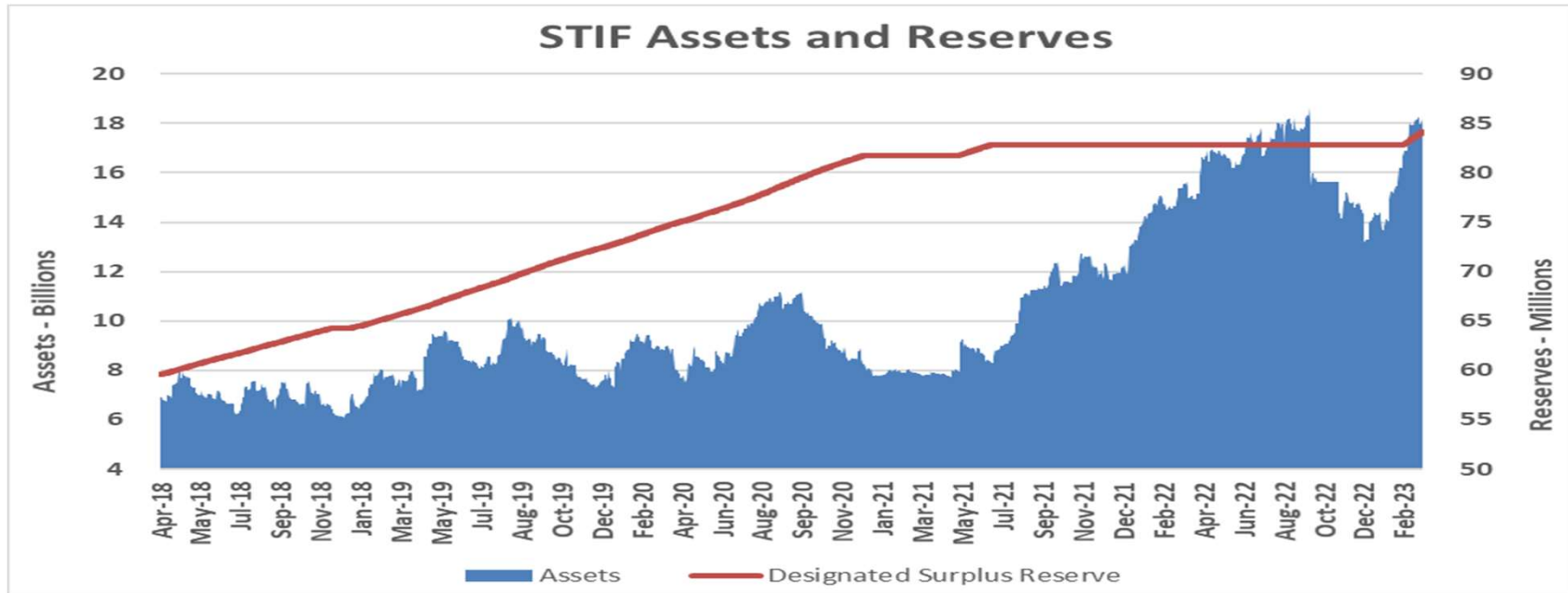
Short-Term Investment Fund – Safety

Conservative Portfolio Composition – Banks

Banks within the STIF portfolio are larger, well-capitalized banks. Banks are monitored and evaluated for asset quality, provisions, business lines, funding, and availability of additional liquidity.

STIF Bank Holdings								
Bank Name	Domicile	Tier 1 CE Ratio	S&P		Moody's		Fitch	
			S&P ST	S&P LT	MDY LT	MDY LT	Fitch ST	Fitch LT
Nordea Bank Abp/New York NY	850,000,000 Finland	16.40	A-1+	AA-	Aa3	P-1	F1+	AA
Australia & New Zealand Banking /NY	800,000,000 Australia	12.30	A-1+	AA-	Aa3	P-1	F1	A+
Cooperatieve Centrale	800,000,000 Netherlands	17.40	A-1	A+	Aa2	P-1	F1+	AA-
Royal Bank of Canada/New York NY	800,000,000 Canada	12.60	A-1+	AA-	Aa1	P-1	F1+	AA
Bank of Nova Scotia	750,000,000 Canada	11.50	A-1	A+	Aa2	P-1	F1+	AA
Svenska Handelsbanken/New York NY	750,000,000 Sweden	19.60	A-1+	AA-	Aa2	P-1	F1+	AA+
Toronto-Dominion Bank/NY	684,535,292 Canada	16.20	A-1+	AA-	Aa1	P-1	F1+	AA
DZ Bank AG /New York	550,000,000 Germany	15.30	A-1	A+	Aa2	P-1	F1+	AA-
MUFG Bank Ltd/New York NY	450,000,000 Japan	11.00	A-1	A	A1	P-1	F1	A
Norinchukin BK NY BR	400,000,000 Japan	17.00	A-1	A	A1	P-1	NR	NR
National Bank of Canada/New York NY	300,000,000 Canada	12.70	A-1	A	Aa3	P-1	F1+	NR
Bank of America NA	253,470,320 United States	11.20	A-1	A+	Aa2	P-1	F1+	AA+
Sumitomo Mitsui Banking Corp/New York	200,000,000 Japan	14.50	A-1	A	A1	P-1	F1	A
Commonwealth Bk Aus NY Branch	150,000,000 Australia	11.50	A-1+	AA-	Aa3	P-1	F1	A+
Berkshire Bank	75,000,000 United States	12.35						
	7,813,005,612							

Short-Term Investment Fund – Safety Designated Surplus Reserve



Fund assets remain near all-time highs, ending February 2023 with approximately \$18 billion in assets.

- The “reserve transfer”, or contributions to the designated surplus reserve was reinstated February 2, 2023 contributions of \$1.4 million were made during the month.

Short-Term Investment Fund – Safety

Stress Test

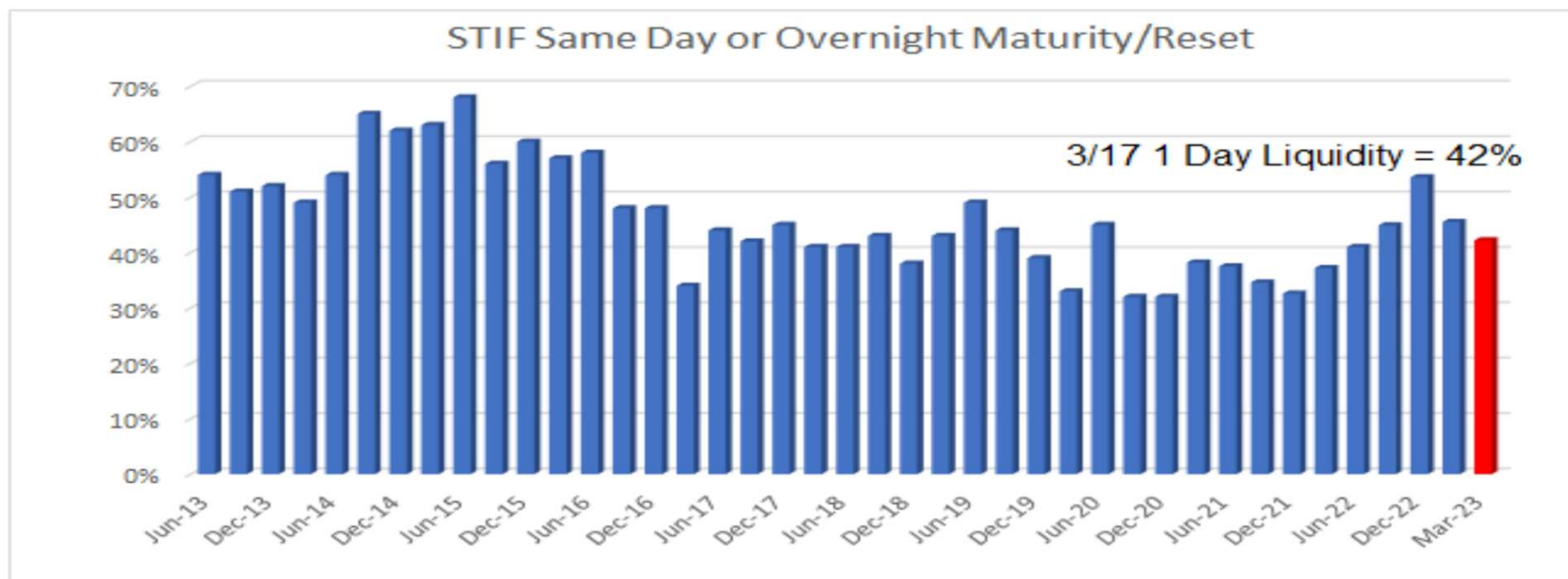
PORTFOLIO SENSITIVITY MATRIX (Px due to interest rate and credit spread movement)

VALUATION DATE	3/17/2023				
Current NAV	1.00008518				
CS Increase	0 bps	20 bps	50 bps	75 bps	100 bps
IR Increase = 0	1.00008518	1.00005980	1.00002173	0.99999001	0.99995829
25 bps	1.00004383	1.00001845	0.99998039	0.99994866	0.99991694
50 bps	1.00000249	0.99997711	0.99993904	0.99990731	0.99987559
75 bps	0.99996114	0.99993576	0.99989769	0.99986597	0.99983424
100 bps	0.99991979	0.99989441	0.99985634	0.99982462	0.99979290
125 bps	0.99987844	0.99985306	0.99981500	0.99978327	0.99975155
150 bps	0.99983710	0.99981172	0.99977365	0.99974192	0.99971020
175 bps	0.99979575	0.99977037	0.99973230	0.99970058	0.99966885
200 bps	0.99975440	0.99972902	0.99969095	0.99965923	0.99962751

- STIF's portfolio is tested under various scenarios for changes in interest rates, changes in risk premiums and investor redemptions.
- The portfolio consistently proves resilient to changes.
- If credit spread increase 200bps and interest rates increase 100bps – simultaneously – the fund has a NAV of 0.99962, which means investors still receive par.

Short-Term Investment Fund – Liquidity

Significant Liquidity

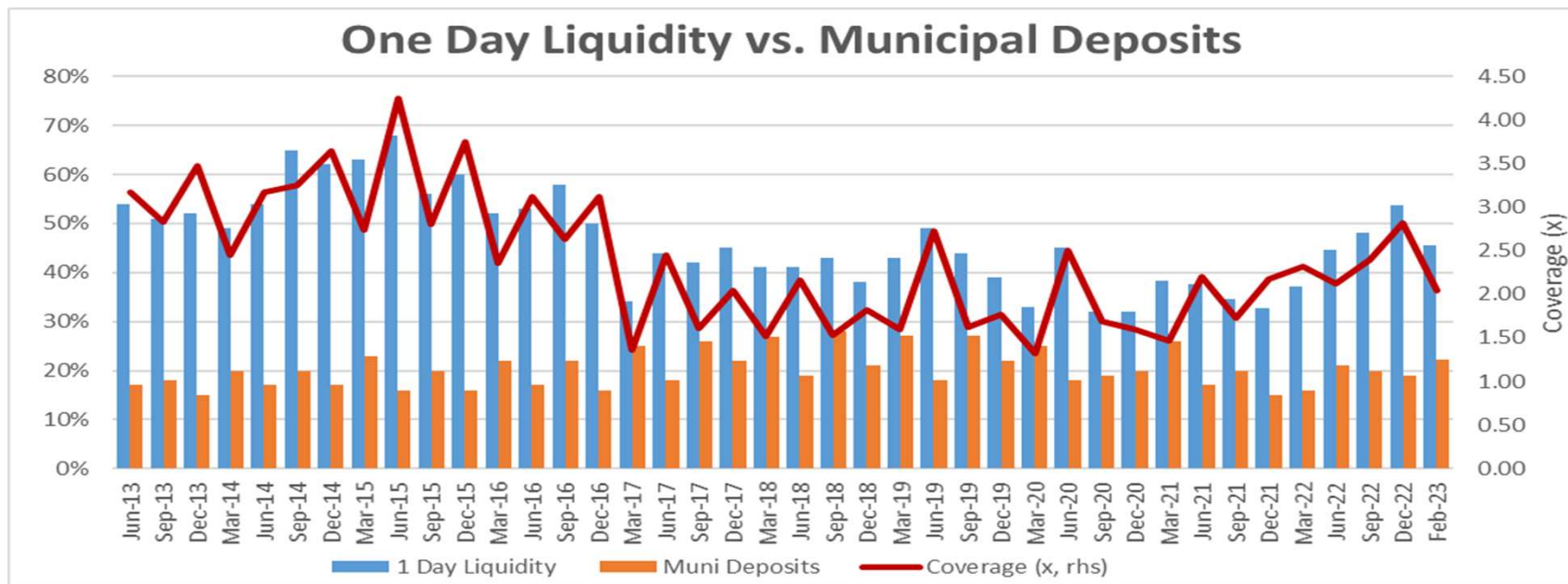


Overnight Investments or investments that are available on a same-day or next-day basis.

- As of March 17, 2023, one-day liquidity stood at 42 percent of the portfolio, or 2.2x municipal investments.

Short-Term Investment Fund – Liquidity

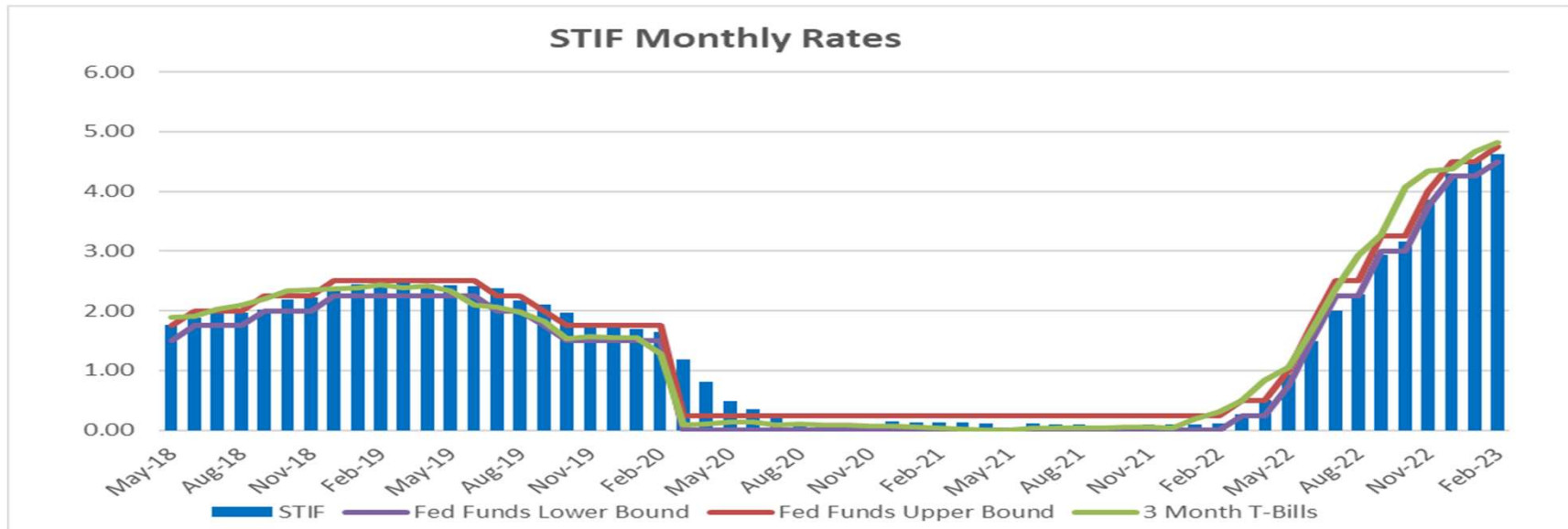
Investor Composition



- The State Treasury continues to be the single largest investor in STIF.
- Local governments, with approximately \$3.9 billion in deposits in STIF, represented 22% of the fund as of February 28, 2023.
- One day liquidity was approximately 2x municipal deposits.

Short-Term Investment Fund - Yield

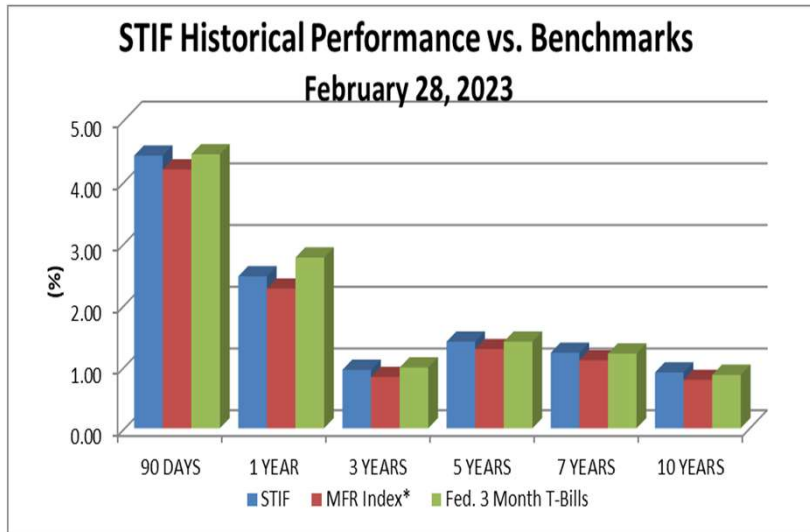
Recent Performance



- While the rate on STIF is currently slightly lower than three month T-Bills, it falls near the upper-end of the Federal Funds target range. The reserve transfer was reinstated February 2, 2023, reducing the fund's rate by ten basis points, but increasing the safety of the fund.
- The fund also provides daily liquidity without the price volatility of other money market rates.

Short-Term Investment Fund – Performance

Period ending February 28, 2023



Total Return	90 DAYS	1 YEAR	3 YEARS	5 YEARS	7 YEARS	10 YEARS
STIF	4.42	2.46	0.95	1.40	1.22	0.90
MFR Index*	4.19	2.26	0.83	1.28	1.10	0.78
Fed. 3 Month T-Bills	4.44	2.77	0.98	1.40	1.21	0.86

* iMoneyNet's First Tier Institutions-Only AAA-Rated Money Fund Report (MFR) Averages Index.

- As rates have increased, and despite the conservative nature of the fund, the STIF has outperformed its primary benchmark across all time periods.
- The fund's performance resulted in an additional \$21.2 and \$9.1 million fiscal year-to-date and calendar year-to-date, respectively, in interest earnings above the benchmark for Connecticut's state and local governments.

Going Forward

- The fund is maintaining a cautious approach to issuer exposure as well as the fund's maturity profile.
- Short-term rates are expected to continue to be volatile in the immediacy, stabilizing when the path of federal funds becomes more evident.
- Bank deposit instruments continue to be attractive relative to other opportunities and alternatives- fundamental analysis is front and center.
- Floating rate issues are being selectively purchased when the spread to SOFR or Prime is viewed as attractive.

STIF – Staying the Course



- The fund is not meant to be a show horse, it has been designed to be a workhorse – plow straight rows, deliver the load from point A to point B, have a sturdy gait, and the ability to weather any storm.

Short-Term Investment Fund Team

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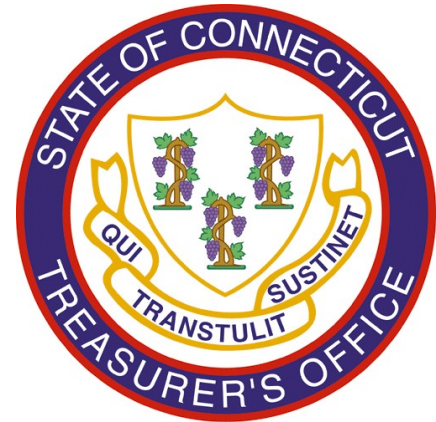
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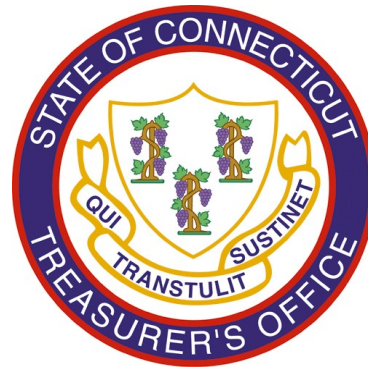
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Erick Russell
Connecticut State Treasurer

Office of Connecticut State Treasurer Erick Russell



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