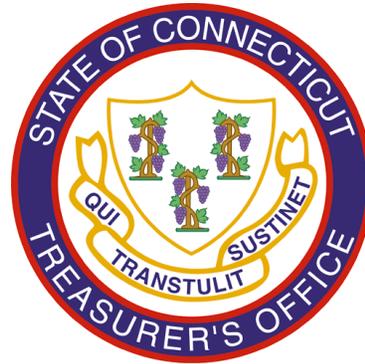


Office of Connecticut State Treasurer Shawn T. Wooden



2019 Public Finance Outlook Conference

CTfastrak & CTrail Hartford Line Transit-Oriented Development

OFFICE OF THE STATE TREASURER: PUBLIC FINANCE OUTLOOK CONFERENCE

Lyle Wray, Executive Director, Capitol Region Council of Governments

Dunkin Donuts Park, Hartford CT

April 5, 2019

Transit Oriented Development

- Capitol Region: 38 towns, 1 million residents
- Themes: Connected, competitive, vibrant and green
- 17 train and rapid transit stations in place or to be developed
- Abundant land at many stations

Transit Oriented Development

- What?
- Why?
- How?

Transit Oriented Development: What?

- Residential, commercial and amenity development at a station or within a quarter of half mile by walking or two miles by bicycle
- Varies in character by urban density: 600 units per acre and down
- Success depends on transit network and “complete street” infrastructure

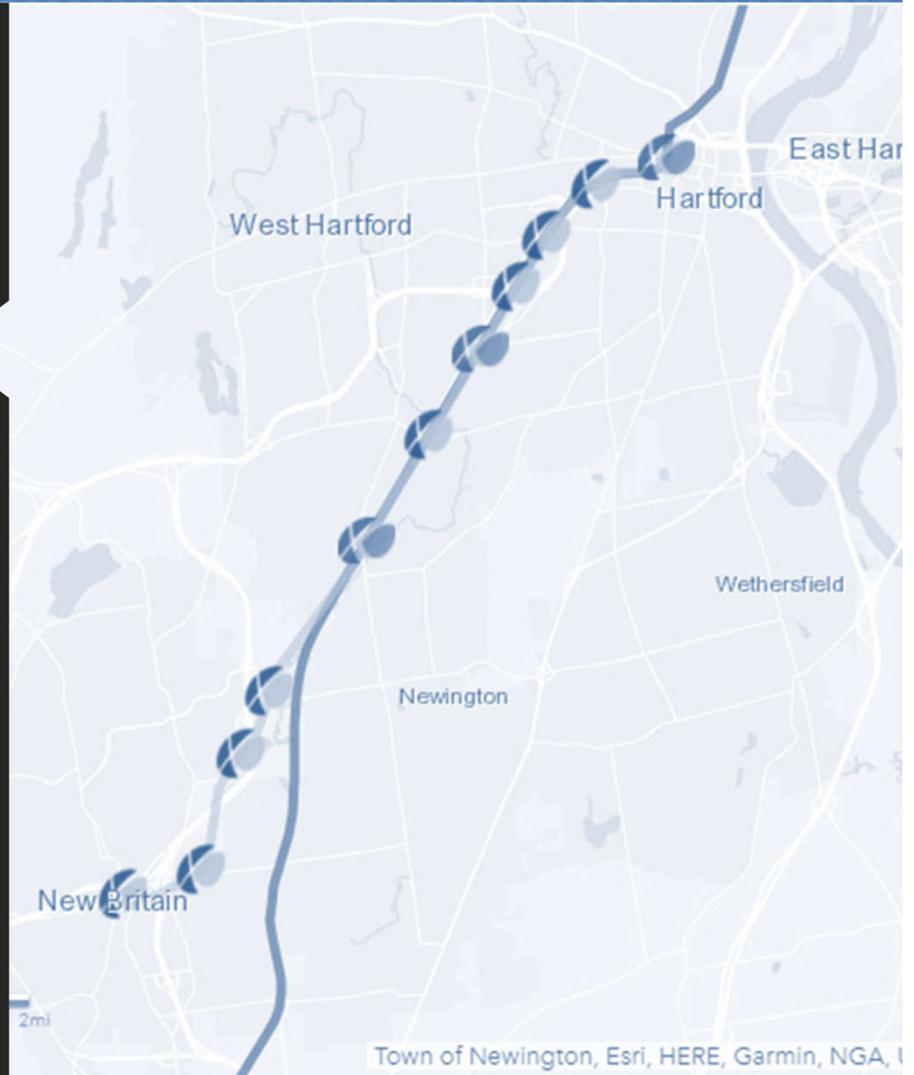
Transit Oriented Development: Why?

- Accelerate economic growth
- Attract next generation workers with vibrant, connected spaces – urban agglomeration effect -- Boston and NYC
- Redevelop sites that need remediation

Transit Oriented Development: How?

- TOD tasks are very dependent on the context
- Often regional entities that do land assembly, deal creation, financing
- Special case of TOD in slow economic growth areas – intentional
- Multiple characters of TOD development provide a range of opportunities
- Learning curve for communities, developers and financial institutions

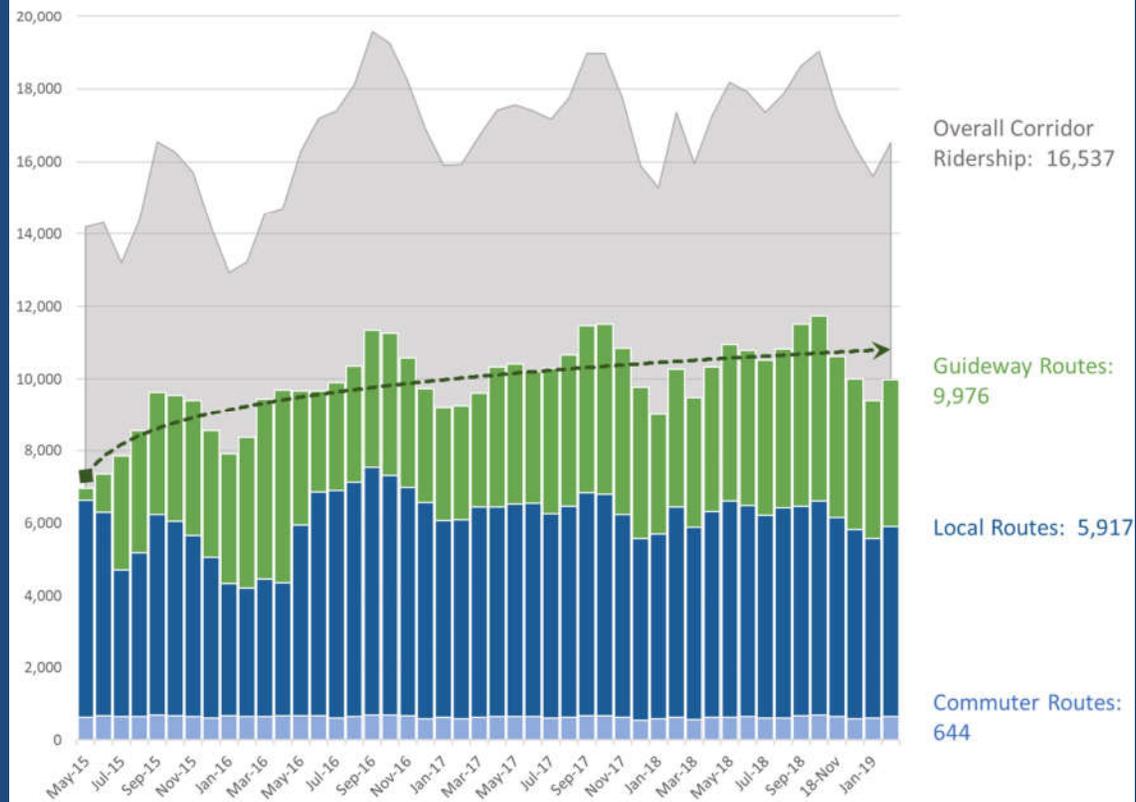
CTfastrak





Average Weekday Ridership

May 2015–February 2019





1429 Park Street – Hog River Brewing

Parkville Station, CTfastrak

3700 square foot Brewery & Tap Room (Food Trucks)

Completed 2016

reSET

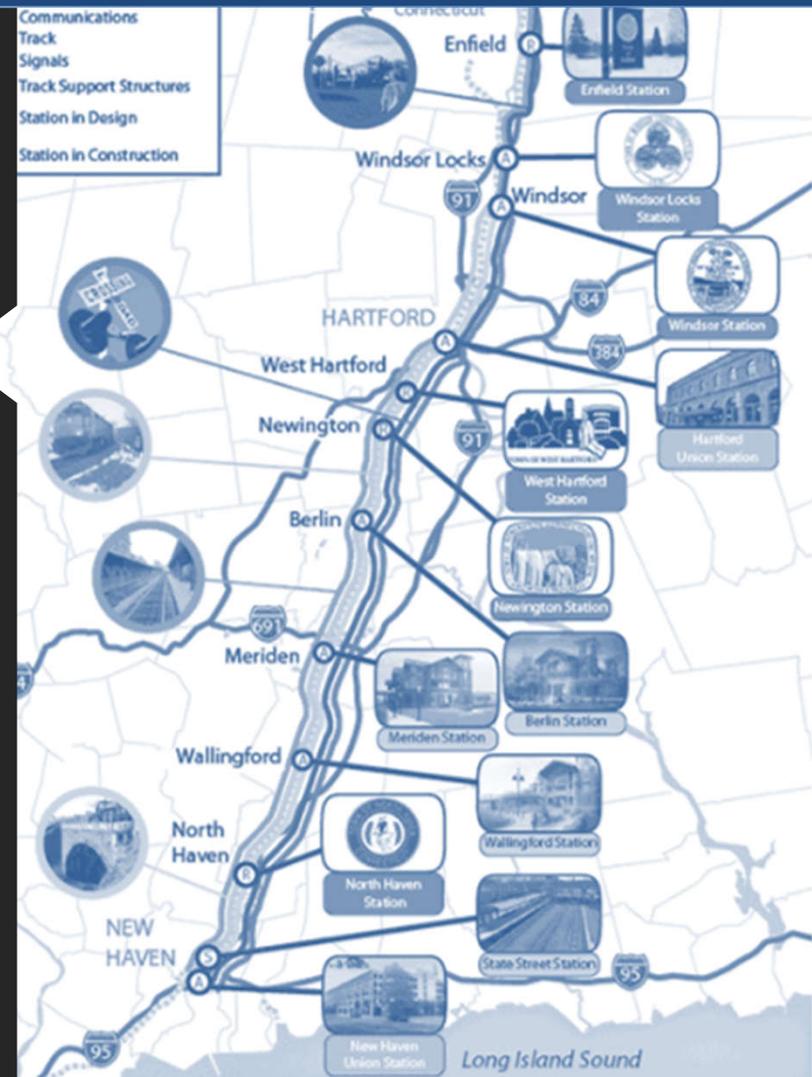
9,575 square foot business incubator space

Completed 2015

1477 Park Street –Parkville Sounds



CTrail Hartford Line



Montgomery Mills – 25 Canal Bank Road

Windsor Locks Station - CTrail, Hartford Line
160 Units (60/40 market/affordable)
\$ 62 Million
Anticipated Completion 2019





55-69 Mechanic Street – Windsor Station Apartments

Windsor Station - CTrail, Hartford Line

130 Units

\$22 Million

Completed 2017

Total Investment

CTrail TOD
\$523.2 Million

Total \$771 million

TOD Wrap Up

- 17 station locations in Capitol Region with many development opportunities
- GIS detailed mapping of station sites (soils, access etc.) available now
- Need to accelerate TOD development in a slow growth market
- Partnerships with anchor institutions
- Complete streets around stations: walking, bicycling
- TOD is a long pull process and need to prepare for that

Panel Contact Information

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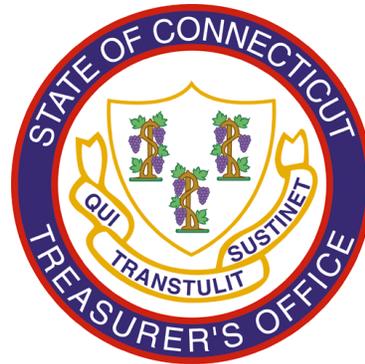
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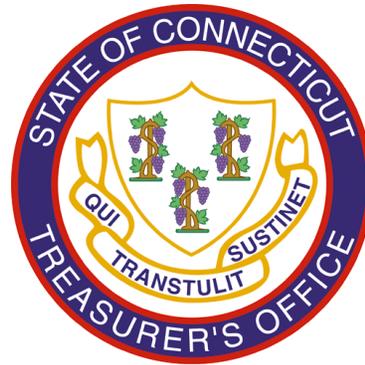
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2019 Public Finance Outlook Conference

Short-Term Investment Fund
24th Annual Investors Meeting
April 5, 2019



Michael M. Terry, CFA
Principal Investment Officer
Cash Management Division

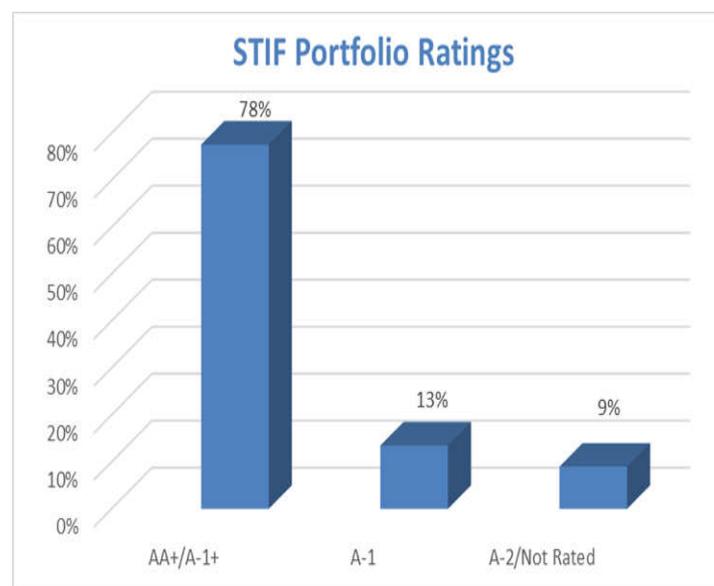
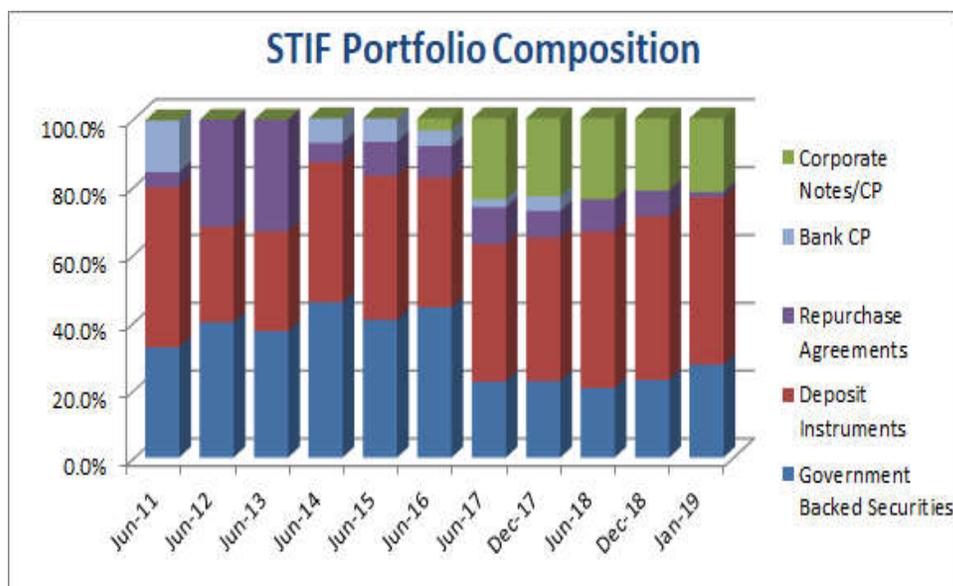
Primary Objectives

STIF's mandate is to provide:

- Safety
- Liquidity
- Yield

Short-Term Investment Fund – Safety

Conservative Portfolio Composition



A-1+ amount includes repurchase agreements

- The STIF portfolio remains conservative with a focus on government/agency, bank and highly rated corporate issuers.
- A-1 and A-2 rated investments mature in less than a week. All A-2 investments and investments that are not rated are backed by a letter of credit from a Federal Home Loan Bank.

Short-Term Investment Fund – Safety

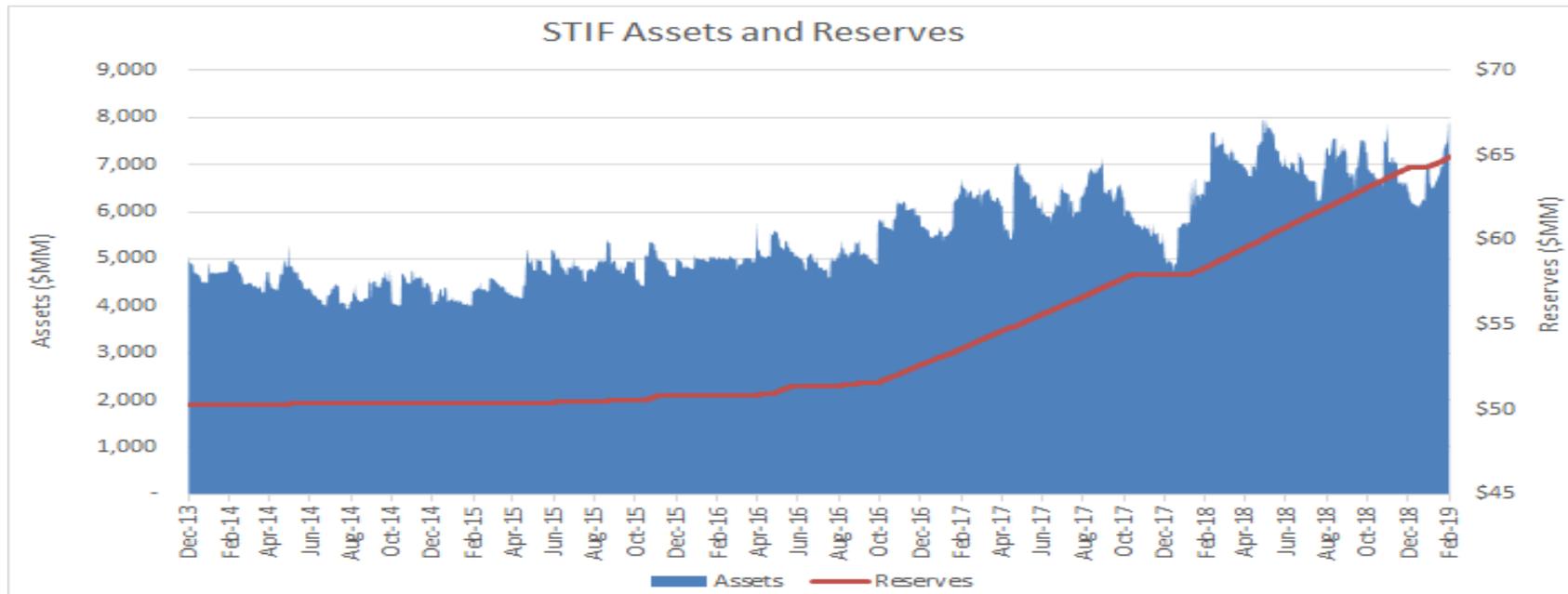
Conservative Portfolio Composition

STIF Top Ten Holdings			
Issuer	Exposure	Percent of Portfolio	Ratings
Federal Home Loan Bank	\$739,354,301	9.49%	AA+/P-1
Federal Farm Credit Bank	\$673,543,502	8.64%	AA+/P-1
Fannie Mae	\$608,965,930	7.82%	AA+/P-1
Svenska Handelsbanken NY	\$350,000,000	4.49%	A-1+/P-1
ANZ Bank NY	\$350,000,000	4.49%	A-1+/P-1
Exxon Mobil	\$348,959,181	4.48%	A-1+/P-1
Apple Inc	\$315,174,043	4.05%	A-1+/P-1
Scotia Bank NY	\$300,000,000	3.85%	A-1/P-1
MUFG Bank	\$300,000,000	3.85%	A-1/P-1
Nordea Bank NY	\$287,940,000	3.70%	A-1+/P-1
		54.85%	

Ratings: S&P/Moody's

- STIF has been actively diversifying the portfolio across markets while only investing in the strongest issuers.

Short-Term Investment Fund – Safety Designated Surplus Reserve



Data as of 1/31/2019

Contributions to reserves:

- \$5.2 million during Fiscal 2018
- \$3.6 million during Fiscal 2019 to date (1/31/19)
- \$6.5 million over the last 12 months (2/01/18 – 1/31/19)

Short-Term Investment Fund – Safety

Stress Test

PORTFOLIO SENSITIVITY MATRIX (Price due to interest rate and credit spread movement)					
Valuation Date:		1/25/2019			
Current NAV ¹		0.9999			
Credit Spread Increase	20 bps	50 bps	60 bps	75 bps	100 bps
Rate Increase = 0	0.9999	0.9998	0.9998	0.9997	0.9996
50 bps	0.9998	0.9997	0.9997	0.9996	0.9995
75 bps	0.9997	0.9996	0.9996	0.9996	0.9995
100 bps	0.9997	0.9996	0.9996	0.9995	0.9994
150 bps	0.9996	0.9995	0.9995	0.9994	0.9993
200 bps	0.9995	0.9994	0.9994	0.9993	0.9992

- 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.

Short-Term Investment Fund – Liquidity

Significant Liquidity

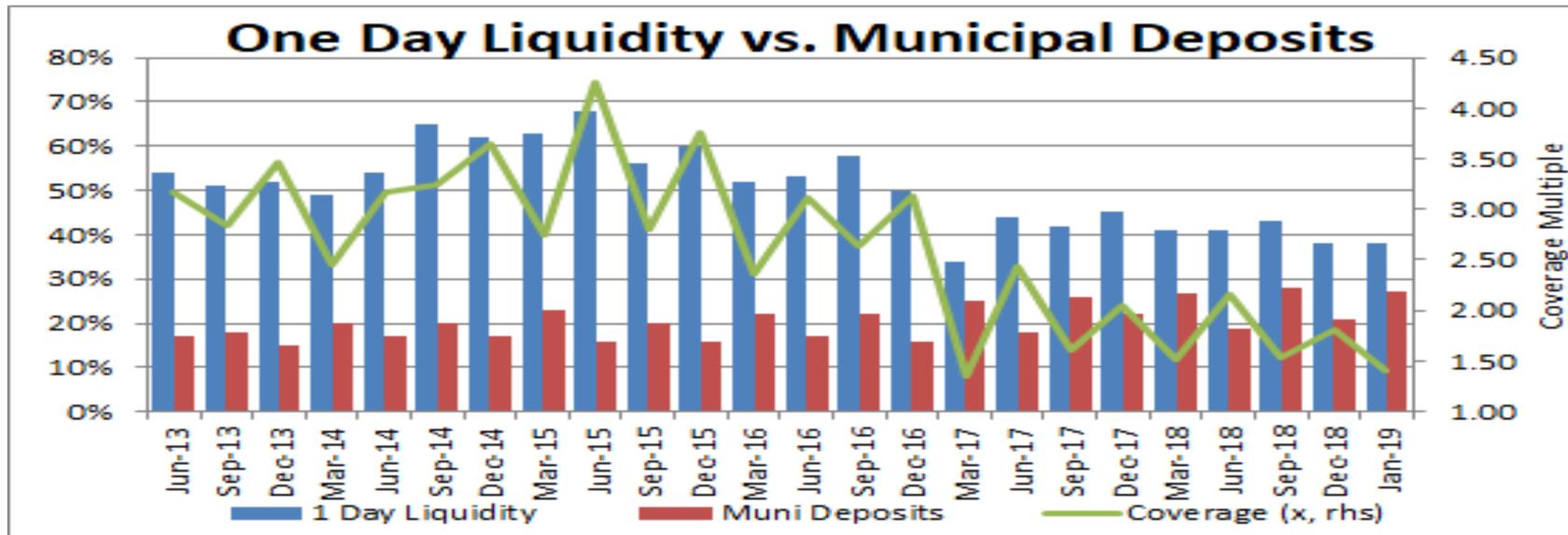


Overnight Investments or investments that are available on a same-day or next-day basis.

- As of January 31, 2019, one-day liquidity stood at 38 percent of the portfolio.

Short-Term Investment Fund – Liquidity

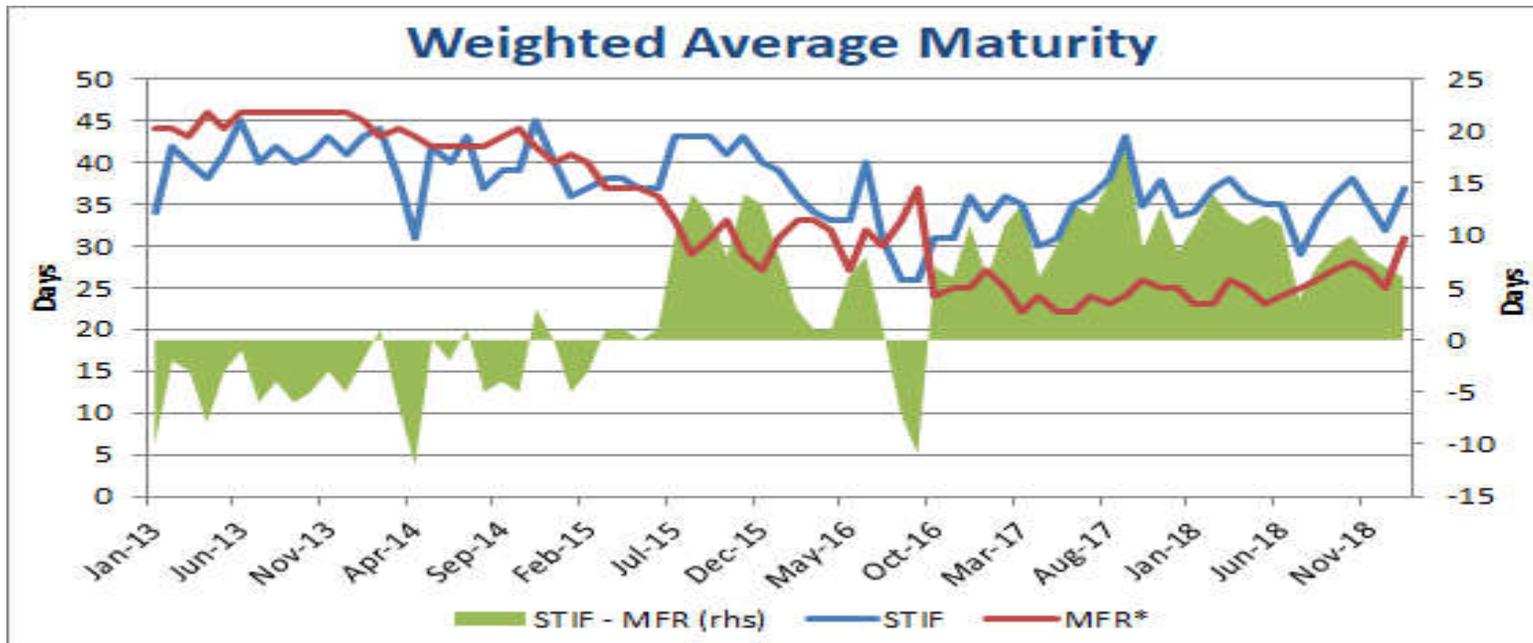
Investor Composition



- The State Treasury continues to be the single largest investor in STIF.
- Local governments, with approximately \$2.1 billion in deposits in STIF, represented 27% of the fund as of January 31, 2019.
- One day liquidity was approximately 1.4x municipal deposits.

Short-Term Investment Fund – Liquidity

Weighted Average Maturity

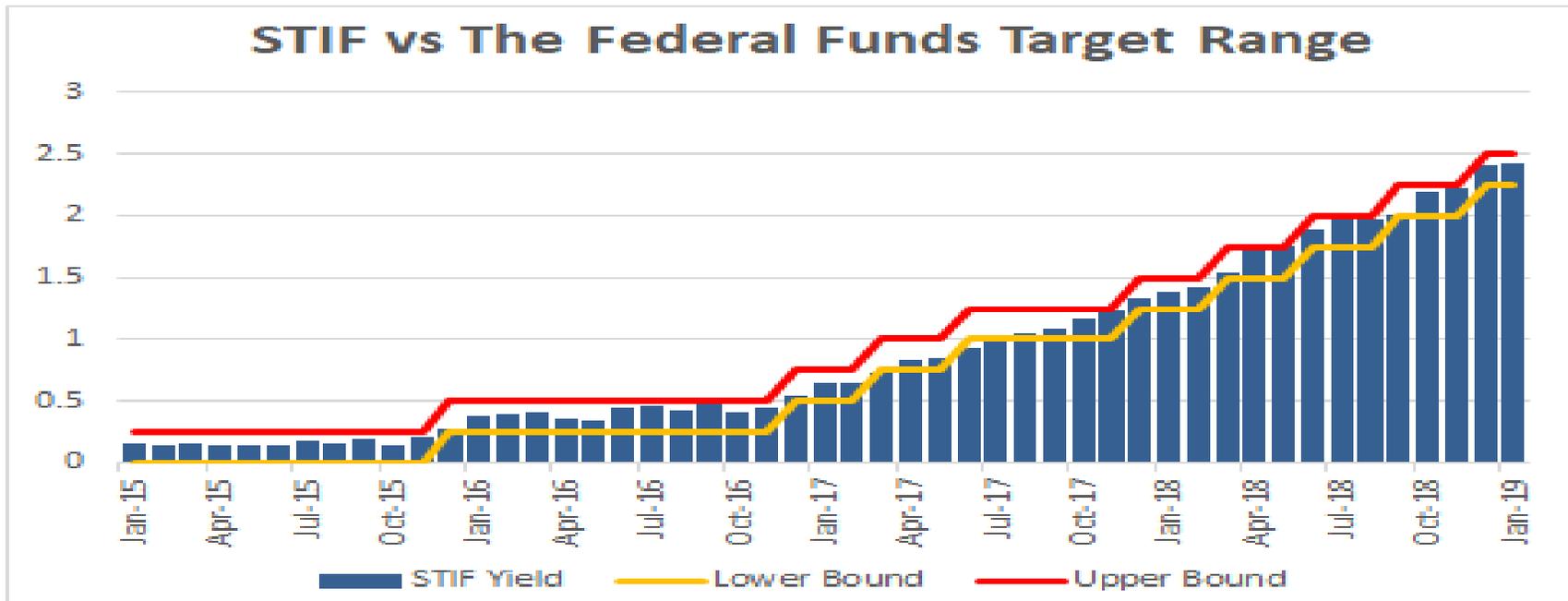


* iMoneyNet's First Tier Institutions-Only AAA-Rated Money Fund Report (MFR) Averages Index.

- STIF's WAM, at 37 days, remains conservative and well below fund averages, its guidelines and AAAM fund requirements.

Short-Term Investment Fund - Yield

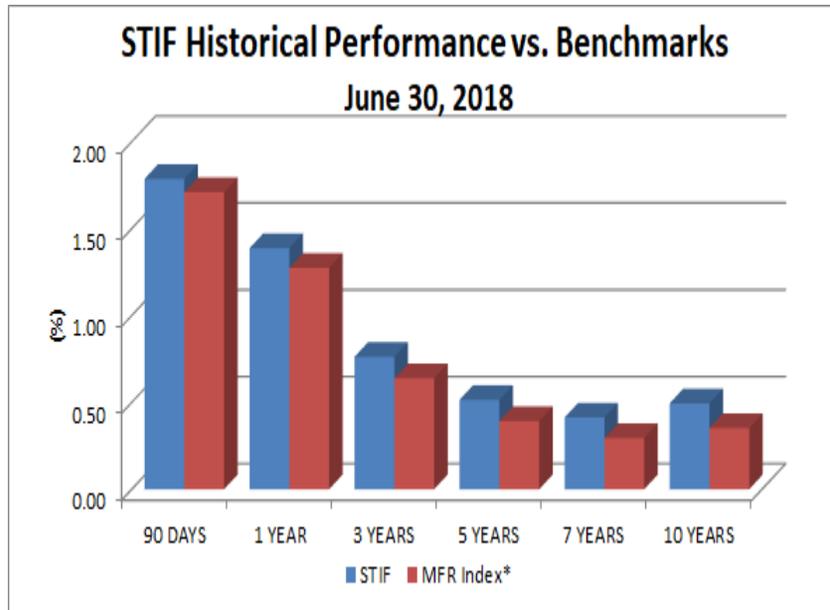
Recent Performance



- STIF has kept pace with the increases to the Federal Funds rate.

Short-Term Investment Fund – Performance

Period ending June 30, 2018



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

- During FY 2018, STIF outperformed our benchmark by 12 bps.
- Returned an additional \$7.0 million to investors above the benchmark.

Short-Term Investment Fund

Recent Performance

- For Calendar Year 2018, outperformed benchmark by 12 bps (1.89% vs. 1.77%), thereby earning an additional \$8.2 million for investors.
- Fiscal year-to-date (1/31/2019), the average rate on STIF was 9 basis points higher than the benchmark (1.28% vs 1.19%), thereby earning an additional \$5.6 million for investors.

Market Report

Overview

- The market has discounted the possibility of future rate hikes for the remainder of the calendar year.
- Short-term rates are expected to remain stable during 2019 and lower in 2020 as economic activity softens and the Federal Open Market Committee (FOMC) considers easing.
- An increase in wage inflation as well as commodity inflation could prompt a rate hike by the FOMC.

Market Report

Federal Funds

Current Implied Probabilities						
Meeting Date	Prob of Hike	Prob of Cut	1.75 - 2.00	2.00 - 2.25	2.25 - 2.50	2.50 - 2.75
5/1/2019	0.00%	3.00%	0.00%	3.00%	97.00%	0.00%
6/19/2019	0.00%	3.80%	0.00%	3.80%	96.10%	0.00%
7/31/2019	0.90%	3.80%	0.00%	3.80%	95.30%	0.90%
9/18/2019	0.90%	5.90%	0.10%	5.80%	93.10%	0.90%
10/30/2019	2.10%	5.90%	0.10%	5.80%	92.00%	2.10%
12/11/2019	1.90%	13.40%	0.60%	12.80%	84.70%	1.90%
1/29/2020	1.70%	20.90%	1.70%	19.20%	77.40%	1.70%

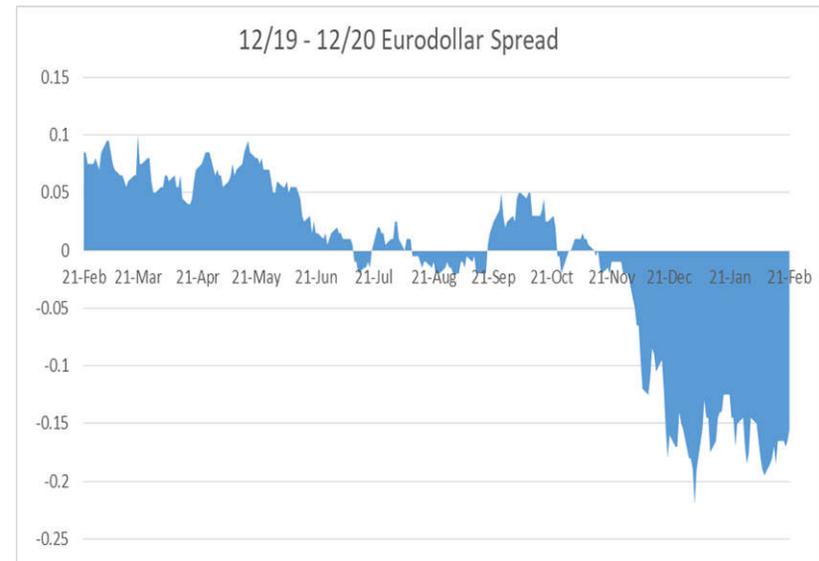
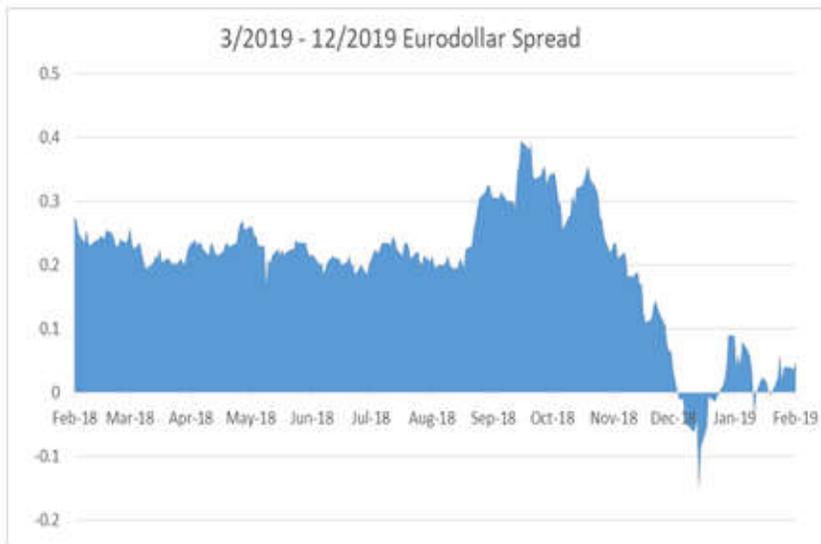
Current Federal Funds range: 2.25 - 2.50%

Source: Bloomberg

- Based on implied probabilities derived from the futures market, FOMC rate hikes that began in December of 2015 are now expected to stop and the next direction is expected to be lower.

Market Report

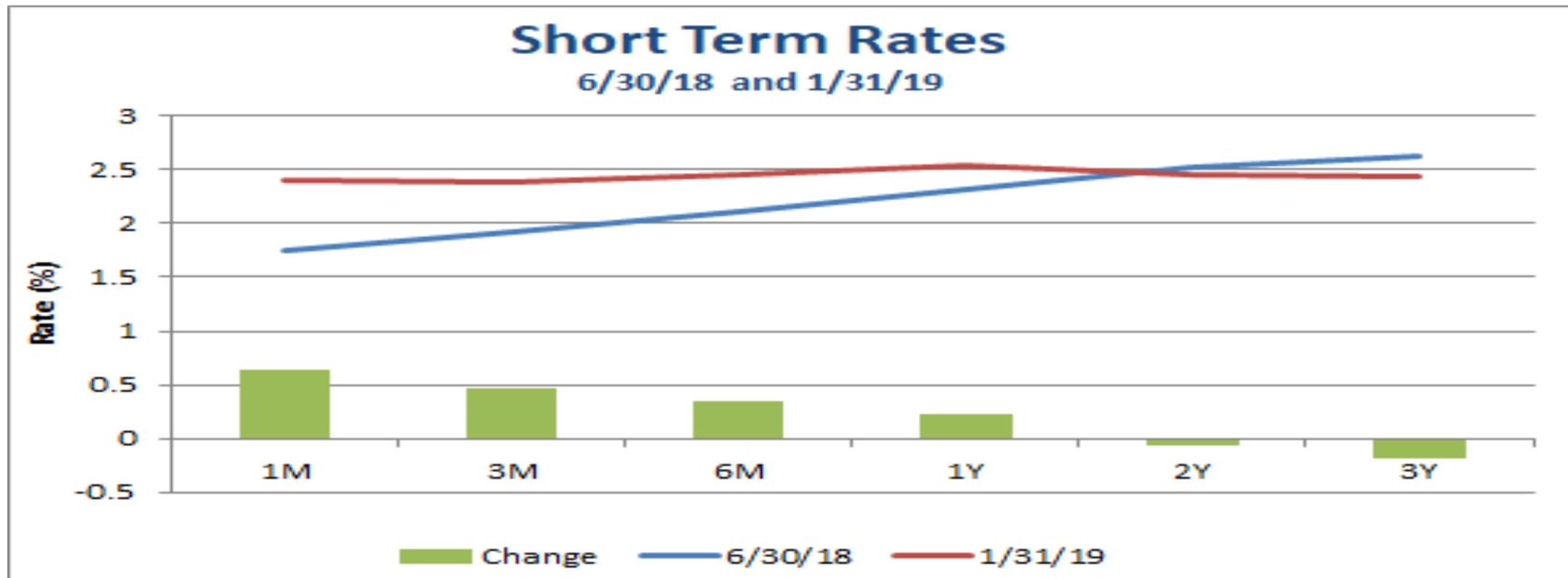
Short-Term Rate Trajectory



- Eurodollar futures show a five basis point increase in three month LIBOR between March and December of 2019 and nearly a twenty basis point reduction during 2020. This market, like Fed Funds, is expecting short-term rates to head lower.

Market Report

Short-Term Yield Curve



Source: Bloomberg

- Interest rates for under two years have increased due to inflation rates and monetary policy. The curve has flattened due to the longer-term outlook (2020+) for monetary policy and economic growth.

Going Forward

- Short-term rates are expected to remain steady near-term before gradually going lower.
- Capital has been entering prime funds, reducing the opportunities in high quality credit instruments.
- Bank deposit instruments should continue to be attractive relative to other opportunities and alternatives.
- Breakeven rates between fixed rate and floating rate securities must factor in outlier events (not being priced into the market) and be monitored closely when investing.

Thank you!

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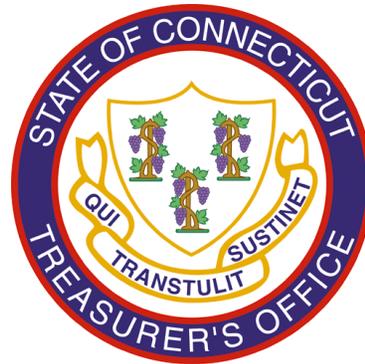
Investment Transactions

1-800-754-8430

STIF Express Online Account Access

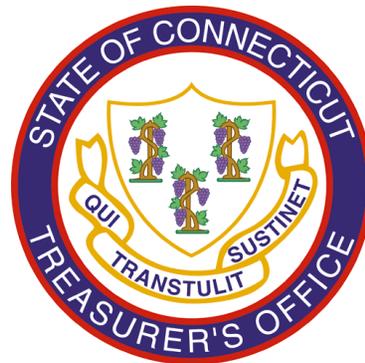
https://www.ott.ct.gov/cashmanagement_stif_express.html

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2019 Public Finance Outlook Conference

The Connecticut Retirement Plans and Trust Funds

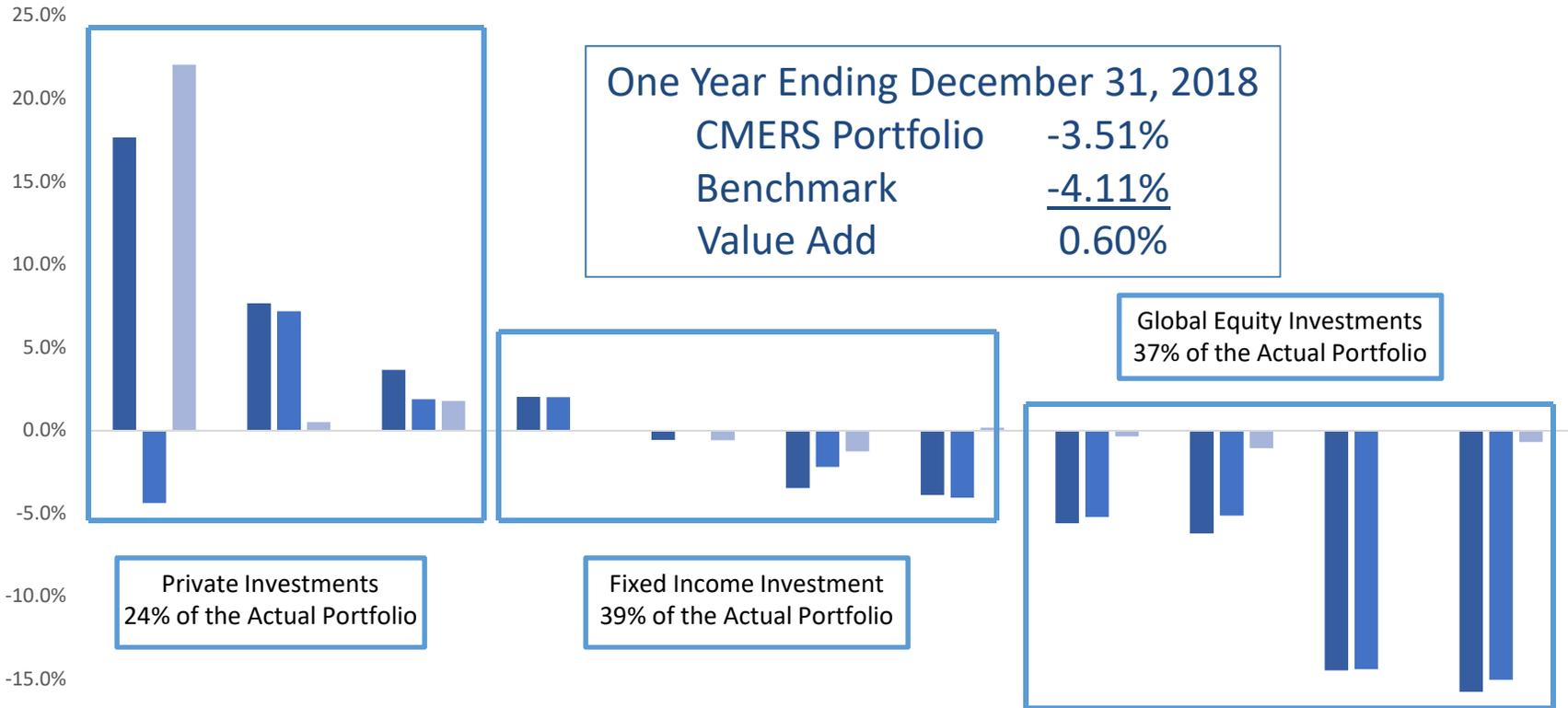


Connecticut Municipal Employees Retirement System
Laurie Martin
Chief Investment Officer

CMERS Program Review

- CMERS Investment Program
 - 2018 Calendar Year Performance
 - Private Investments
 - Fixed Income
 - Global Equity
 - Long Term Performance Through December 31, 2018
- 2018 Actuarial Changes
- CMERS Investment Program Asset Allocation

CMERS Calendar Year 2018 Performance

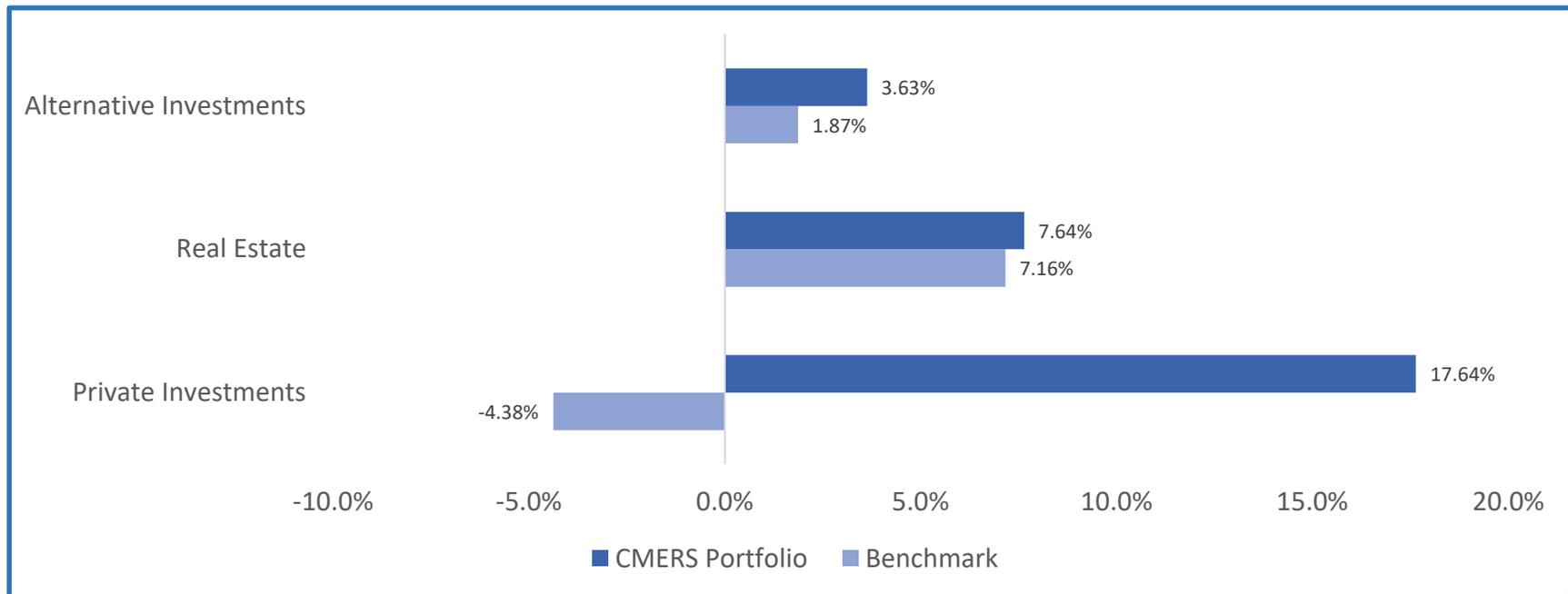


	Private Investments	Real Estate	Alternative Investments	Liquidity Fund	Core Fixed Income	High Yield Debt	Global Inflation Linked Bonds	US Equity	Emerging Market Debt	Int'l Developed Equity	Emerging Market Equity
■ CMERS Portfolio	17.64%	7.64%	3.63%	2.00%	-0.59%	-3.49%	-3.91%	-5.61%	-6.23%	-14.48%	-15.76%
■ Benchmark	-4.38%	7.16%	1.87%	1.99%	0.01%	-2.22%	-4.07%	-5.24%	-5.15%	-14.40%	-15.05%
■ Value Add	22.02%	0.48%	1.76%	0.01%	-0.60%	-1.27%	0.16%	-0.37%	-1.08%	-0.08%	-0.71%

Calendar Year 2018 Private Investments

Private Investments, representing 24% of the CMERS portfolio led returns for the year

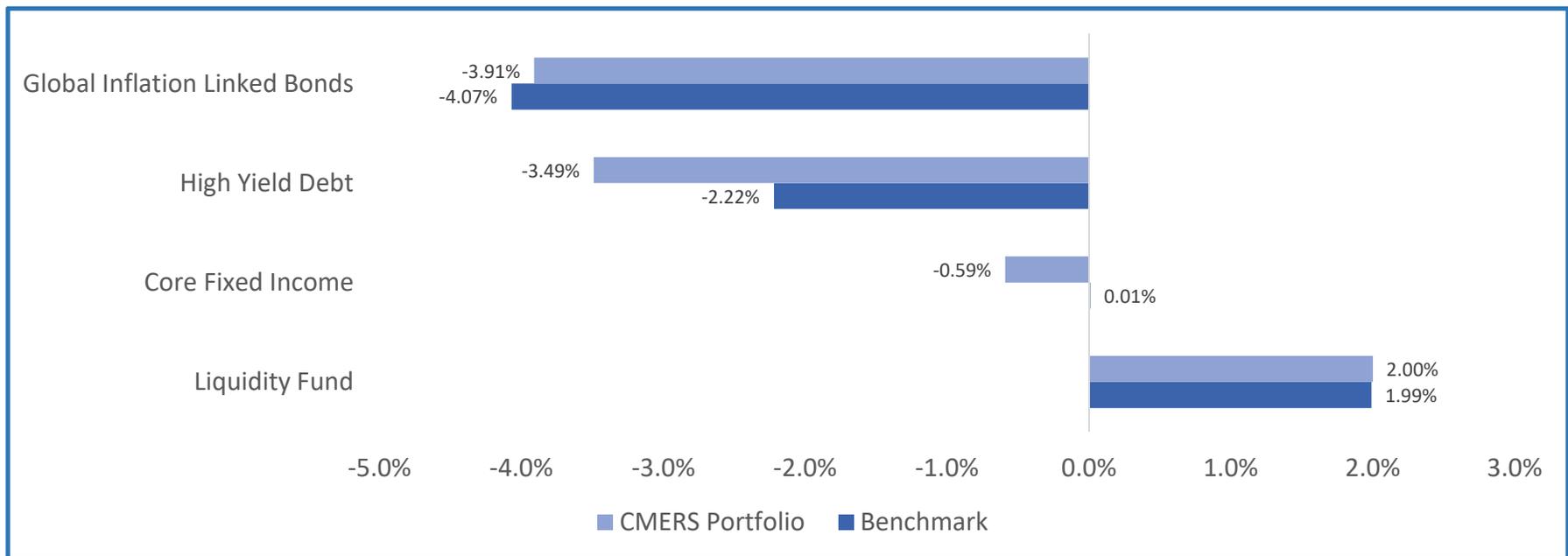
- Private Investments include Private Equity, Venture Capital, Real Estate, Real Assets and Hedge Funds
- These asset classes serve as a diversifiers for the portfolio and are expected to have higher returns than public markets over longer time periods
- Over the one year time frame, this diversification helped protect the overall portfolio



Calendar Year 2018 Fixed Income

Followed by Fixed Income, representing 39% of the CMERS portfolio that had mixed results for the year

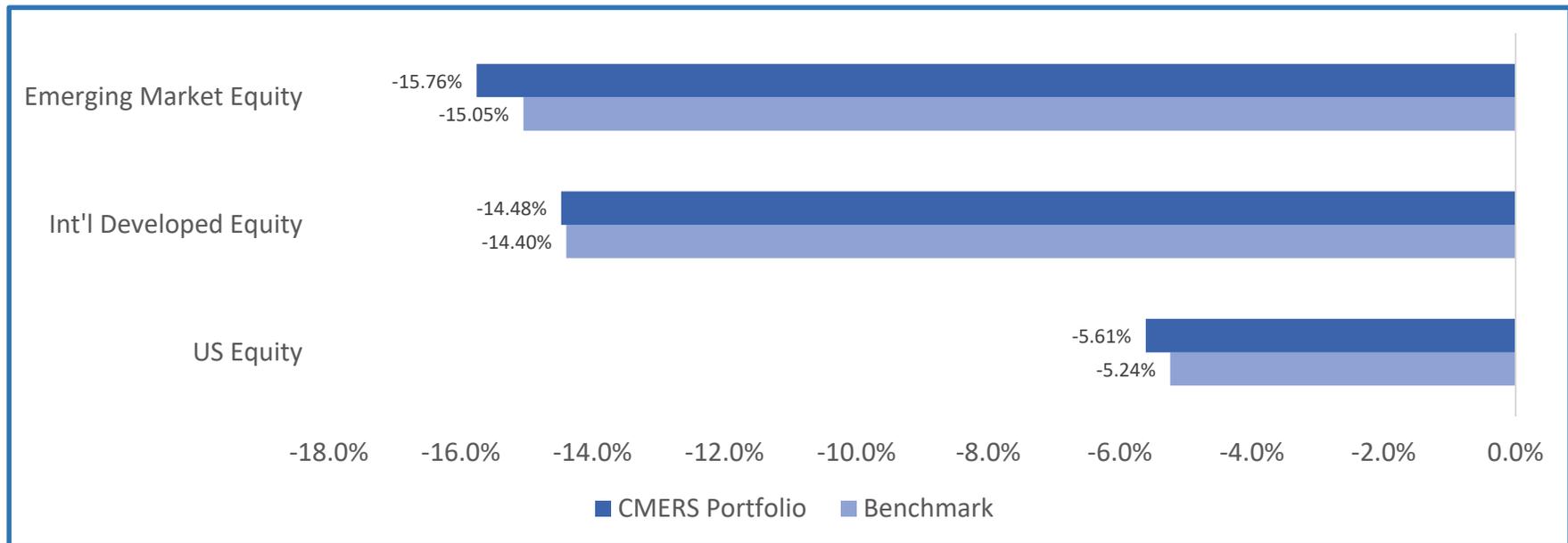
- The strengthening US Dollar combined with a significant decline in oil prices resulted in losses for the Global Inflation Linked Bond Fund as well as the High Yield Debt Fund
- Core Fixed Income returns were relatively flat for the year and the Liquidity Fund produced modest 2.0% returns as short term yields increased during the year



Calendar Year 2018 Global Equity

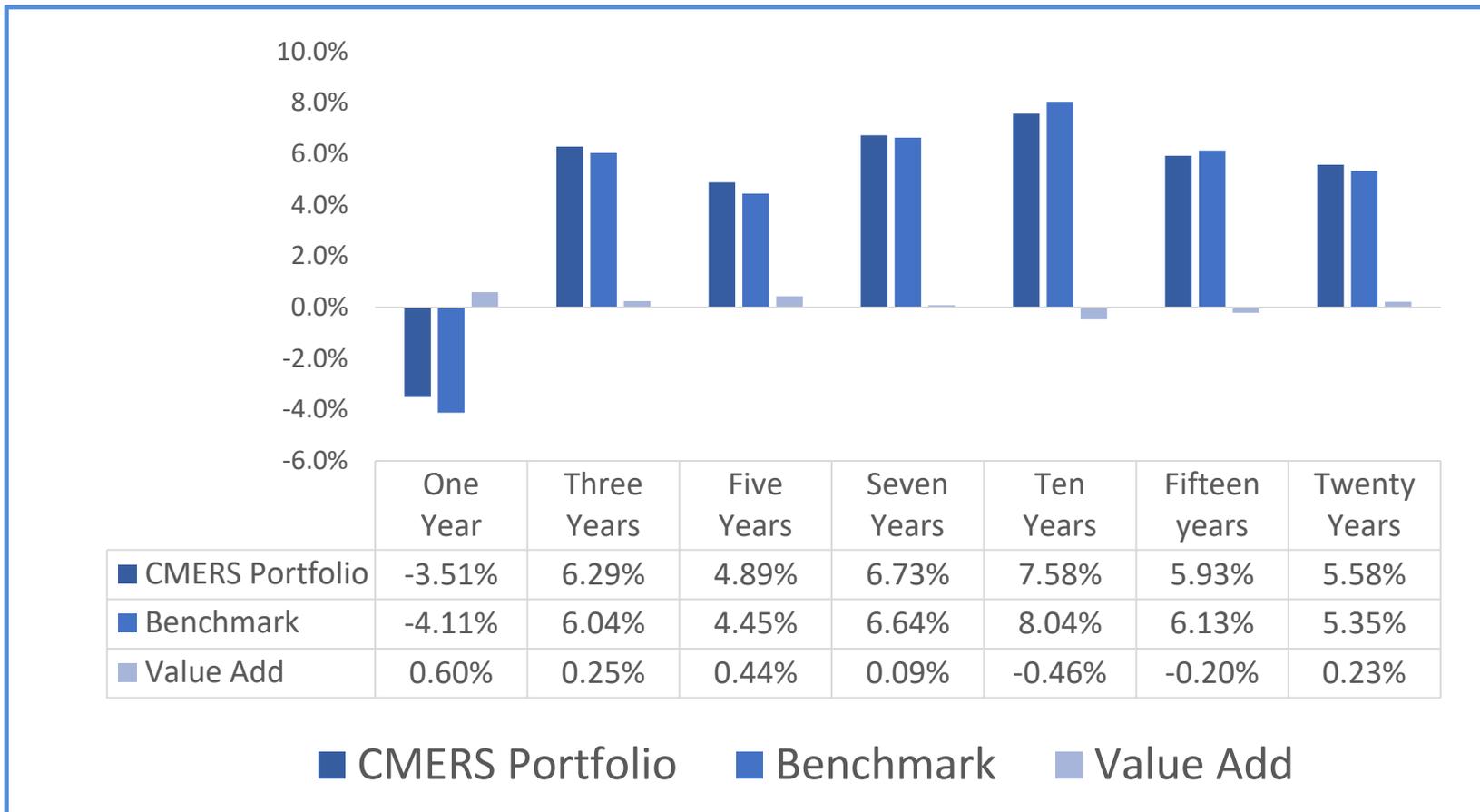
Finally, Global Equity, representing 37% of the CMERS portfolio was down (-7.1%) for the year

- The first three quarters posted gains of 6.1% but the last quarter lost (-12.1%) with a correction in equity markets that began on October 4, 2018
- The month of December was the worst performance for the equity markets since 1931
- Steep losses in Developed International and Emerging Equities were due to several factors including a slowdown in global growth and an increase in the US dollar versus foreign currencies



CMERS Long-Term Performance Through December 31, 2018

Looking at longer time periods, the CMERS portfolio performed well but short of the return assumption of 8.0% that was embedded in the valuation of the pension liabilities



MERS - 2018 Actuarial Changes

On November 15, 2018, there were several Actuarial Valuation Changes made

- Investment return assumed rate changed from 8.00% to 7.00%
 - This reduction brings the plan in line with realistic return assumptions in the market
- Wage inflation assumed rate changed from 3.50% to 3.00%
- Assumed rates of withdrawal, disability, retirement and mortality were adjusted to reflect the results of the experience study
- The impact of these changes to contribution rates will be phased in over 5 years

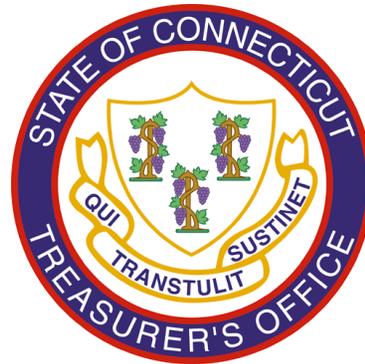
	2018 Valuation	2016 Valuation	Change
Actuarial Value of Assets	\$2,779.6M	\$2,445.5M	\$334.1M
Actuarial Value of Liabilities	\$3,624.0M	\$2,840.3M	\$783.7M
Funded Status	76.7%	86.1%	(9.4%)
Asset Return Assumption	7.0%	8.0%	(1.0%)
Employee and Employer Contributions	\$204.4M	\$131.0M	\$73.4M

CMERS 2019 Asset Allocation Changes

- As a result of the change in the rate of return assumption used for actuarial purposes, an asset allocation study was performed for the investment program
- For the CMERS asset allocation study we use **20 year** capital market forecasts to predict asset class returns and related risk metrics
- These returns are combined to build a portfolio expected to achieve the rate of return assumption used to value the liabilities on a risk adjusted basis
- The changes made to the CMERS investment program asset allocation are designed to reduce overall volatility and increase stable income generating assets include:

Increase	Decrease
Domestic Equity	International Equity
Core Fixed Income	High Yield Bonds/Emerging Market Debt
Real Estate	Short Duration Bonds
Real Assets/Infrastructure	Hedge Funds

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