

Asset Liability Management Report

1Q2019

Performance Indicators and Key Measures

Cash, Investment and Debt Balances - Book Value (\$M)

Restricted Cash and Investments 560.5
Unrestricted Cash and Investments 1,687.2 **Total Cash and Investments** 2,247.7

Total Outstanding Debt 2,234.9

INVESTMENT PERFORMANCE



Prior quarter: Average

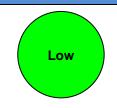
Interest earnings forecast to exceed budget. ST Portfolio performance on a risk adjusted basis at or above the benchmark for a rolling 1 year period of time.

Key Measures

Interest income is \$12.7M vs. \$8.4M budget.
Without unrealized gains and losses, interest income is \$4.3M above budget.

Book yield for the unrestricted ST investment portfolio is 2.45%, Risk-adjusted ratio for the unrestricted portfolio is 6.20 vs 4.66 for benchmark.

INTEREST RATE RISK



Prior quarter: Low

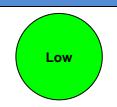
The current long term rate for tax exempt bonds and blended rate for outstanding debts are below the assumed borrowing rate in the financial plan.

Key Measures

The blended ST interest cost is 3.62%. The current assumed rate in the financial plan is 4% from 2017 to 2021 and 5.3% from 2022 to 2041.

The blended investment yield is 2.46% versus the variable debt rate of 1.49% in 1Q2019.

CREDIT RISK



Prior quarter: Low

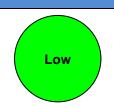
Agency is well diversified against counterparty credit risk. Investment portfolios are within policy parameters.

Key Measures

All investment portfolios are in compliance with policy limits. Credit risk exposure is low.

There were no credit rating actions that negatively impact the investment portfolio during the quarter.

LIQUIDITY RISK



Prior quarter: Low

Agency cash and investment balances are sufficient to meet all known funding and reserve requirements.

Key Measures

All reserves are fully funded to date.

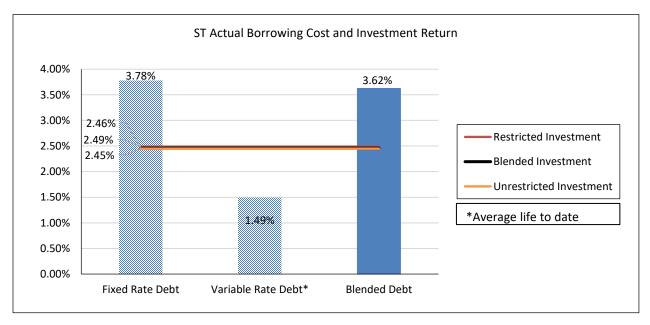
Current liquidity meets policy requirement.

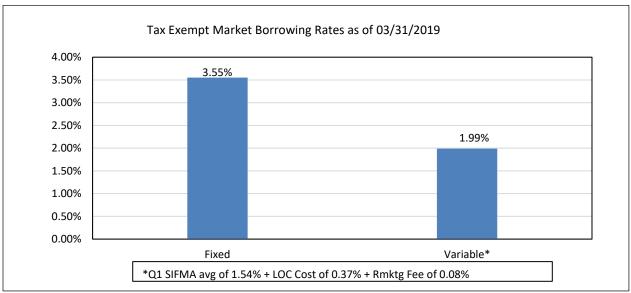
1Q2019 ALM Overview

Market Environment

- The Federal Open Market Committee (FOMC) met on on March 20th meeting and announced their decision to maintain fed fund rates at 2.25% to 2.50%. Investors in the Treasury market are pricing in a 50% probability of a 25 basis point reduction in fed funds by the end of the year.
- Concerns of a global economic slowdown pushed 2-year US Treasury rate lower from 2.50% on 12/31/18 to 2.26% on 03/31/19. With the exception of short term rates, yield curve generally shifted down as a result.
- The unemployment rate finished the month at a strong rate of 3.8% along with unemployment claims at close to 50 year lows. The Fed's preferred rate of inflation (PCE) stayed just below the Fed's desired rate of 2% with PCE inflation for Q1 at 1.6%.

Current Borrowing Rate versus Investment Rate





Credit Watch

ST is currently in "stand still" status on its Lease In/Lease Out agreement with AIG, awaiting further market and regulatory developments. AIG's financial standing has stabilized.

Cash, Investment and Debt Balances

ALM Position (\$M)

Balance and Duration	Value (\$M)	Interest Rate	Duration/Avg. Life (Year)	Benchmark Duration (Year)
Assets (Cash/Investments)				
Restricted	560.5	2.49%	1.63	NA
Unrestricted	1,687.2	2.45%	0.81	0.91
Assets (Cash/Investments) total	2,247.7	2.46%	1.01	
Liabilities (Debt)				
Fixed-Rate	(2,084.9)	3.78%		
Variable-Rate	(150.0)	1.49%		
Liabilities (Debt) total	(2,234.9)	3.62%	15.35	19.55
Net Position	12.8			

Balance and Duration	End 1Q 2019 (\$M)	End 4Q 2018 (\$M)	End 4Q 2018 (\$M)	Investment Yield (trend vs. last Q)
Restricted Cash & Invs	560.5	529.8	529.8	2.49% ∱
Unrestricted Cash & Invs	1,687.2	1,586.5	1,586.5	2.45% 介
Total Cash and Investments	2,247.7	2,116.3	2,116.3	2.46% 🕆
_	Current Debt	Undrawn TIFIA Loans*	Future Debt	Projected Next Bond Issue
Total Debt	2,234.9	3,263.7	16,638.7**	TBD

^{*}Includes East Link TIFIA Loan and the TIFIA Master Credit Agreement Amounts.

^{**}Balance reference to Fall 2018 Financial Plan

				Adjusted 2019	
Net Interest	2018 Budget (\$M)	2018 Actual (\$M)	2019 Budget (\$M)	Budget (\$M)	2019 Actual (\$M)
Uncapitalized Debt Interest Exp	(14.3)	(9.8)	(24.8)	(24.8)	(24.5)
Capitalized Debt Interest Exp	(95.3)	(98.4)	0.0	0.0	0.0
Interest Earnings*	19.5	37.6	8.4	8.4	12.7
Net Interest Expense	(90.1)	(70.6)	(16.4)	(16.4)	(11.8)

Budget based on the annual Adopted Budget.

^{*}Interest Earning without adjusted unrealized gains and losses

1Q2019 Investment Overview

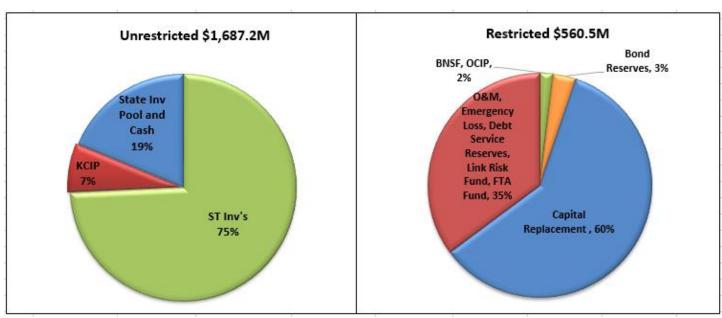
Strategy

The portfolios are position on shorter duration to allow the portfolio earnings yield on the investment portfolio to increase over the quarter as maturities were reinvested at higher rates and longer term rates flatten. Target incoprating high quality corporates into the Capital Replacement and Unrestricted Core fund to pick up additional spreads.

Cash and Investments (\$M)	Book Value	Net Change	Average Duration	Benchmark Duration	Risk Adj Ratio (RAR)*	Benchmark RAR	Current Yield	Qtrly Yield Change
Unrestricted								-
State Investment Pool	321.1	83.8	0.05				2.52%	0.16
Operating account/Uncleared checks**	(6.4)	(9.2)	0.01				2.34%	0.00
King County Investment Pool	110.4	0.8	0.91				2.23%	0.18
ST Internal Investments	1,262.0	25.2	0.99				2.45%	0.24
Total Unrestricted	1,687.2	100.7	0.81	0.91	6.20	4.66	2.45%	0.23
Restricted								
Operating/Contingency (internal)	85.0	6.6	0.05				2.52%	0.46
Capital Replacement (internal)	334.3	2.2	2.48	2.60	1.99	1.79	2.37%	0.17
Emergency Loss Reserve (internal)	29.9	5.7	0.05				2.53%	0.47
Debt Service Accounts	79.3	16.3	0.05				2.52%	0.46
BNSF Escrow	8.0	(0.0)	0.01				0.05%	0.00
OCIP Collateral	2.3	0.0	3.46	5.00			3.68%	(0.00)
Link Risk Fund	0.5	0.0	0.91				2.19%	0.37
Prior Debt Service Reserve	18.7	0.1	3.61	4.50			5.06%	0.03
FTA Grant Recovery	2.4	0.0	0.05				2.53%	0.47
Total Restricted	560.5	30.8	1.63	N/A***			2.49%	0.26
Total	2,247.7	131.5	1.01				2.46%	0.23

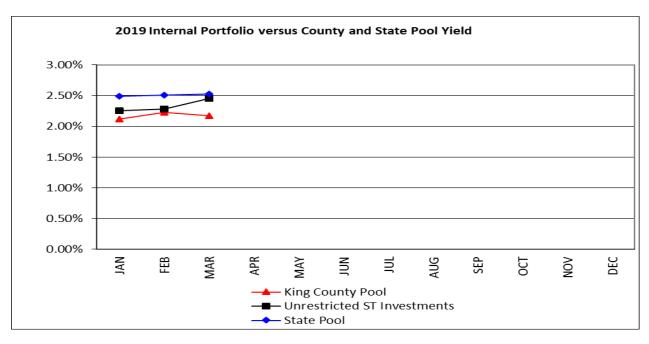
^{*}Risk Adjusted Ratio is the rolling 1 year Sharpe Ratio.

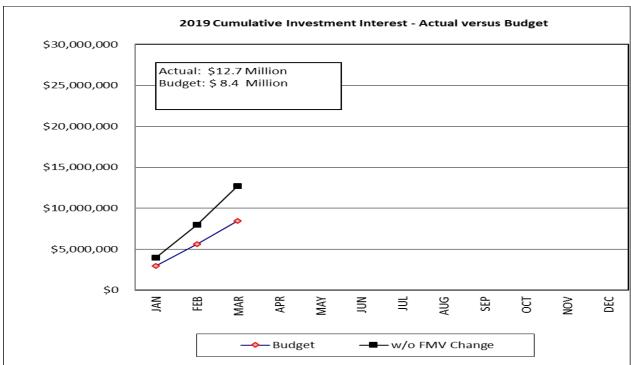
Investment Performance Portfolio Composition



^{**}Balance is not included in total RAR calculation since balance represents cash used for daily operations.

^{***}Restricted benchmarks are based upon projected cash flow needs. Calculating a "total" benchmark duration for restricted investments is not applicable.





Asset Allocation Compliance

Asset Class	\$ Par Value	Percentage Allocation	Policy Limit
U.S. Treasuries	936,265,000	41.63%	100%
U.S. Government Agencies	644,360,000	28.65%	75%
Certificates of Deposit	0	0.00%	20%
King County Investment Pool	110,957,952	4.93%	50%
State Investment Pool	521,711,763	23.20%	100%
Commerical Paper	0	0.00%	25%
Taxable Municipal/G.O. Bonds	35,710,000	1.59%	20%
	2,249,004,715	100.00%	

1Q2019 Debt Overview

Strategy

Sound Transit will consider the diversification of its long-term liabilities in the context of its future borrowing needs. With the agency's TIFIA loans, the strategy would be to utilize the lowest cost available loans first prior to issuance of other debt.

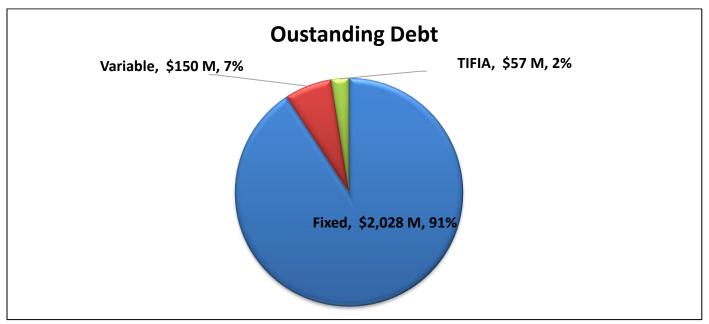
Debt Summary

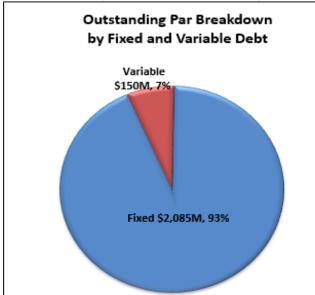
- On track to close the last TIFIA MCA loan, Federal Way, in late 2019.
- Anticipate 3 TIFIA draws in 2019 for a total of approximately \$100 million. Estimated first draw in July for \$25 million.
- The 20-year MMD ended the quarter at 2.44%, 40 basis points lower than the 12/31/2019 rate. Rates were increasing the start of the quarter but took a turn after 01/23/2019 when the MMD reached it's peak rate of 2.95%. Rates trended downard to a low of 2.44% on the final MMD recorded this quarter.
- The average spread between the 20-year AAA MMD and the 20-year A MMD was 49 basis points as of 3/31/19, which is one basis point less than what was measured on 12/31/18.

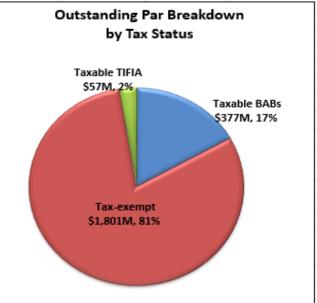
Central Puget Sound Regional Transit Authority Summary of Outstanding Bonds						
Prior Bonds Series	Issue Date	Final Maturity	Issue Size	Amount Outstanding	All-in Interest Cost	Financial Plan Assumption
1999	1/6/1999	2/1/2028	\$350,000,000	\$253,685,000	5.03%	5.00%
2009P-2T (BABs)	9/29/2009	2/1/2028	\$76,845,000	\$76,845,000	3.36%	5.00%
2012P-1	8/22/2012	2/1/2028	\$216,165,000	\$124,265,000	2.62%	5.75%
Total Prior Bonds			\$643,010,000	\$454,795,000	4.09%	
Parity Bonds				Amount	All-in	Financial Plan
Series	Issue Date	Final Maturity	Issue Size	Outstanding	Interest Cost	Assumption
2009S-2T (BABs)	9/29/2009	11/1/2039	\$300,000,000	\$300,000,000	3.65%	5.00%
2012S-1	8/22/2012	11/1/2030	\$97,545,000	\$83,525,000	2.73%	5.75%
2015S-1	9/10/2015	11/1/2050	\$792,840,000	\$789,940,000	3.89%	5.75%
2015S-2A*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	1.48%	5.75%
2015S-2B*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	1.51%	5.75%
2016S-1	12/19/2016	11/1/2046	\$400,000,000	\$400,000,000	3.60%	5.30%
Total Parity Bonds			\$1,740,385,000	\$1,723,465,000	3.52%	
Total Prior & Parity Bonds			\$2,383,395,000	\$2,178,260,000	3.64%	

Central Puget Sound Regional Transit Authority Summary of Outstanding TIFIA Loans						
TIFIA Loan	Execution Date	Final Maturity	Loan Amount	Amount Drawn	Interest Rate	Financial Plan Assumption
East Link	1/16/2015	11/1/2058	\$1,330,000,000	\$0	2.38%	5.75%
Northgate	12/22/2016	11/1/2056	\$615,267,000	\$56,605,824	3.13%	5.30%
O&M Facility East	6/22/2017	11/1/2055	\$87,663,515	\$0	2.73%	5.30%
Lynnwood Link	12/19/2018	5/1/2059	\$657,863,164	\$0	3.06%	3.95%
Federal Way	2019		\$629,472,431	\$0	N/A	
·				\$0		
Total TIFIA Loans			\$3,320,266,110	\$56,605,824	3.13%	

Debt Portfolio Composition





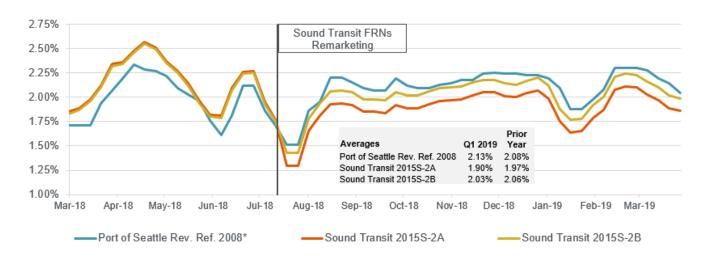


Q1 2019 Variable Rate Comparison and Pricing Estimate

Actual - Sound Transit Q1 Series 2015S-2A Borrowing Cost				
Q1 SIFMA Average	1.54%			
Index Spread	0.30%			
Remarketing Cost	0.06%			
Total FRN Cost	1.90%			

Series 2015S-2B Borrowing Cost				
Q1 SIFMA Average	1.54%			
Index Spread	0.45%			
Remarketing Cost	0.04%			
Total FRN Cost	2.03%			

Estimated - Sound Transit VRDB Q1 Borrowing Cost			
Q1 SIFMA Average	1.54%		
Estimated LOC Cost*	0.37%		
Remarketing Agent Fee	0.08%		
Total VRDB Cost	1.99%		



^{*} Assumes 3-year letter of credit

Bond Ratings as of 03/31/2019				
	Prior	Parity	TIFIA	
Moody's	Aaa	Aa1		
S&P	AAA	AAA	AA+	
Fitch			AA+	

Asset Liability Management Report 1Q2019 Key for Performance Summary

	Above Average	Average	Below Average
INVESTMENT PERFORMANCE	Interest earnings forecast to exceed budget. ST Portfolio performance on a risk adjusted basis at or above the benchmark for a rolling 1 year period of time.	Interest earnings forecast to meet budget. ST Portfolio performance on a risk adjusted basis near benchmark for a rolling 1 year period of time.	Interest earnings forecast to be below budget. ST Portfolio performance on a risk adjusted basis below benchmark or a rolling 1 year period of time.
	Low	Medium	High
INTEREST RATE RISK	Change in interest rates will have less than \$5M impact on ST financial plan over 5-year period.	Change in interest rates will have less than \$10M impact on ST financial plan over 5-year period.	Change in interest rates will have less than \$20M impact on ST financial plan over 5-year period.
LIQUIDITY RISK	All reserves and liquidity contingencies in place. Current liquidity contingency greater than policy minimum.	All reserves and liquidity contingencies in place. Current liquidity contingency equal to policy minimum.	Not all reserves and liquidity contingencies in place.
	Г		
CREDIT RISK	No known credit risks that could materially impact ST balance sheet.	Known credit risks could potentially materially impact ST balance sheet.	Known credit risks are likely to materially impact ST balance sheet.

Glossary of Debt and Investment Terms

Basis Point – The smallest measure used in quoting yields on bonds and notes. One basis point is 0.01% of yield. For example, a bond's yield that changed from 3.50% to 3.00% would be said to have moved 50 basis points.

Benchmark - A bond whose terms are used for comparison with other bonds of similar maturity. The global financial market typically looks to U.S Treasury securities as benchmarks.

BNSF Escrow – Collateral pursuant to the Sound Transit / Amtrak / BNSF lease-sub-lease dated September 2000.

Book Value – The amount at which an asset is carried on the books of the owner. The book value of an asset does not necessarily have a significant relationship to the market value of the security.

Duration - The weighted maturity of a fixed-income investment's cash flows, used in the estimation of the price sensitivity of fixed-income securities for a given change in interest rates.

Federal Funds Rate – The rate of interest at which Federal Funds are traded between banks. Federal Funds are excess reserves held by banks that desire to invest or lend them to banks needing reserves. The particular rate is heavily influenced through the open market operations of the Federal Reserve Board. Also referred to as the "Fed Funds rate."

General Obligation Bond (GO) - A municipal bond secured by the pledge of the issuer's full faith and credit, and backed by their taxing authority.

Link Risk Fund - Funded by Sound Transit to pay certain claims related to the operation of Central Link.

Liquidity – The ease and speed with which an asset can be converted into cash without a substantial loss in value.

Local Government Investment Pool (LGIP) – The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment.

Market Price - For securities traded through an exchange, the last reported price at which a security was sold; for 4securities traded "over-the-counter," the current price of the security in the market.

Par Value – The nominal or face value of a debt security; that is, the value at maturity.

Performance - An investment's return (usually total return), compared to a benchmark that is comparable to the risk level or investment objectives of the investment.

Risk Adjusted Ratio (RAR): The RAR also referred to as the Sharpe ratio is a measure for calculating risk-adjusted return. The Sharpe ratio is the average return earned in excess of the risk-free rate per unit of volatility (standard deviation) or total risk. The Sharpe ratio helps explain whether a portfolio's excess returns are due to smart investment decisions or the result of too much risk. The greater a portfolio's Sharpe ratio, the better its risk-adjusted performance has been. A negative Sharpe ratio indicates that a risk-less asset would perform better than the security being analyzed.

SIFMA - The Securities Industry and Financial Markets Association Municipal Swap Index is a 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations (VRDOs) with certain characteristics. The Index is calculated and published by Bloomberg.

TIFIA Loan – Transportation Infrastructure Finance and Innovation Act loan with the United States Department of Transportation, acting by and through the Federal Highway Administrator. TIFIA loans are used to complement other sources of debt, resulting in a lower cost of funding than would be available in the capital markets.

Total Return - Investment performance measure over a stated time period which includes coupon interest, interest on interest, and any realized and unrealized gains or losses.

OCIP Collateral – Pledged collateral for the Owner Controlled Insurance Program for University Link and Northgate Link.