



# Asset Liability Management Report

1 Q 2017

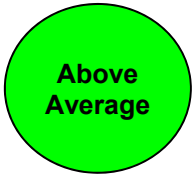
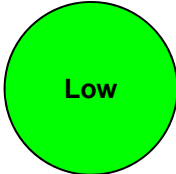
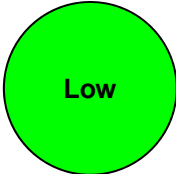
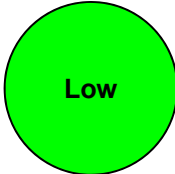
## Performance Indicators and Key Measures

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

Restricted Cash and Investments	506.4
Unrestricted Cash and Investments	1,180.3
<b>Total Cash and Investments</b>	<b>1,686.8</b>

### Current Debt

<b>Total Outstanding Debt</b>	<b>2,252.8</b>
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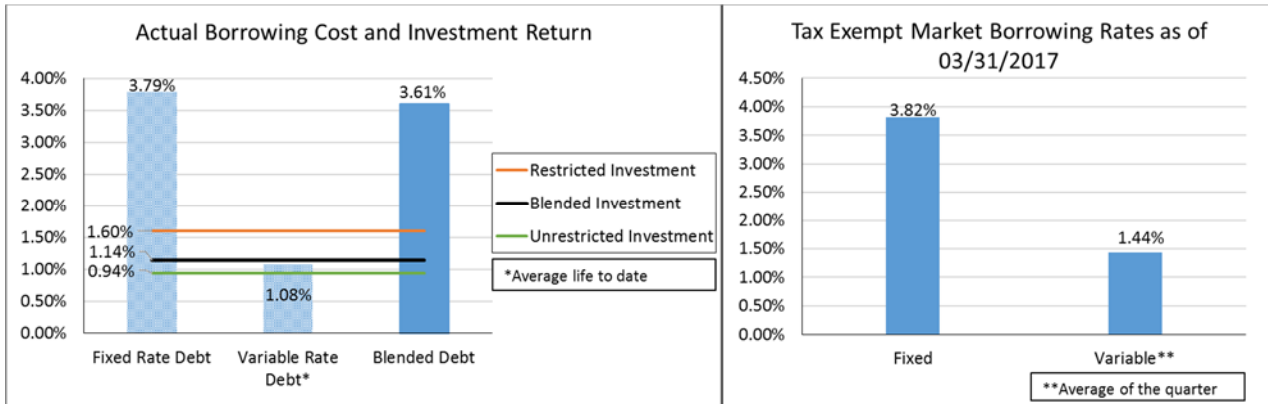
INVESTMENT PERFORMANCE	INTEREST RATE RISK	CREDIT RISK	LIQUIDITY RISK
 <p><b>Above Average</b></p>	 <p><b>Low</b></p>	 <p><b>Low</b></p>	 <p><b>Low</b></p>
Prior quarter: Average	Prior quarter: Low	Prior quarter: Medium	Prior quarter: Low
Interest earnings exceed budget. Investment returns are above benchmark.	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.	Agency is well diversified against counterparty credit risk. Investment portfolios are within policy parameters.	Agency cash and investment balances are sufficient to meet all known funding and reserve requirements.
Key Measures	Key Measures	Key Measures	Key Measures
Interest income is \$4.7M vs. \$2.7M budget. Without unrealized gains and losses, interest income is \$2M above budget.	The 20 year MMD rate is 2.93%. The blended ST interest cost is 3.61%. The current assumed rate in the financial plan is 5.30%.	All investment portfolios are in compliance with policy limits. Credit risk exposure is low.	All reserves are fully funded to date.
Book yield for the unrestricted portfolio is 0.97%, State Pool is 0.69%, and KC Pool is 0.99%.	The blended investment yield is 1.14% versus the current variable debt rate of 1.61%.	ST has moderate risks on its Lease In/Lease Out deal guaranteed by AIG although AIG's financial standing has stabilized.	Current liquidity meets policy requirement.

## 1 Q 2017 ALM Overview

### Market Environment

- The Federal Open Market Committee (FOMC) met twice during the quarter and in March increased the federal funds rate to a target range of .75% - 1.00%.
- The March unemployment rate was 4.5%, a decrease of 2 basis points from December.
- Inflation was 2.4% for the 12 months ended March 31, very close to the FOMC's target of 2%. Inflation excluding food and energy was 2.0%.
- During the quarter, treasury yields were higher with an increase of 7 basis points in the two year note and a decrease of 5 basis points in the ten year note. The two year note yield changed from 1.19 to 1.26, and the ten year note yield changed from 2.44 to 2.39.

### 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

Balance and Duration	End 1Q 2017 (\$M)	End 4Q 2016 (\$M)	End 1Q 2016 (\$M)	Investment Yield (trend vs. last Q)
Restricted Cash & Inv's	506.4	479.1	479.0	1.60% ↑
Unrestricted Cash & Inv's	1,180.3	1,276.7	757.7	0.94% ↑
<b>Total Cash and Investments</b>	1,686.8	1,755.8	1,236.7	1.14% ↑
	<b>Current Debt</b>	<b>Undrawn TIFIA Loans*</b>	<b>Future Debt**</b>	<b>Projected Next Bond Issue</b>
<b>Total Debt</b>	2,252.8	3,320.3	8,110	TBD

\*Includes East Link TIFIA Loan and the TIFIA Master Credit Agreement Amounts \*\*Includes projected ST2 and ST3 debt

## ALM Position (\$M)

Balance and Duration	Value (\$M)	Interest Rate	Duration/Avg. Life	Benchmark
<b>Assets (Cash/Investments)</b>				
Restricted	506.4	1.60%	1.86 years	3.01 years
Unrestricted	1,180.3	0.94%	0.87 years	0.98 years
<b>Assets (Cash/Investments) total</b>	1,686.8	1.14%		
<b>Liabilities (Debt)</b>				
Fixed-Rate	(2,102.8)	3.79%		
Variable-Rate	(150.0)	3.47% *		
<b>Liabilities (Debt) total</b>	(2,252.8)	3.77%	17.06	18.97
<b>Net Position</b>	<b>(566.0)</b>			

\*Blended rate of actual through quarter end and Assumed Variable Rate, 3.67% at time of issuance, for remaining life of the bonds. The Assumed Variable Rate is the highest 12 month rolling average of the SIFMA index over the preceding 10 years.

Net Interest	2016 Budget (\$M)	2016 Actual (\$M)	2017 Budget (\$M)	2017 YTD Budget (\$M)	2017 YTD Actual (\$M)
Uncapitalized Debt Interest Exp	0.0	0.0	0.0	0.0	(6.6)
Capitalized Debt Interest Exp	(91.1)	(82.5)	(109.4)	(22.4)	(17.8)
Interest Earnings	10.3	12.6	9.6	2.7	4.7
<b>Net Interest</b>	<b>(80.8)</b>	<b>(69.9)</b>	<b>(99.8)</b>	<b>(19.7)</b>	<b>(19.7)</b>

Budget based on the annual Adopted Budget.

## 1 Q 2017 Investment Overview

### Strategy

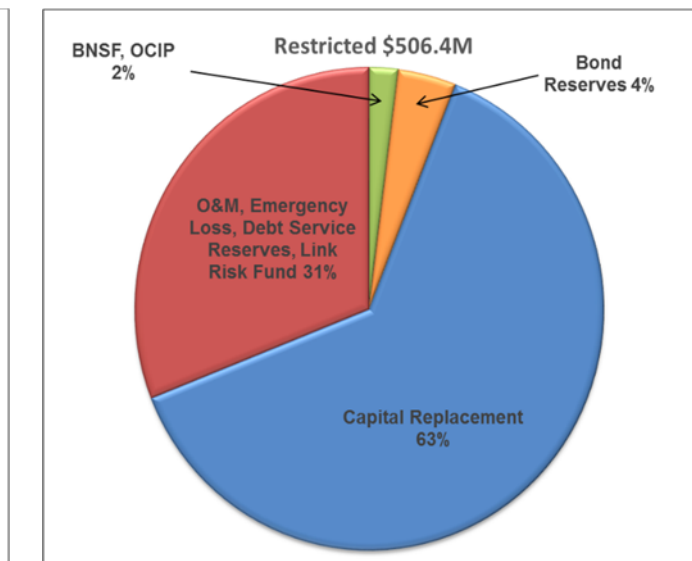
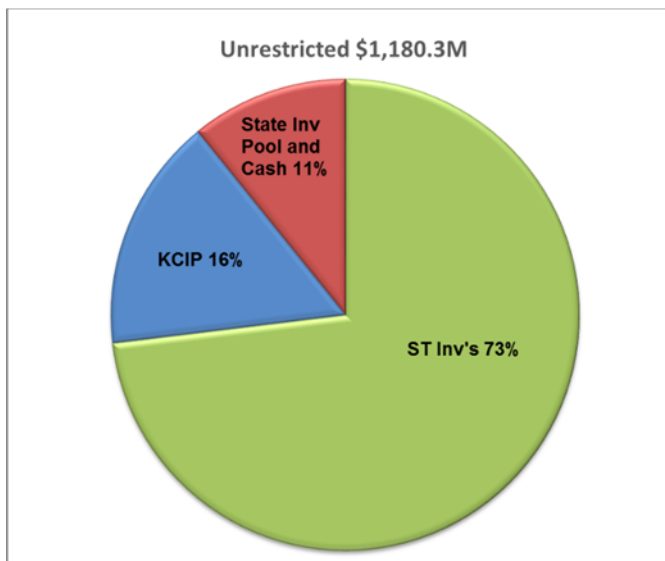
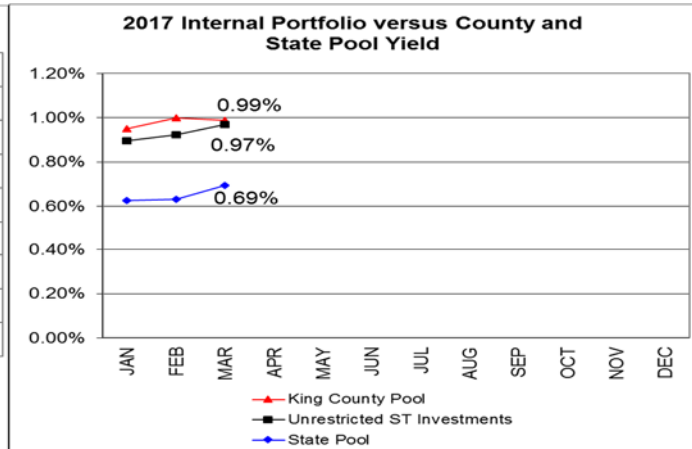
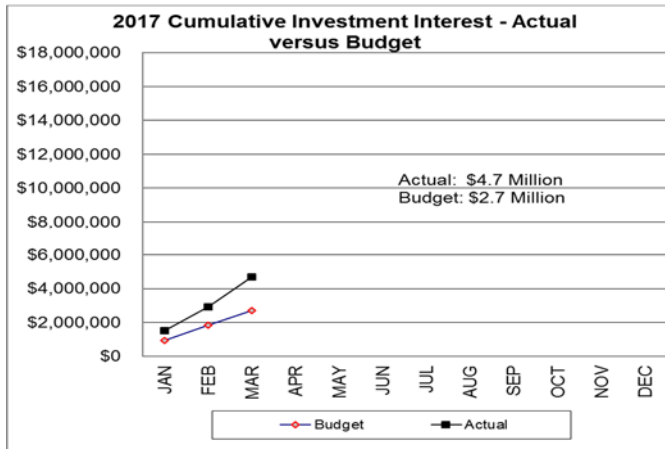
Key elements of the investment strategy focus on duration, yield curve and asset allocation selections. Staff monitors the portfolio's duration exposure compared to the benchmark duration on a monthly basis and reviews duration prior to each investment purchase. The yield curve is reviewed to determine the best value within the maturity constraints of the portfolio before each investment purchase is made. A comparison of US Treasury rates to other allowable investments is conducted to ensure that value is added before taking on any additional risk.

Cash and Investments (\$M)	Book Value	Net Change	Average Duration	Benchmark Duration	Current Yield	Qtrly Yield Change
<b>Unrestricted</b>						
State Investment Pool	126.2	(86.9)	0.01		0.69%	0.18
Operating account/Uncleared checks	1.4	(9.8)	0.01		0.53%	0.05
King County Investment Pool	190.0	0.4	1.05		0.99%	0.06
ST Internal Investments	862.6	(0.1)	0.96		0.97%	0.10
<b>Total Unrestricted</b>	<b>1,180.3</b>	<b>(96.4)</b>	<b>0.87</b>	<b>0.98</b>	<b>0.94%</b>	<b>0.13</b>
<b>Restricted</b>						
Operating/Contingency (internal)	67.9	7.2	0.01		0.70%	0.19
Capital Replacement (internal)	320.6	1.6	2.64	2.68	1.87%	0.07
Emergency Loss Reserve (internal)	18.1	3.0	0.01		0.70%	0.20
Debt Service Accounts	70.7	15.4	0.01		0.70%	0.19
BNSF Escrow	8.0	(0.0)	0.01		0.05%	0.00
OCIP Collateral	2.2	0.0	5.43		3.68%	(0.00)
Link Risk Fund	0.6	0.0	1.05		0.97%	0.06
Prior Debt Service Reserve	18.4	0.1	4.44		4.91%	0.01
<b>Total Restricted</b>	<b>506.4</b>	<b>27.3</b>	<b>1.86</b>	<b>N/A*</b>	<b>1.60%</b>	<b>0.06</b>
<b>Total</b>	<b>1,686.8</b>	<b>(69.1)</b>	<b>1.17</b>		<b>1.14%</b>	<b>0.12</b>

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

## Investment Performance

### Portfolio Composition



### Asset Allocation Compliance

Asset Class	\$ Par Value	Percentage Allocation	Policy Limit
U.S. Treasuries	523,880,000	31.20%	100%
U.S. Government Agencies	608,608,000	36.25%	75%
Certificates of Deposit	0	0.00%	10%
King County Investment Pool	190,620,036	11.35%	50%
State Investment Pool	286,567,196	17.07%	100%
Commerical Paper	25,000,000	1.49%	10%
Taxable Municipal/G.O. Bonds	44,210,000	2.63%	25%

## 1 Q 2017 Debt Overview

### Strategy

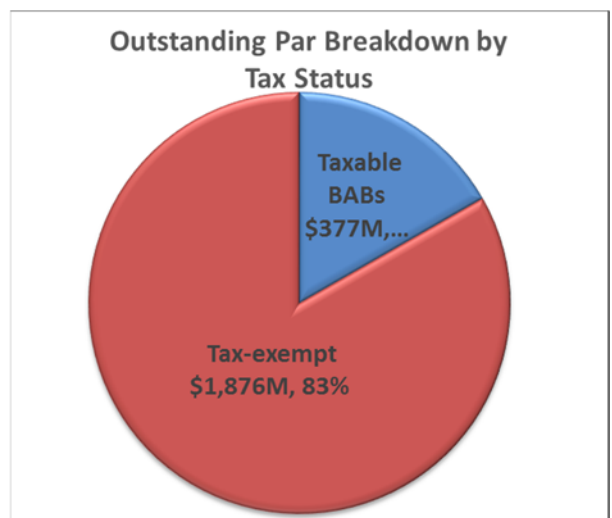
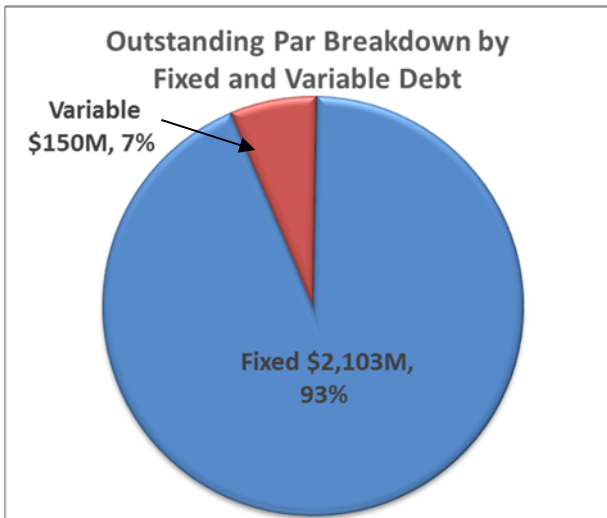
Sound Transit will consider the diversification of its long-term liabilities in the context of its future borrowing needs.

### Debt Summary

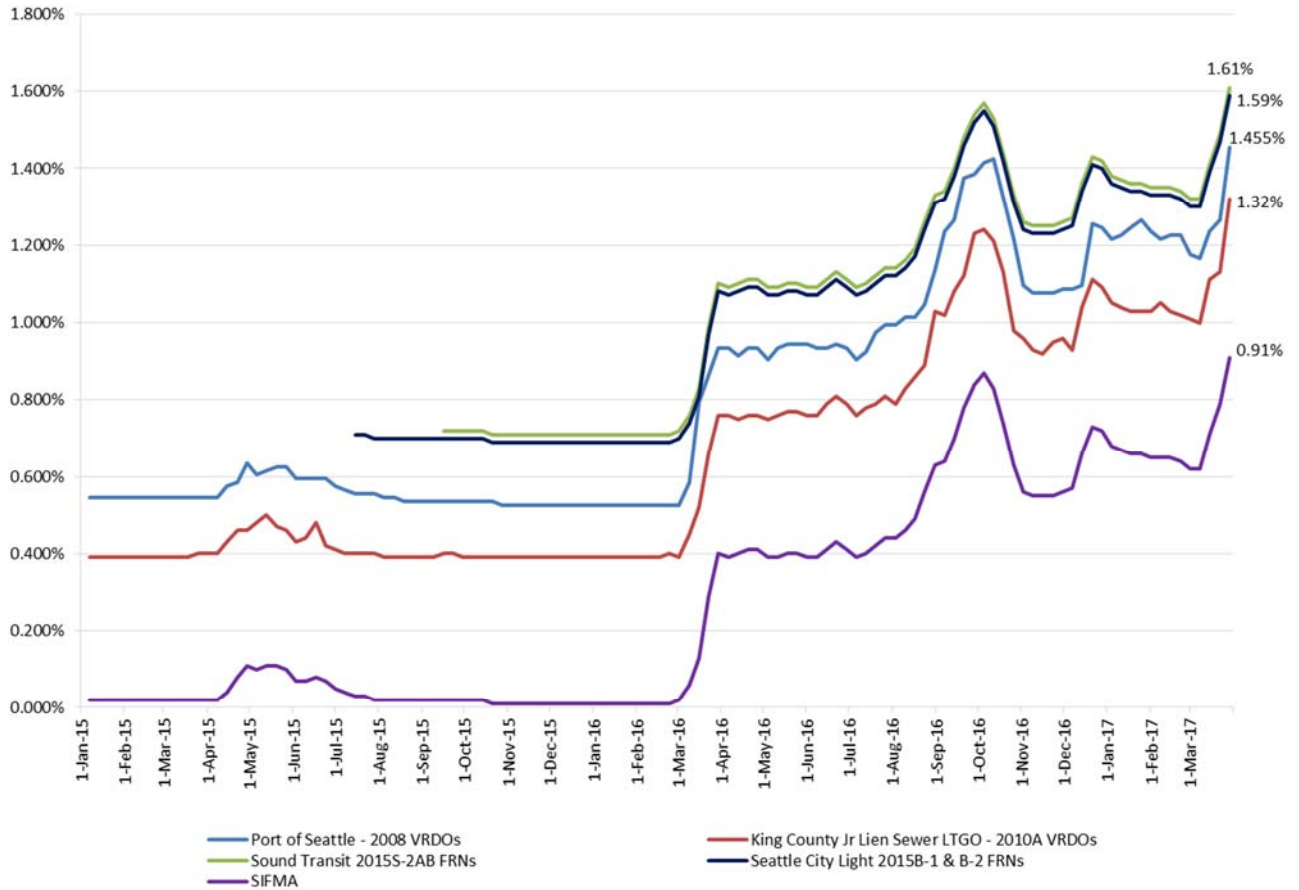
- The 20-year MMD ended the quarter at 2.93%, up 3 basis points from the December 31 rate of 2.90%. During the quarter, the 20-year MMD was as high as 3.15% on 3/13/17, and as low as 2.76% on 1/17/17.
- The spread between the 20-year AAA MMD and the 20-year A MMD was 56 basis points as of 3/31/2017, which is 9 basis points tighter than the spread was on 3/31/17.

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	\$283,190,000	5.03%	5.00%
2009P-1	9/29/2009	2/1/2016	\$23,155,000	\$0	0.00%	5.00%
2009P-2T (BABs)	9/29/2009	2/1/2028	\$76,845,000	\$76,845,000	3.31%	5.00%
2012P-1	8/22/2012	2/1/2028	\$216,165,000	\$157,955,000	2.62%	5.75%
<b>Total Prior Bonds</b>			\$666,165,000	\$517,990,000	4.04%	
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	3.62%	5.00%
2012S-1	8/22/2012	11/1/2030	\$97,545,000	\$91,940,000	2.73%	5.75%
2015S-1	9/10/2015	11/1/2050	\$792,840,000	\$792,840,000	3.89%	5.75%
2015S-2A*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	3.23%	5.75%
2015S-2B*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	3.23%	5.75%
2016S-1	12/19/2016	11/1/2046	\$400,000,000	\$400,000,000	3.60%	5.30%
<b>Total Parity Bonds</b>			\$1,740,385,000	\$1,734,780,000	3.66%	
<b>Total Prior &amp; Parity Bonds</b>			<b>\$2,406,550,000</b>	<b>\$2,252,770,000</b>	<b>3.75%</b>	

\*2015S-2A and 2015S-2B are variable rate bonds. The all-in Interest cost assumes interest calculated using only the spread through 2018 and after the variable rate was the highest 12 month rolling average of SIFMA over the past 10 years (3.67%)



### Variable Rate Pricing Comparison 2015 - 2016



Variable Rates as of 3/31/17						
	SIFMA Index	Spread to SIFMA*	Bank Credit Spread**	Liquidity Fee	Remarketing Fee	Total Cost
Sound Transit 2015S-2AB FRNs	0.91%	0.70%	n/a	n/a	n/a	1.610%
Seattle City Light 2015B-1 & B-2 FRNs	0.91%	0.68%	n/a	n/a	n/a	1.590%
King County Jr Lien LTGO 2010A VRDOs	0.91%	n/a	0.03%	0.28%	0.10%	1.320%
Port of Seattle - 2008 VRDOs	0.91%	n/a	0.03%	0.45%	0.065%	1.455%

\* Fixed spread, will not change.

\*\* Not fixed. Will vary with market conditions and changes in bank credit quality.

Bond Ratings as of 3/31/17			
	Prior	Parity	TIFIA
Moody's	Aaa	Aa1	
S&P	AAA	AAA	A+
Fitch			AA+

**Asset Liability Management Report**  
**1 Q 2017**  
**Key for Performance Summary**

	Above Average	Average	Below Average
INVESTMENT PERFORMANCE	Interest earnings forecast to exceed budget. ST Portfolio performance well above benchmark.	Interest earnings forecast to meet budget. ST Portfolio performance at or near benchmark.	Interest earnings forecast to be below budget. ST Portfolio performance below benchmark.
	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 securities 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.

**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.