TREASURER'S PORTFOLIO RISK REPORT

JUNE 30, 2019

MEASURES OF CREDIT AND COUNTERPARTY RISK

THE PORTFOLIO HAS CREDIT RISK RELATED TO THE TYPE OF INVESTMENTS SELECTED, AND INTEREST RATE RISK RELATED TO THE TERM OF THE INVESTMENT. THE PORTFOLIO ALSO HAS COUNTERPARTY RISK BASED UPON THE SOUNDNESS OF THE INSTITUTIONS THAT HOLD THE TOWN'S ASSETS. ADDITIONAL RISKS EXIST DUE TO MARKET LIQUIDITY OF THE INVESTMENTS AND THE OPERATIONAL RISKS THAT CAN IMPAIR THE ABILITY TO MANAGE THE FUNDS. THE LAST TWO RISKS CAN BE CHALLENGING TO MEASURE NUMERICALLY.

	CREDIT RISK CATEGORIES FOR INVESTMENTS
US GOV'T ISSUED	**INVESTMENTS IN SECURITIES ISSUED BY THE UNITED STATES GOVERNMENT**
US GOV'T GUARANTEED	**INVESTMENTS THAT ARE GUARANTEED BY THE US GOVERNMENT, E.G. FDIC DEPOSITS**
BANK COLLATERALIZED	**BANK ACCOUNTS THAT HAVE SEGREGATED COLLATERAL MAINTAINED FOR THE TOWN EQUAL TO AT LEAST 100% OF THE ACCOUNT**
BANK MUNI	**BANK ACCOUNTS THAT CONFORM TO CT STATE REQUIREMENTS FOR MUNICIPAL INVESTMENT**
CT STIF	**CT Short Term Investment Fund, operated by the State Treasurer's office. Portfolio is a mix of Treasury notes, bank CD's and other money market investments with a small reserve fund in the event of losses.**

CREDIT & COUNTERPARTY RISK

THE COLUMNS BELOW REFLECT RISK EXPOSURE TO THE TYPE OF INVESTMENT, THE ROWS REFLECT RISK EXPOSURE BY TYPE OF COUNTER PARTY THAT HOLDS THE TOWN'S ASSETS

OPERATING FUNDS ***6/30/2019***

LOCATION	*ACCOUNT OR TYPE*	*US GOV"T ISSUED*	*US GOV'T GTD*	*BANK COLLATERALIZED*	*BANK MUNI*	*Ct STIF*
Webster Bank	General Fund	$0	$0	$0	$285,543	$0.0
	Investment Account	$0	$0	$5,037,620	$0	$0.0
	Tax Collection Account	$0	$0	$0	$0	$0.0
	T Bill Account	$0	$0	$0	$0	$0.0
Janney Montgomery	Investments	$2,544,298	$1,233,000	$0	$0	$0.0
	Cash	$0	$15,617	$0	$0	$0
CT STIF	Redding STIF a/c	$0	$0	$0	$0	$7,676
US Bank	Stone Castle as advisor		$6,021,463			
TOTAL		$2,544,298	$7,270,080	$5,037,620	$285,543	$7,676
% of Portfolio by Asset Type		***17%***	***48%***	***33%***	***2%***	***0%***

CREDIT & COUNTERPARTY RISK

THE COLUMNS BELOW REFLECT RISK EXPOSURE TO THE TYPE OF INVESTMENT, THE ROWS REFLECT RISK EXPOSURE TO THE COUNTER PARTY THAT HOLDS THE TOWN'S ASSETS

		CAPITAL OR DESIGNATED FUNDS				
LOCATION	*ACCOUNT OR TYPE*	*US GOV"T ISSUED*	*US GOV'T GTD*	*BANK COLLATERALIZED*	*BANK MUNI*	*Ct STIF*
Webster Bank						
	Capital Non-Recurring	$0	$0	$710,212	$0	$0
	Debt Service Fud	$0	$0	$805,394	$0	$0
	Capital Projects-School	$0	$0	$261,990	$0	$0
	Capital Projects-Town	$0	$0	$739,632	$0	$0
	Georgetown Sewer Assesment	$0	$0	$0	$12,598	$0
	Georgetown Sewer Use	$0	$0	$0	$103,270	$0
	Police Fund	$0	$0	$0	$141,158	$0
	Special Revenue	$0	$0	$0	$16,234	$0
	Town Road Aid	$0	$0	$0	$369,581	$0
	Trust and Agency	$0	$0	$0	$173,425	$0
CT STIF	Redding Reserve Fund	$0	$0	$0	$0	$219,176
TOTAL of Capital or Designated Funds		$0	$0	$2,517,228	$816,266	$219,176
		0%	***0%***	***71%***	***23%***	***6%***

INTEREST RATE RISK

INTEREST RATE RISK IS RELATED TO THE TERM OF THE INVESTMENT. BELOW IS THE CALCULATED MEASUREMENT OF THE PORTFOLIO'S SENSITIVITY TO LOSS DUE TO AN IMMEDIATE INCREASE IN MARKET RATES, SHOWN IN THE WEIGHTED AVERAGE NUMBER OF DAYS TO MATURITY FOR THE INVESTMENTS. A PORTFOLIO WITH AN AVERAGE MATURITY OF 90 DAYS LOSES $25 PER MILLION OF MARKET VALUE FOR EACH 1 BASIS POINT INCREASE IN RATES, IF IMMEDIATELY LIQUIDATED OR SOLD.
IF THE INVESTMENT IS HELD TO MATURITY AS PLANNED, THERE WILL BE NO LOSS SUFFERED.

OPERATING FUNDS
6/30/2019

LOCATION	*ACCOUNT OR TYPE*	*TOTAL*	*AVG MAT*	
Webster Bank	General Fund	$285,543	1	
	Investment Account	$5,037,620	1	
	Tax Collection Account	$0	1	
	T Bill Account	$0	1	
Janney Montgomery	Investments	$3,777,298	266	
	Cash	$15,617	1	
CT STIF	Redding STIF a/c	$7,676	36	
US Bank	Stone Castle as advisor	$6,021,463	1	
TOTAL		$15,145,217		
			67.10	***DAYS***

INTEREST RATE RISK

A MEASURE OF THE PORTFOLIO'S SENSITIVITY TO LOSS DUE TO AN IMMEDIATE INCREASE IN MARKET RATES

CAPITAL OR DESIGNATED FUNDS

ACCOUNT OR TYPE	*TOTAL*	*AVG MAT*	
Capital Non-Recurring	$710,212	1.00	
Debt Service Fud	$805,394	1.00	
Capital Projects-School	$261,990	1.00	
Capital Projects-Town	$739,632	1.00	
Georgetown Sewer Assesment	$12,598	1.00	
Georgetown Sewer Use	$103,270	1.00	
Police Fund	$141,158	1.00	
Special Revenue	$16,234	1.00	
Town Road Aid	$369,581	1.00	
Trust and Agency	$173,425	1.00	
Redding Reserve Fund	$219,176	36	
	$3,552,670		
		3.16	***DAYS***

JANNEY MONTGOMERY PORTFOLIO AS OF 6/30/2019

SCHEDULE OF INVESTMENTS

ISSUER	MATURITY	RATE	Cost	Par Amount	Yield at Purchase	Income
US Treasury Note	7/15/2019	0.75%	$ 245,625	$ 250,000	2.20%	$ 1,875.00
US Treasury Note	7/31/2019	1.38%	$ 247,935	$ 250,000	2.20%	$ 3,437.50
US Treasury Note	8/31/2019	1.00%	$ 251,680	$ 256,000	2.20%	$ 2,560.00
Hsbc USA	10/24/2019	1.70%	$ 249,000	$ 249,000	1.70%	$ 4,233.00
Barclays Bank	11/7/2019	2.65%	$ 245,000	$ 245,000	2.65%	$ 6,492.50
US Treasury Note	11/30/2019	1.75%	$ 255,401	$ 258,000	2.00%	$ 4,515.00
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Sallie Mae Bk	3/23/2020	1.80%	$ 249,000	$ 249,000	1.70%	$ 4,482.00
US Treasury Note	4/30/2020	2.38%	$ 248,596	$ 250,000	2.00%	$ 5,937.50
US Treasury Note	5/31/2020	2.50%	$ 250,919	$ 252,000	2.00%	$ 6,300.00
US Treasury Note	7/31/2020	2.00%	$ 248,996	$ 250,000	2.15%	$ 5,000.00
US Treasury Note	9/30/2020	2.00%	$ 275,000	$ 278,000	2.15%	$ 5,560.00
Wells Fargo	10/31/2020	2.50%	$ 245,000	$ 245,000	2.50%	$ 6,125.00
Israeli Discount Bank	5/10/2021	2.50%	$ 245,000	$ 245,000	2.45%	$ 6,125.00
Total for Portfolio			**$ 3,776,038**	**$ 3,802,000**		**$71,473.75**
US Treasury Note			$ 2,543,038	$ 2,569,000		
CD's FDIC insured			$ 1,233,000	$ 1,233,000		

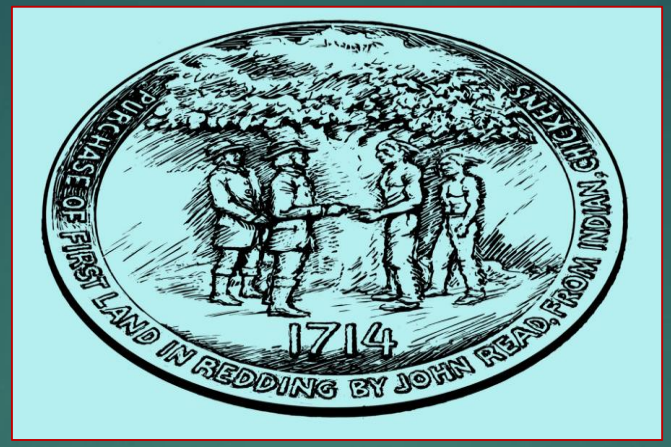
A FORECAST OF INTEREST RATES

USING THE PROBABILITIES DERIVED FROM CHICAGO MERCANTILE EXCHANGE FUTURES MARKET TRANSACTIONS FOR THE FED FUNDS OVERNIGHT RATE CONTRACT. THIS IS THE RATE SET BY THE FEDERAL RESERVE OPEN MARKET COMMITTEE IN THEIR PERIODIC MEETINGS AND DRIVES ALL THE RATE LEVELS IN THE SHORT TERM MONEY MARKETS

		Current Fed Funds Rate	**2.25-2.50%**
		as of	***7/05/2019***

	Probabilities derived from Futures Market transactions						
Federal Reserve FOMC	**Fed Funds =**						
Meeting Date	**100-125**	**125-150**	**150-175**	**175-200**	**200-225**	**225-250**	**300-325**
7/31/2019	0%	0%	8%	5%	95%	0%	0%
9/18/2019	0%	0%	3%	67%	29%	0%	0%
10/30/2019	0%	1%	23%	56%	20%	0%	0%
12/11/2019	0%	10%	36%	42%	12%	0%	0%
1/29/2020	3%	16%	37%	35%	9%	0%	0%
3/18/2020	6%	21%	37%	29%	7%	3%	0%
4/29/2020	9%	23%	36%	26%	6%	3%	0%

EACH 1/4 MOVE IN FED FUNDS IS APPROXIMATELY $5,000 PER MONTH IN INTEREST TO THE TOWN



Treasurer's Report to the Board of Finance

JULY 2019

Fund Balance June 30, 2019
Operating Funds

LOCATION	-	ACCOUNT OR TYPE	AMOUNT	ACCRUAL RATE	CASH INCOME RECEIVED FOR MONTH
Webster Bank		General Fund	$285,543	0.00%	$ -
		Investment Account	$5,037,620	2.20%	$ 5,446.86
		Tax Collection Account	$0	0.00%	$ -
		$5mm US Tsy Bill due 6/6/19	$0	2.40%	$ 48,897.90
subtotal			$5,323,164		
Janney Montgomery		Investments	$3,777,298	1.87%	$ 4,939.49
		Cash	$15,617	1.20%	$ 13.56
Bank of NY Mellon		CT STIF	$7,676	2.41%	$ 0.05
U.S. Bank		Stone Castle as advisor	$6,021,463	2.37%	$ 10,540.19
TOTAL			$15,145,217	2.14%	$ 69,838.05

Fund Balances June 30, 2019

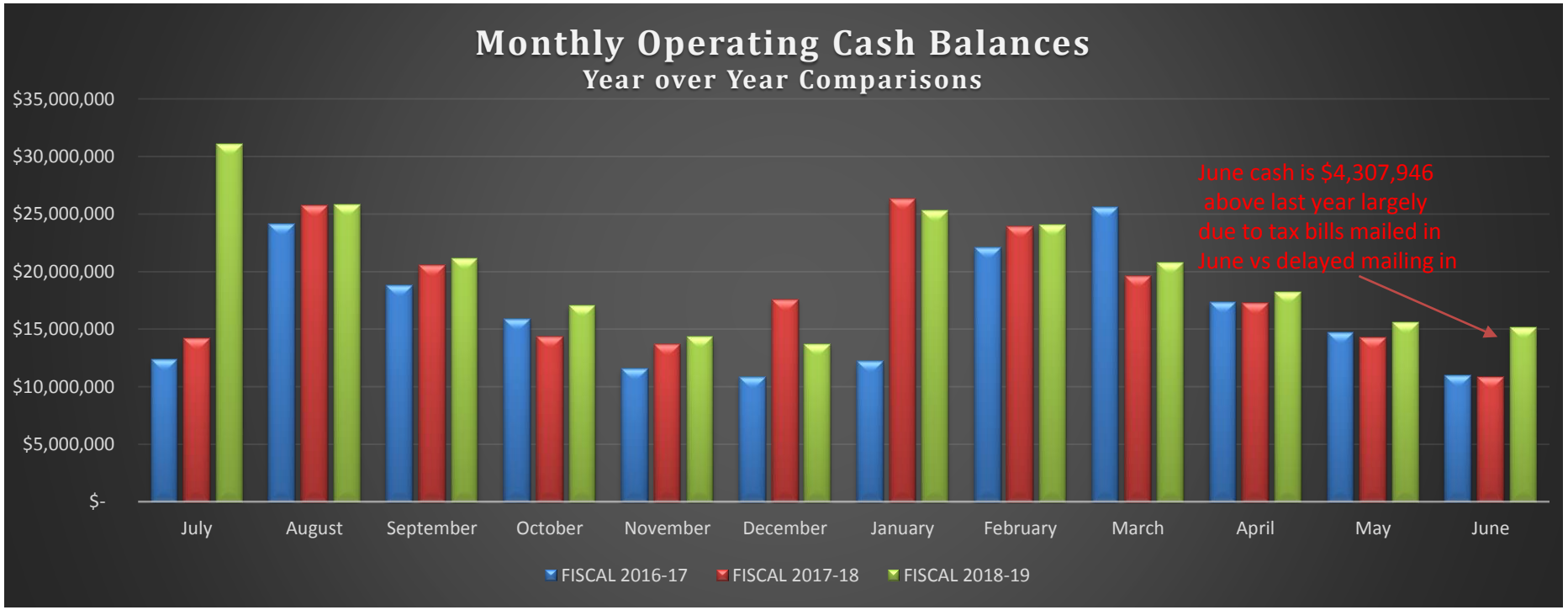
Capital or Designated Funds

LOCATION	-	ACCOUNT OR TYPE	AMOUNT	ACCRUAL RATE	CASH INCOME RECEIVED FOR MONTH
Webster Bank		Capital Non-Recurring	$ 711,431	1.97%	$ 1,212.04
		Debt Service Fund	$ 807,513	1.97%	$ 1,670.20
		Capital Projects-School	$ 312,593	1.97%	$ 530.08
		Capital Projects-Town	$ 755,747	1.97%	$ 1,316.08
		Georgetown Sewer Assesment	$ 598	0.00%	$ -
		Georgetown Sewer Use	$ 57,713	0.00%	$ -
		Police Fund	$ 113,512	0.00%	$ -
		Special Revenue	$ 12,787	0.00%	$ -
		Town Road Aid	$ 369,581	0.00%	$ -
		Trust and Agency	$ 176,320	0.00%	$ -
CT STIF		Capital Non-RE	$ 214,248.37	2.43%	$ 448.59
TOTAL			$ 3,532,043	1.59%	$ 5,176.99

Operating Cash Balances
Monthly Trends

	July	August	September	October	November	December	January	February	March	April	May	June
FISCAL 2016-17	$ 12,339,483	$ 24,138,703	$ 18,841,539	$ 15,904,492	$ 11,567,133	$ 10,852,848	$ 12,221,301	$ 22,079,478	$ 25,596,609	$ 17,329,329	$ 14,746,108	$ 10,987,985
FISCAL 2017-18	$ 14,178,351	$ 25,737,857	$ 20,519,013	$ 14,340,022	$ 13,673,926	$ 17,568,595	$ 26,340,239	$ 23,912,670	$ 19,586,100	$ 17,294,390	$ 14,262,052	$ 10,837,271
FISCAL 2018-19	$ 31,071,838	$ 25,817,845	$ 21,135,722	$ 17,072,409	$ 14,314,242	$ 13,713,897	$ 25,279,217	$ 24,085,037	$ 20,795,142	$ 18,249,913	$ 15,585,659	$ 15,145,217

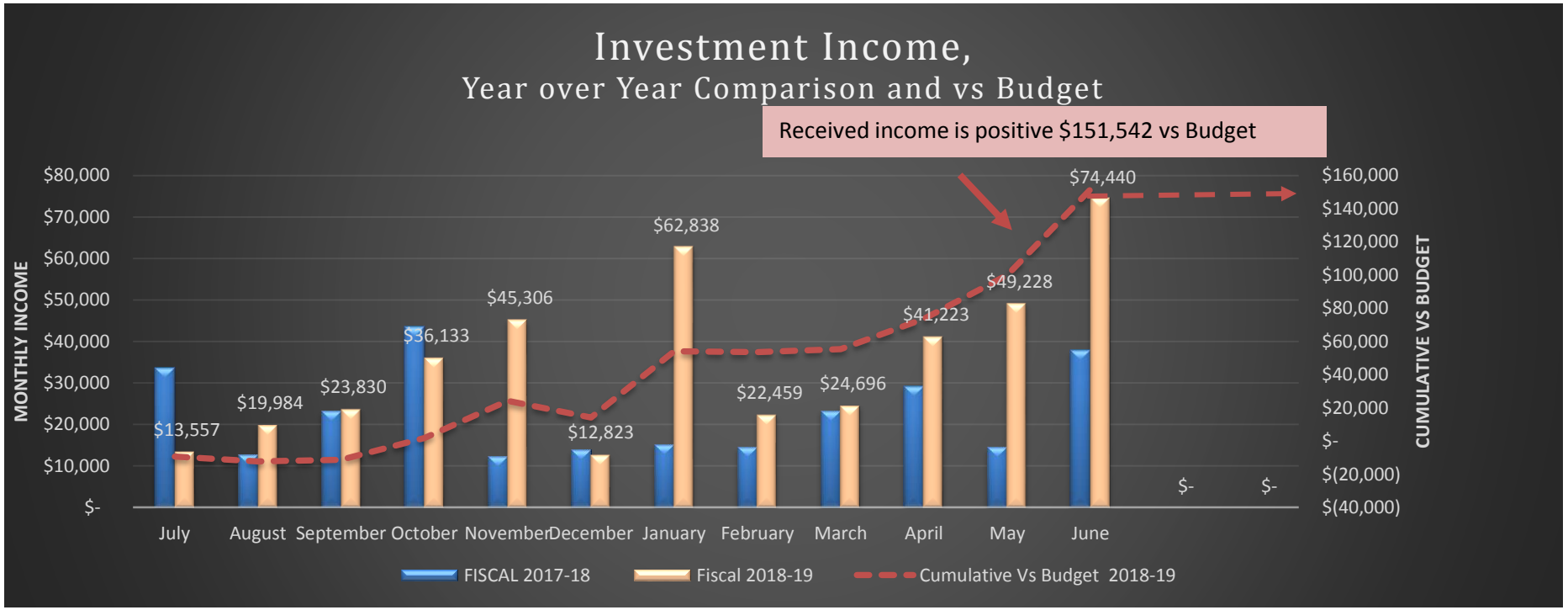
Monthly Operating Cash Balances

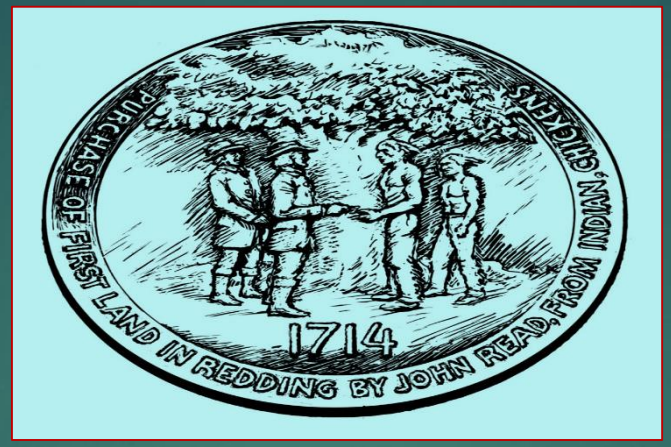


Monthly Interest Received

Interest Income	*July*	*August*	*September*	*October*	*November*	*December*	*January*	*February*	*March*	*April*	*May*	*June*
FISCAL 2017-18	$ 33,628	$ 12,721	$ 23,197	$ 43,581	$ 12,254	$ 13,840	$ 15,179	$ 14,559	$ 23,286	$ 29,265	$ 14,547	$ 37,876
Fiscal 2018-19	$ 13,557	$ 19,984	$ 23,830	$ 36,133	$ 45,306	$ 12,823	$ 62,838	$ 22,459	$ 24,696	$ 41,223	$ 49,228	$ 74,440
Budget	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917	$ 22,917
cumulative income	$ 13,557	$ 33,541	$ 57,371	$ 93,504	$ 138,810	$ 151,633	$ 214,471	$ 236,930	$ 261,626	$ 302,849	$ 352,077	$ 426,517
cumulative budget	$ 22,917	$ 45,834	$ 68,751	$ 91,668	$ 114,585	$ 137,502	$ 160,419	$ 183,336	$ 206,253	$ 229,170	$ 252,087	$ 275,004
Cumulative Vs Budget 2018-19	$ (9,360)	$ (12,293)	$ (11,380)	$ 1,836	$ 24,225	$ 14,131	$ 54,052	$ 53,594	$ 55,373	$ 73,679	$ 99,990	$ 151,513

Investment Income Trends

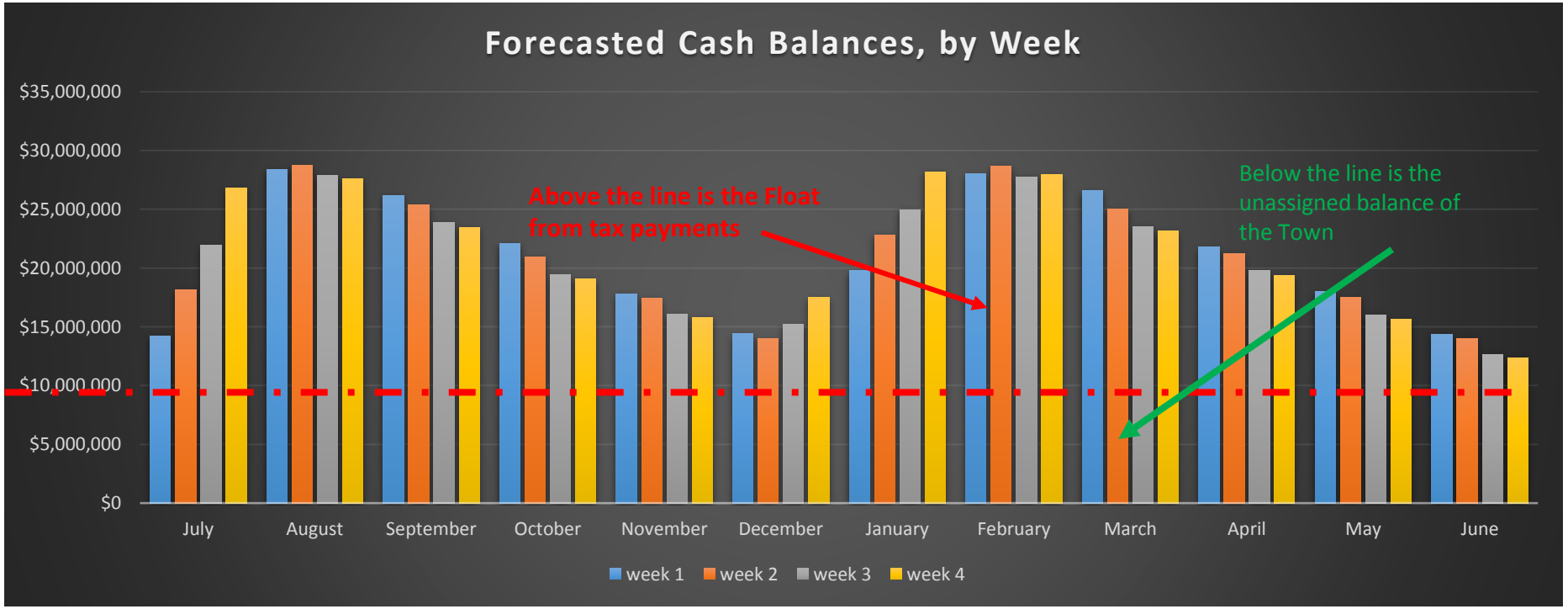




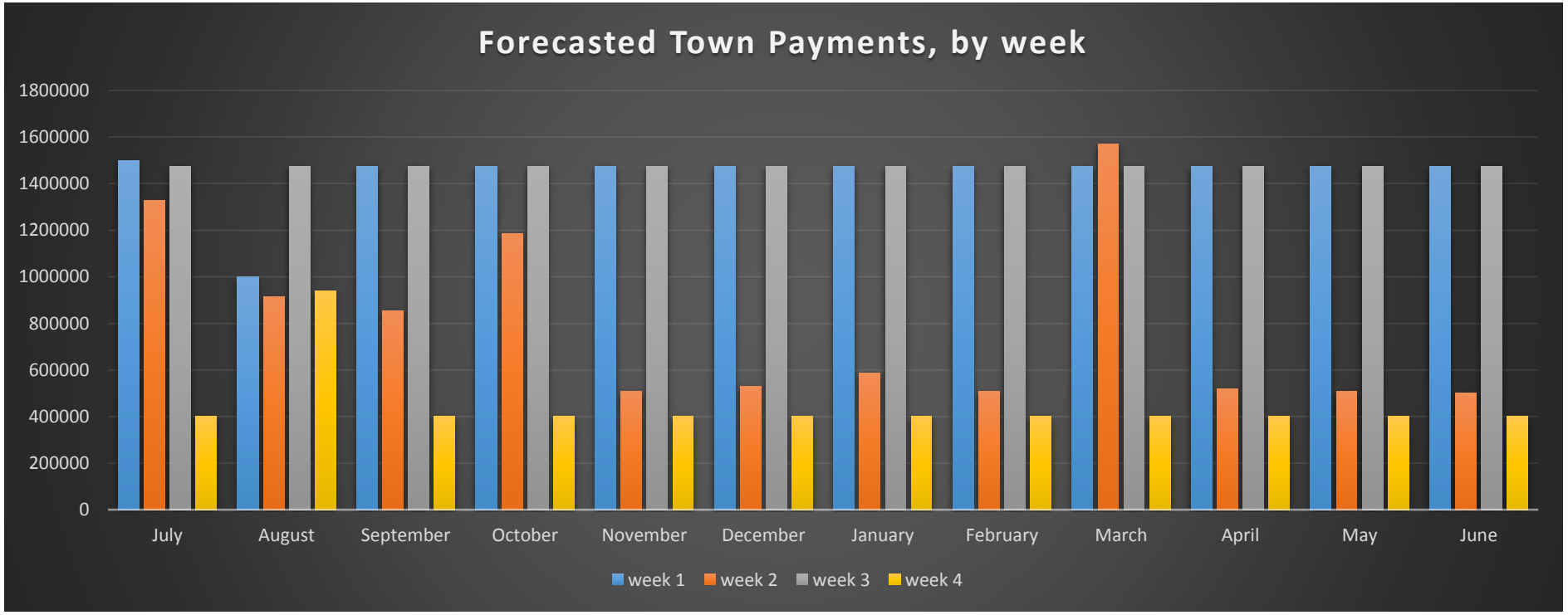
Treasurer's Investment Presentation to the Board of Finance

JULY 2019

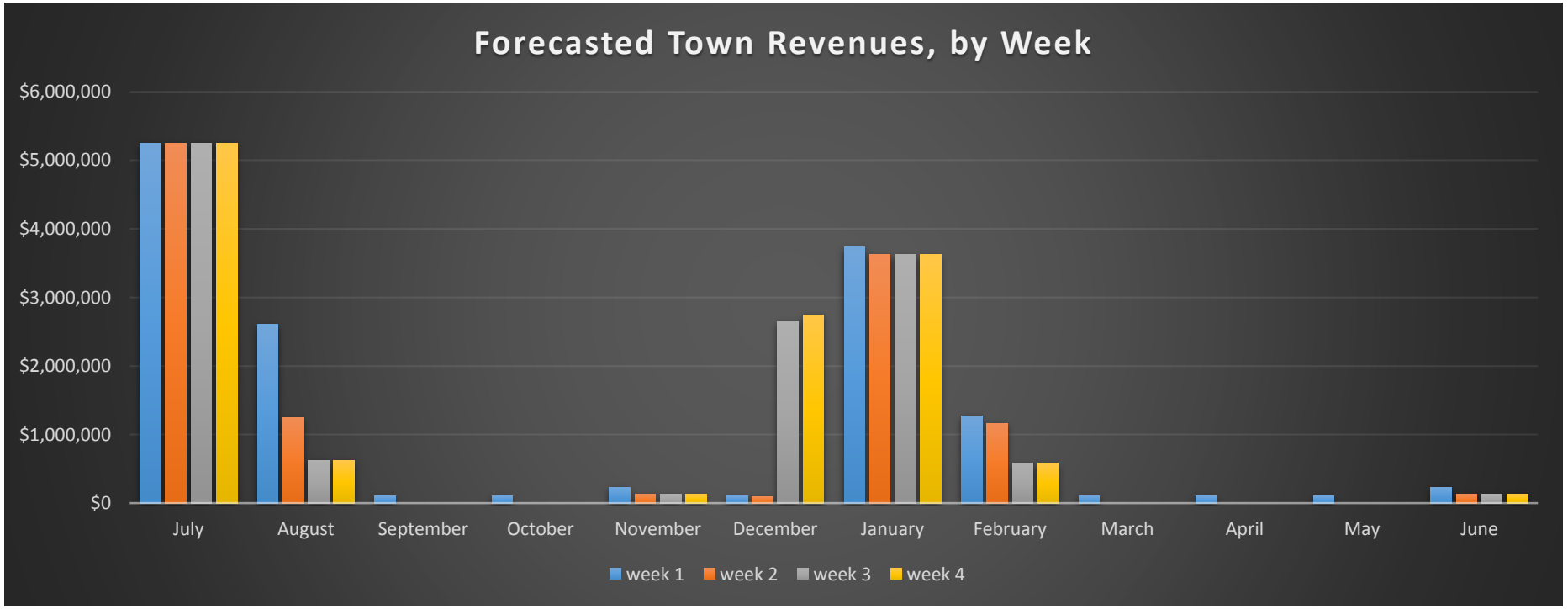
The two large pools of investment funds that the Treasurer can invest are created by the float from the timing of tax payments and the accumulated unassigned fund balance of the Town. There exists in addition smaller amounts of funds in segregated trust and capital accounts



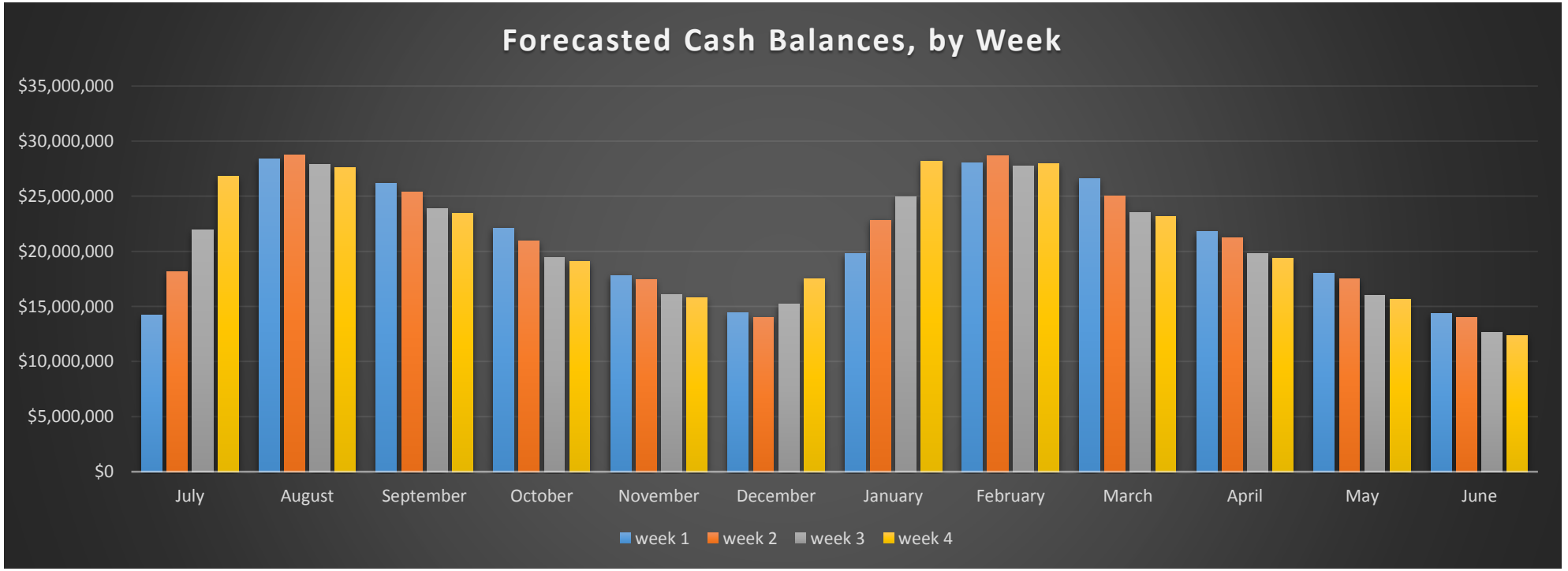
The Town's overall history of payments are fairly regular on a bi-weekly schedule for the schools, Town employee payroll, and the Town's bills. Bond repayments and accounts payable vary significantly month to month



Revenues for tax payments typically peak in the weeks leading up to the end of July and January. Remaining revenue sources are irregular in timing and relatively minor in amount.



The weekly projected total cash balances reflect the difference in timing of outgoing payments and incoming receipts; or alternatively reflect the total of the combination of the float and the Town's cash reserves



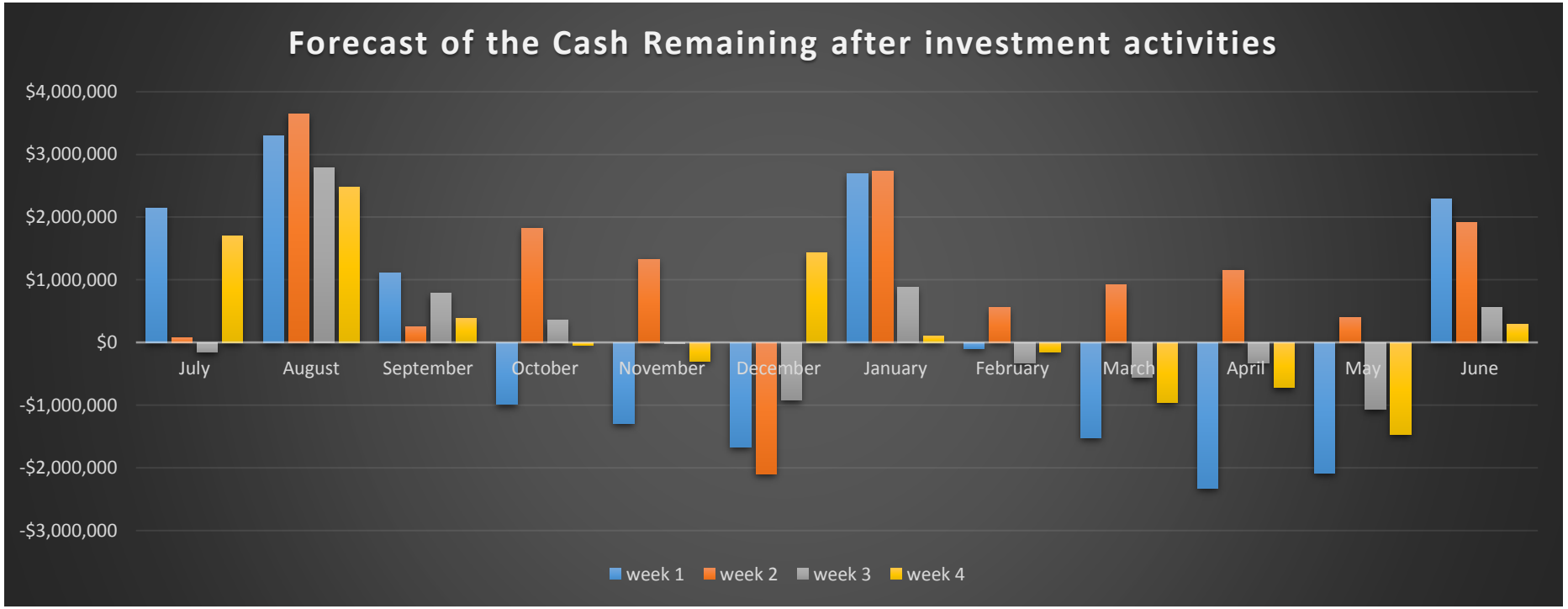
Portfolio Design

- A transactional balance of approximately $300,000 will be maintained in the general fund at Webster. A liquidity reserve of about $3 million will be held in the investment account at the bank.
- Treasury Bills will be purchased during the period of tax receipts in July and January to mature as cash is required in the subsequent months.
- A $3.8 million portfolio of Treasury notes and CD's with an average life of about 1 year will be held at Janney Montgomery.
- The Stone Castle advised account will employed as a sweep account to ensure the remaining cash balances are kept invested and liquid. Weekly amounts will vary from $1mm to $5mm.

Treasury bill purchases will provide income during the period between tax receipts and payments

Investment Funding Table, Treasury Bills					
Action	**Amount**	**Due**	**term**	**rate**	**Income**
7/7/2019	$4,000,000	1/10/2020	187	2.00%	$40,986
7/14/2019	$6,000,000	9/10/2019	58	2.00%	$19,068
7/21/2019	$4,000,000	10/8/2019	79	2.00%	$17,315
7/30/2019	$3,000,000	11/12/2019	105	2.00%	$17,260
7/21/2019	$2,000,000	9/25/2019	66	2.00%	$7,233
	$15,250,000				$101,863
Action	**Amount**	**Due**	**term**	**rate**	
1/10/2020	$ 5,000,000	6/15/2020	157	1.75%	$37,637
1/15/2020	$ 3,000,000	Apr 15, 20	91	1.75%	$13,089
1/15/2020	$ 4,000,000	May 15, 20	121	1.75%	$23,205
1/28/2020	$ 4,000,000	Mar 15, 20	47	1.75%	$9,014
	$ 16,000,000				$82,945
					$184,808

After all of the expected investments are funded, the remaining weekly cash balances are projected to fluctuate by $1-2 million. Actual timing of tax receipts, account payables, and other unforeseen cash events will change this forecast.



Forecast of Investment Income for fiscal year ending 2020

Expected income	***Source***	***Forecasted Interest***	***% of portfolio income***
	The Treasury Bill portfolio, at current rates, should yield	**$184,808**	**50%**
	The Webster Investment account should yield	**$57,000**	**15%**
	The Stone Castle account should yield	**$22,260**	**6%**
	The Janney Montgomery account should yield	**$70,300**	**19%**
	The STIF account should yield	**$4,000**	**1%**
	Income on Webster deposits of capital accounts	**$42,500**	**11%**
	Cost of Webster Bank fees not offset by compensating balances	**-$10,000**	
	Total Net Investment Income	**$370,868**	

Selected Investments risk characteristics

- **Treasury Bills-** Highly liquid, US Government issued. Maturities of one year or less.
- **Webster Secured Money Market Account(s)-** Bank account with pledged segregated collateral identified for the Town's protection, providing intra day liquidity. Used as the Investment account for a liquidity reserve and for selected Capital Accounts of the Town
- **Stone Castle advised account at US Bank-** FDIC insured deposits in the Town's name placed daily with numerous banks selected by the manager, providing next day liquidity.
- **Janney Montgomery account-** a self directed portfolio of 15 positions divided between US Treasury Notes and FDIC insured negotiable CD's. Liquidity of the CD's exist, but largely untested. The portfolio consists of a ladder of maturities among the 15 positions from 3 months to two years, with a targeted average maturity of one year
- **Ct State Short Term Investment Fund-** a mutual fund run by the State's Treasurer's office with an average maturity of about 60 days. Allows for next day liquidity. There is not a guarantee of principal. A possible alternative to the Stone Castle account.

Janney Montgomery Portfolio as of 6/30/2019

SCHEDULE OF INVESTMENTS

ISSUER	MATURITY	RATE	Cost	Par Amount	Yield at Purchase	Income
US Treasury Note	7/15/2019	0.75%	$ 245,625	$ 250,000	2.20%	$ 1,875.00
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Total for Portfolio			**$ 3,776,038**	**$ 3,802,000**		**$71,473.75**
US Treasury Note			$ 2,543,038	$ 2,569,000		
CD's FDIC insured			$ 1,233,000	$ 1,233,000		
Grand Total			**$ 3,776,038**	**$ 3,802,000**		

Counterparty Risk

- The largest exposure is to Webster Bank which provides access to check writing services, transaction ledgers and statements, ACH transfers, and wire transfer capabilities. In addition the bank is the depository for seven transactional accounts (guaranteed to a combined total of $250,000), five collateralized investment accounts, and a safekeeping account for US government securities. The bank's software facilitates the Town's multi level approval process for electronic payments. Issues regularly occur in preventing Town officials access to the system due to incompatible software updates.
- The Janney Montgomery account holds securities and cash for the Town. The account does not allow re-hypothecation and cash balances are generally maintained at less than $20,000. There is access to transactional control by phone and account information by internet.
- The Stone Castle account at US Bank is invested in a managed portfolio of direct bank deposits selected by the advisor. All monies are deposited in bank accounts in the name of the Town with FDIC insurance. Transactional access and account information is via an internet portal.
- State of Connecticut Investment Fund (STIF) accounts represent mutual fund investments for the Town. Transactional access and account information is via an internet portal.

Cash control procedures related to activity initiated by the Treasurer

- ACH transfers- used twice a month to fund next day transfers from the Webster General Fund to the School accounts and the Town's HSA account. Requires set up by the Treasurer and approval of a Selectman.
- Wire Transfers used to fund bond payments, lease payments, money transfers to STIF or US Bank for the Stone Castle portfolio, and transfers to and from Janney Montgomery. Requires set up by the Treasurer and approval of a Selectman.
- Webster Account transfers- Conducted by the Treasurer. Funds tracked and recorded by the Finance Director's office.
- Purchases and sales in the Janney account are authorized by the Treasurer. All confirms of trades and cash events are recorded against monthly statements by the Finance Director's office. Monies can move out of the account back to the Town's general account at Webster with approval of the Town's Treasurer.
- Treasury Bill purchases are conducted with Webster Bank using a segregated safekeeping account at the bank. Cash moves to and from the Town's Webster General Account. Transactions are directed by the Treasurer with confirms and cash activity recorded and reconciled by the Finance Director's office.

List of authorized individuals to approve electronic transactions

- To release ACH transfers and wires- Julia Pemberton, Peg O'Donnell, Michael Thompson
- Access to activity reports statements at Webster Bank, Janney Montgomery, Stone Castle, and STIF accounts- Krista Kramer, Zach Smith
- Access to the Webster Tax account- *****
- Access to Georgetown Sewer accounts- ******
- Assistant Treasurer appointed in the event of the Treasurer becoming unavailable- Janice Meehan