

Asset Liability Management Report 3Q2019

Performance Indicators and Key Measures

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

Restricted Cash and Investments 572.3 Unrestricted Cash and Investments 1,767.9 **Total Cash and Investments** 2,340.2

Total Outstanding Debt 2,334.9

INVESTMENT PERFORMANCE



Prior quarter: Above 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 of \$41.3M is \$16.0M above budget of \$25.3M budget. Note, excludes unrealized gains and losses.

Book yield for the unrestricted ST investment portfolio is 2.30%, Risk-adjusted ratio for the unrestricted portfolio is 4.12 vs 3.59 for benchmark.

INTEREST RATE RISK



Prior quarter: Low

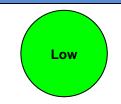
The current long term rate for tax exempt bonds and blended rate for outstanding debts are below the assumed borrowing rate in the financial plan.

Key Measures

The blended ST interest cost is 3.58%. 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 2.31% versus the variable debt rate of 1.75% in 3Q2019.

CREDIT RISK



Prior quarter: Low

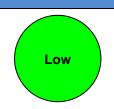
Agency is well diversified against counterparty credit risk. Investment portfolios are within policy parameters.

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.

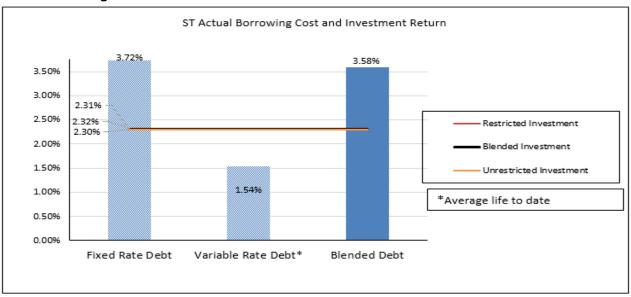
Current liquidity meets policy requirement.

3Q2019 ALM Overview

Market Environment

- The Fed has cut rates by 25 bp twice in 3rd quarter, July 31 and Sept 18 with fed fund rates ending between 1.75%-2.00%. July's move was the first rate cut since December 2008. The fed funds futures market is now pricing in a 70% chance of another 25 basis point ease at the October 30th, FOMC meeting.
- Concerns of a global economic slowdown pushed 2-year US Treasury rate lower from 1.76% on 06/30/19 to 1.62% on 09/30/19. The recent inversion of the three-month Treasury bill to the ten-year note is a strong indicator of lower yields in the future.

Actual Borrowing Rate versus Investment Rate



Current Tax Exempt Borrowing Rates

- Current 30 year fixed at 3.25%
- Current vairable rate at 1.75%. Q3 SIFMA avg of 1.37% + LOC Cost of 0.30% + Rmktg Fee of 0.08%

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	572.3	2.32%	1.60	NA
Unrestricted	1,767.9	2.30%	0.79	0.48
Assets (Cash/Investments) total	2,340.2	2.31%	0.98	
Liabilities (Debt)				
Fixed-Rate	(2,184.9)	3.72%		
Variable-Rate	(150.0)	1.54%		
Liabilities (Debt) total	(2,334.9)	3.58%	14.86	19.09

3Q2019 Investment Overview

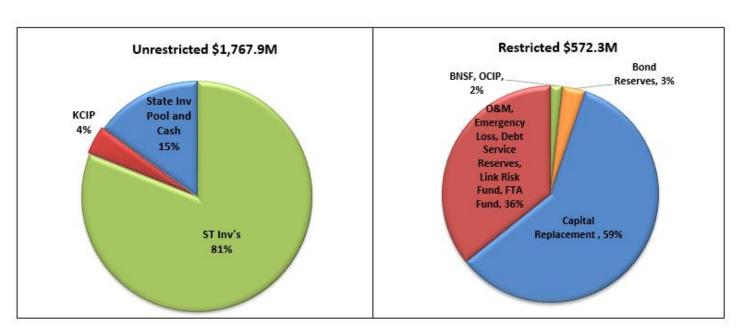
Strategy

With uneasiness of the market and risk of continued declining rates our reininvestment risk increases. We continue to balance our investments with LGIP and actively seek opportunities to pick up additional spread with muni's, corps & CPs without forgoing overall credit quality of the portfolios.

Cash and Investments (\$M)	Book Value	Average Duration	Benchmark Duration	Risk Adj Ratio (RAR)*	Benchmark RAR	Current Yield	Qtrly Yield Change
Unrestricted							
State Investment Pool	278.4	0.05				2.20%	(0.30)
Operating account/Uncleared checks**	(4.7)	0.01				1.95%	(0.44)
King County Investment Pool	64.4	0.90				2.23%	(0.05)
ST Internal Investments	1,429.9	0.92				2.32%	0.04
Total Unrestricted	1,767.9	0.79	0.48	4.12	3.59	2.30%	(0.03)
Restricted							
Operating/Contingency (internal)	86.0	0.05				2.20%	(0.31)
Capital Replacement (internal)	338.1	2.48	2.69	2.72	2.52	2.34%	(0.06)
Emergency Loss Reserve (internal)	30.2	0.05				2.20%	(0.31)
Debt Service Accounts	79.3	0.05				2.19%	(0.31)
BNSF Escrow	8.0	0.01				0.05%	0.00
OCIP Collateral	2.3	3.01	3.5			3.68%	(0.00)
Link Risk Fund	0.5	0.90				2.19%	0.00
Prior Debt Service Reserve	19.3	2.94	3.5			4.14%	(0.86)
FTA Grant Recovery	8.5	0.05				2.20%	(0.30)
Total Restricted	572.3	1.60	N/A***			2.32%	(0.18)
Total	2,340.2	0.98				2.31%	(0.06)

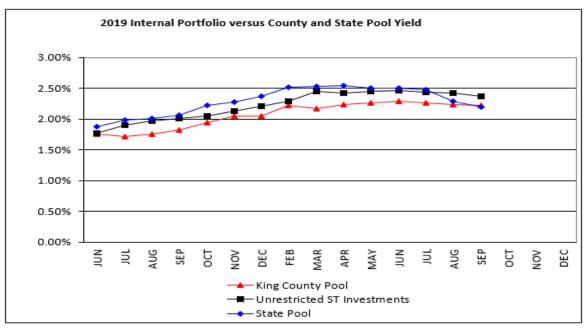
^{**}Balance is not included in total RAR calculation since balance represents cash used for daily operations.

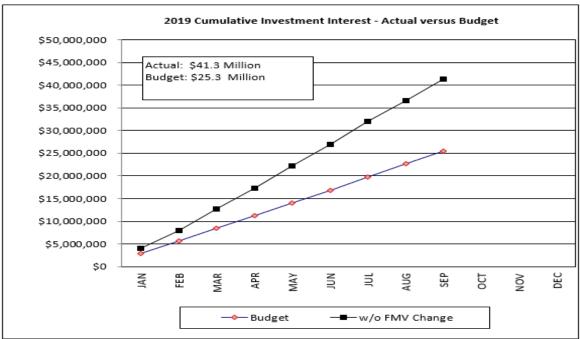
Investment Performance Portfolio Composition



[&]quot;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	964,185,000	41.29%	100%
U.S. Government Agencies	742,970,000	31.82%	75%
Certificates of Deposit	0	0.00%	20%
Corporate Notes	30,000,000	1.28%	25%
King County Investment Pool	64,995,279	2.78%	50%
State Investment Pool	484,426,995	20.74%	100%
Commerical Paper	10,000,000	0.43%	25%
Taxable Municipal/G.O. Bonds	38,600,000	1.65%	20%
	2,335,177,274	100.00%	_

3Q2019 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

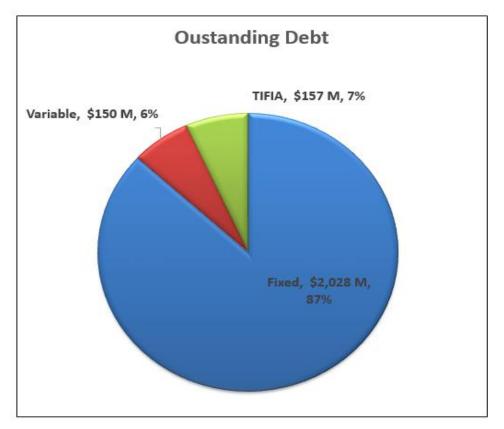
- On schedule to close the last TIFIA MCA loan, Federal Way, in late 2019. Three TIFIA draws occurred in the 3Q of 2019 for a total of \$100 million.
- The 20-year MMD ended the quarter at 1.83%, 29 basis points lower than the June 30th rate. Throughout the quarter, rates remained relatively level. There was a gradual decrease to a low of 1.64% on August 28th due to weak economic data and the Fed rate cut. A short upward trend to 1.93% later on was due to improved trade tensions and better than expected economic data but rates quickly came back down to the end of quarter rate.
- The average spread between the 20-year AAA MMD and the 20-year A MMD was 36 basis points as of 9/30/19, which is five basis points less than what was measured on 6/30/19.

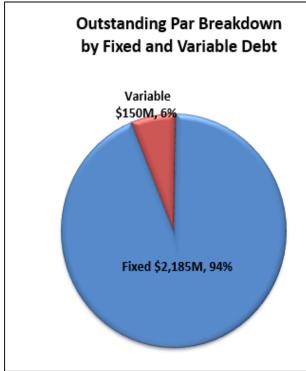
Central Puget Sound Regional Transit Authority Summary of Outstanding Bonds						
Prior Bonds				Amount	All-in	Financial Plan
Series	Issue Date	Final Maturity	Issue Size	Outstanding	Interest Cost	Assumption
1999	1/6/1999	2/1/2028	\$350,000,000	\$253,685,000	5.03%	5.00%
2009P-2T (BABs)	9/29/2009	2/1/2028	\$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	3.66%	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	1.52%	5.75%
2015S-2B*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	1.57%	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%	

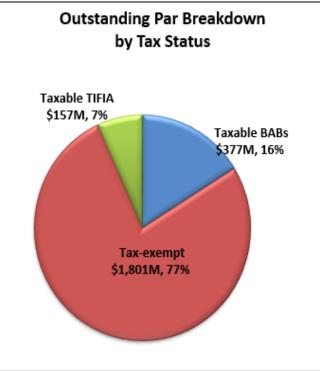
Central Puget Sound Regional Transit Authority Summary of Outstanding TIFIA Loans						
TIFIA Loan	Execution Date	Final Maturity	Loan Amount	Amount Drawn	Interest Rate	Financial Plan Assumption
East Link	1/16/2015	11/1/2058	\$1,330,000,000	\$50,000,000	2.38%	5.75%
Northgate	12/22/2016	11/1/2056	\$615,267,000	\$81,605,824	3.13%	5.30%
O&M Facility East	6/22/2017	11/1/2055	\$87,663,515	\$25,000,000	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	\$156,605,824	2.83%	

Total Outstanding Debt	\$2,334,865,824	3.58%
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Debt Portfolio Composition

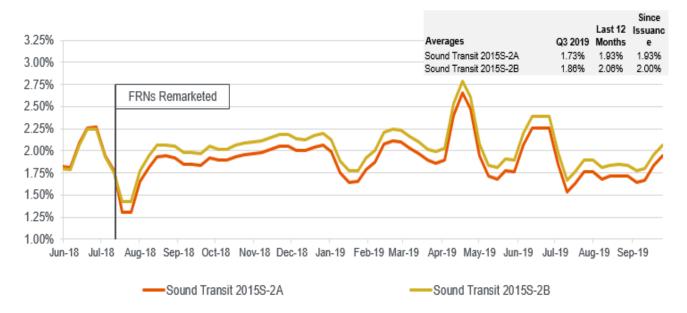






Q3 2019 Variable Rate Comparison and Pricing Estimate

Actual - Sound Transit Q3 Series 2015S-2A Borrowing Cost		Actual - Sound Tra Series 2015S-2B Borre		Estimated - Sound Transit VRDB (Borrowing Cost	
Q3 SIFMA Average	1.37%	Q3 SIFMA Average	1.37%	Q3 SIFMA Average 1.3	37%
Index Spread	0.30%	Index Spread	0.45%	Estimated LOC Cost* 0.3	30%
Remarketing Cost	0.06%	Remarketing Cost	0.04%	Remarketing Agent Fee 0.0)8%
Total FRN Cost	1.73%	Total FRN Cost	1.86%	Total VRDB Cost 1.7	75%



^{*} Assumes 3-year letter of credit

Bond Ratings as of 09/30/2019							
	Prior Parity TIFIA						
Moody's	Aaa	Aa1					
S&P	AAA	AAA	AA+				
Fitch			AA+				

Asset Liability Management Report 3Q2019

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.
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.