



# Asset Liability Management Report

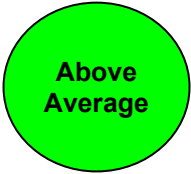
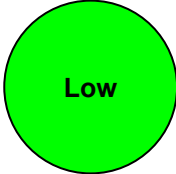
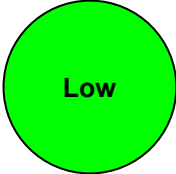
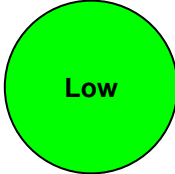
4Q 2021

## Performance Indicators and Key Measures

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

Restricted Cash and Investments	599.9
Unrestricted Cash and Investments	1,897.0
<b>Total Cash and Investments</b>	<b>2,496.9</b>

**Total Outstanding Debt – Par Value 2,097.0**

INVESTMENT PERFORMANCE	INTEREST RATE RISK	CREDIT RISK	LIQUIDITY RISK
 <b>Above Average</b>	 <b>Low</b>	 <b>Low</b>	 <b>Low</b>
Prior quarter: Above Average	Prior quarter: Low	Prior quarter: Low	Prior quarter: Low
Interest earnings exceeded budget for Q4 2021.	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 of \$15.5M was \$.2M above Q4 budget of \$15.3M. Note, excludes unrealized gains and losses.	The blended ST interest cost is 3.01%. The current assumed rate in the financial plan is 4% through 2025 and 5.3% from 2026 to 2041.	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 ST investment portfolio is .34%.	The blended investment yield is .53% versus the variable debt rate of .39% in 4Q 2021.	There were no credit rating actions that negatively impacted the investment portfolio during the quarter.	Current liquidity meets policy requirement.

## 4Q 2021 ALM Overview

### Key Items

The investment portfolio remains conservatively positioned and has weathered the market volatility well. The portfolio continues to selectively add high-quality municipal, agency and corporate securities when the market provides an attractive entry point. A key focus continues to be maintaining liquidity in support of the realigned plan.

Sound Transit continuously monitors the markets and seeks opportunities to decrease costs and create financial capacity. Actions are proposed if they are financially beneficial to the agency and its program as a whole.

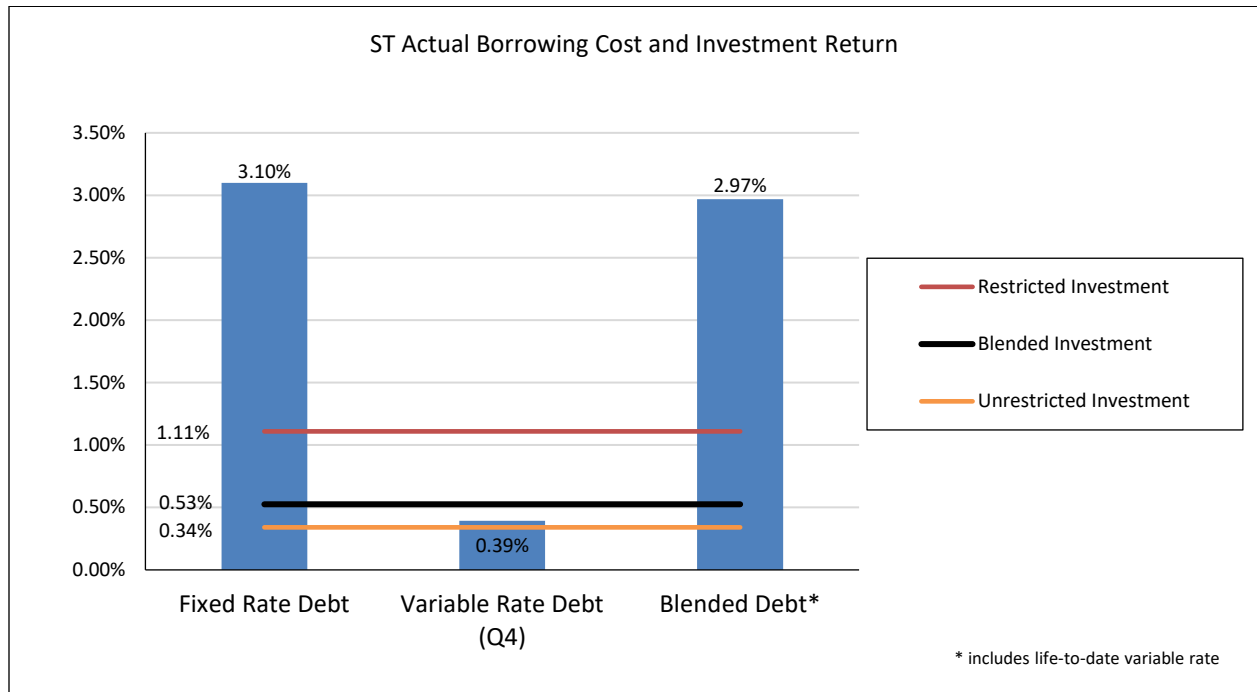
Interest rates remained near all-time lows in Q4, which provided an opportunity for the Agency to take action and create savings. While these actions significantly decrease debt service costs, they did not increase the total amount of agency debt. The actions executed in Q4 are discussed in greater detail in the Debt Overview section.

- In Q3 the Agency closed on a \$521 million loan for the Downtown Redmond Link Extension and completed the refinance of all outstanding TIFIA loans. It is anticipated that these actions will create savings of more than \$630 million over the life of the loans.
- The Agency has undertaken four additional debt actions in response to the Board's direction to seek opportunities to reduce cost and expand financial capacity in Q4.

### Market Environment

The two-year yield ended 2021 at 0.73% - a notable increase from the 0.12% level seen at the end of 2020. While front-end yields surged, longer dated yields rose less sharply leading to a flatter interest rate curve as investors continue to believe we will operate in a relatively low-yield world going forward. As we enter 2022, the market is pricing in approximately four 25 basis point hikes out of the Federal Reserve and a peak funds rate of approximately 1.75% sometime in 2023 or 2024. The outlook for investment returns for 2022 looks mixed. On one hand, we enter the year with higher yields that support interest earnings, however we face uncertainty surrounding the pace and ultimate destination for the path of the federal funds rate.

### Actual Borrowing Rate versus Investment Rate



**Current Tax-Exempt Borrowing Rates**

- Current 30 year fixed at 3.06%
- Current variable rate at .59 %. Q4 SIFMA avg of .06% + LOC Cost of 0.45% + Rmktg Fee of 0.08%

**Credit Watch**

ST is currently in “stand still” 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)
<b>Assets (Cash/Investments)</b>				
Restricted	599.9	1.11%	1.79	NA
Unrestricted	1,897.0	0.34%	0.76	0.74
<b>Assets (Cash/Investments) total</b>	<b>2,496.9</b>	<b>0.53%</b>	<b>1.01</b>	
<b>Liabilities (Debt)</b>				
Fixed-Rate	(1,947.0)	3.10%		
Variable-Rate	(150.0)	1.26%		
<b>Liabilities (Debt) total</b>	<b>(2,097.0)</b>	<b>2.97%</b>	<b>14.50</b>	<b>19.08</b>

## 4Q 2021 Investment Overview

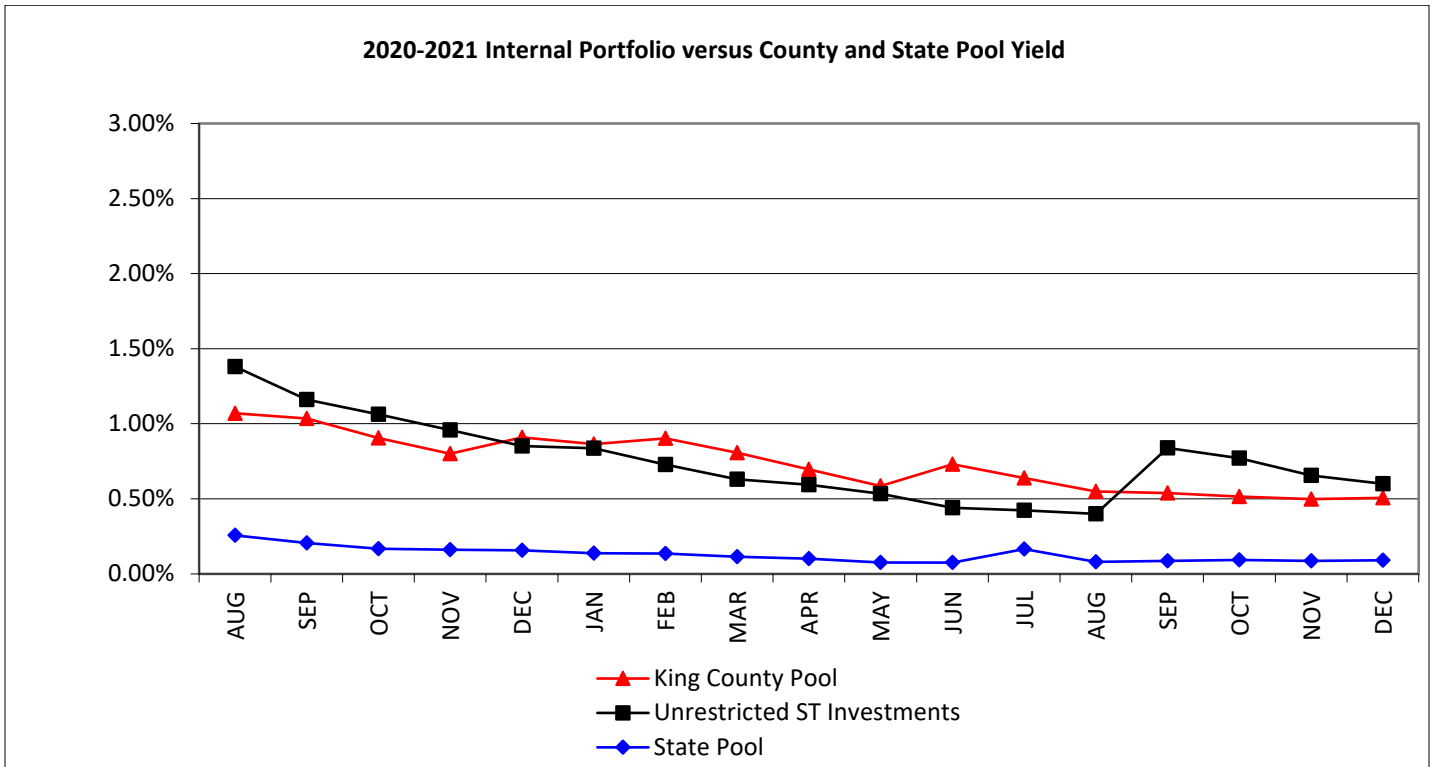
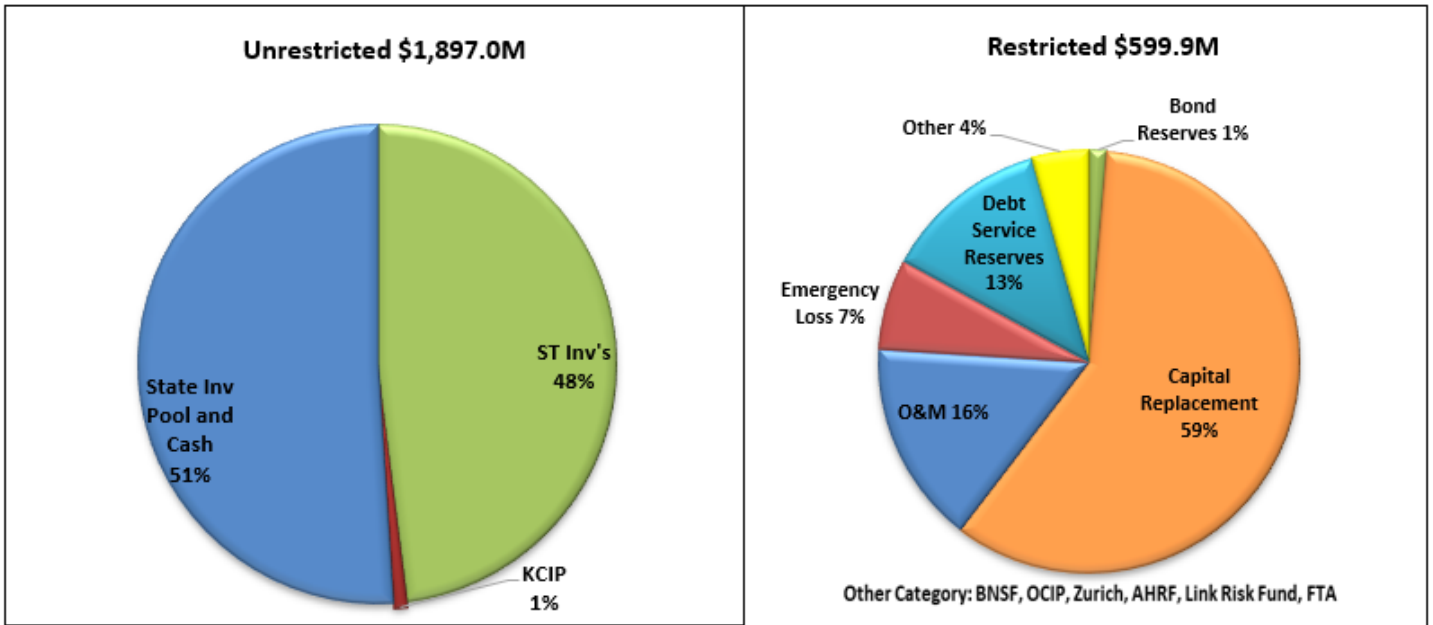
### Investment Strategy

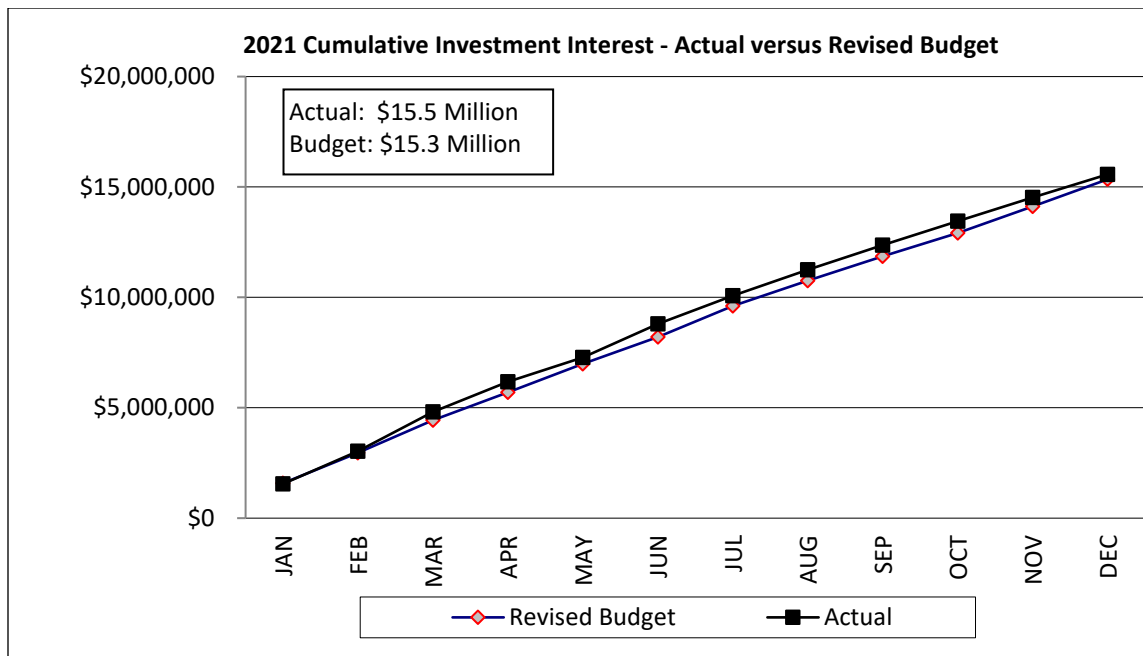
The investment portfolios are tactically invested to manage cash flows and duration to navigate the portfolio through the volatile markets. Spreads on all credit products, which include Commercial Paper, Corporate Notes and Agency securities remain at historically tight levels. US Treasury securities are being overweighted due to the relative valuations. The disciplined approach of managing both the size of the portfolio and the average maturity of the portfolios is contributing to higher interest earnings in the longer durated portfolios versus the short cash investments. The overall earnings yield will continue to decline as reinvestments are being made in this extremely low environment. However, the asset allocation diversification and diligence of seeking opportunistic value in allowable investment instruments will optimize the portfolio over time. A significant portion of the Debt proceeds received in November 2021 remain in the Agency's most liquid investment, the Local Government Investment Pool (LGIP) as GPA looks for opportunities to invest these funds. The Agency has added \$200 million (now a \$500 million balance) into longer dated investments within our ST Internal Investments during Q4 of 2021.

Cash and Investments (\$M)	Book Value	Average Duration	Benchmark Duration	Current Yield	Qtrly Yield Change
<b>Unrestricted</b>					
State Investment Pool	959.9	0.01		0.09%	0.00
Operating account/Uncleared checks**	5.7	0.01		0.22%	(0.13)
King County Investment Pool	15.8	1.24		0.51%	(0.03)
ST Internal Investments	915.6	1.55		0.60%	(0.24)
<b>Total Unrestricted</b>	<b>1,897.0</b>	<b>0.76</b>	<b>0.74</b>	<b>0.34%</b>	<b>(0.10)</b>
<b>Restricted</b>					
Operating/Contingency (internal)	93.2	0.01		0.09%	0.00
Capital Replacement (internal)	354.5	2.95	3.07	1.75%	(0.04)
Emergency Loss Reserve (internal)	41.6	0.01		0.09%	0.00
Debt Service Accounts	76.2	0.01		0.09%	0.00
BNSF Escrow	8.0	0.01		0.03%	0.00
OCIP Collateral	2.5	1.06		3.68%	(0.00)
Link Risk Fund	0.5	1.24		0.50%	(0.03)
Prior Debt Service Reserve	8.1	2.74	3.64	1.87%	0.25
Affordable Housing Revolving Fund	12.1	0.01		0.09%	0.00
Zurich Collateral	0.4	0.01		0.01%	0.00
FTA Grant Recovery	2.7	0.01		0.09%	0.00
<b>Total Restricted</b>	<b>599.9</b>	<b>1.79</b>	<b>N/A*</b>	<b>1.11%</b>	<b>(0.00)</b>
<b>Total</b>	<b>2,496.9</b>	<b>1.01</b>		<b>0.53%</b>	<b>(0.09)</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	574,085,000	23.15%	100%
U.S. Government Agencies-Primary	383,505,000	15.46%	75%
U.S. Government Agencies-Secondary	2,400,000	0.10%	10%
Certificates of Deposit	0	0.00%	20%
Supranationals	80,385,000	3.24%	10%
Corporate Notes	105,678,000	4.26%	25%
King County Investment Pool	16,318,013	0.66%	50%
State Investment Pool	1,187,484,561	47.88%	100%
Commerical Paper	80,000,000	3.23%	25%
Taxable Municipal/G.O. Bonds	50,245,000	2.03%	20%
	<b>2,480,100,574</b>	<b>100.00%</b>	

## 4Q 2021 Debt Overview

### Debt Strategy

Sound Transit considers the diversification of its long-term liabilities in the context of its future borrowing needs. The Agency utilizes various financial instruments to fund the long-range financial plan. The Agency has taken action in response to Board's direction to seek opportunities to reduce cost and expand financial capacity.

- The Agency, in Q3, closed on a \$521 million loan for the Downtown Redmond Link Extension and completed the refinance of all outstanding TIFIA loans, reducing the interest rate on all existing loans to 1.91%. Following these actions, the Agency has \$3.8 billion of undrawn capacity on the TIFIA loans to support the Agency's liquidity needs.

The Agency has executed the four debt actions below in response to the Board's direction to seek opportunities to reduce cost and expand financial capacity in Q4. The Board approved these actions at the 9/23/21 meeting. While these actions significantly decrease debt service costs, they do not increase the total amount of agency debt. The new bonds were issued as Green Bonds on November 4, 2021. Consistent with all of ST's outstanding bonds, sales, MVET and Rental car taxes are pledged to these bonds.

1. Authorize use of cash to pay off approximately \$823 million eligible bonds (2012S-1 and 2015S-1)
2. Issue approximately \$785 million new bonds (2021S-1)
3. Refund approximately \$85 million fixed rate bonds (2012P-1)
4. Reprice approximately \$75 million existing variable rate debt that are due for mandatory repricing (2015S-2A)

### Debt Summary

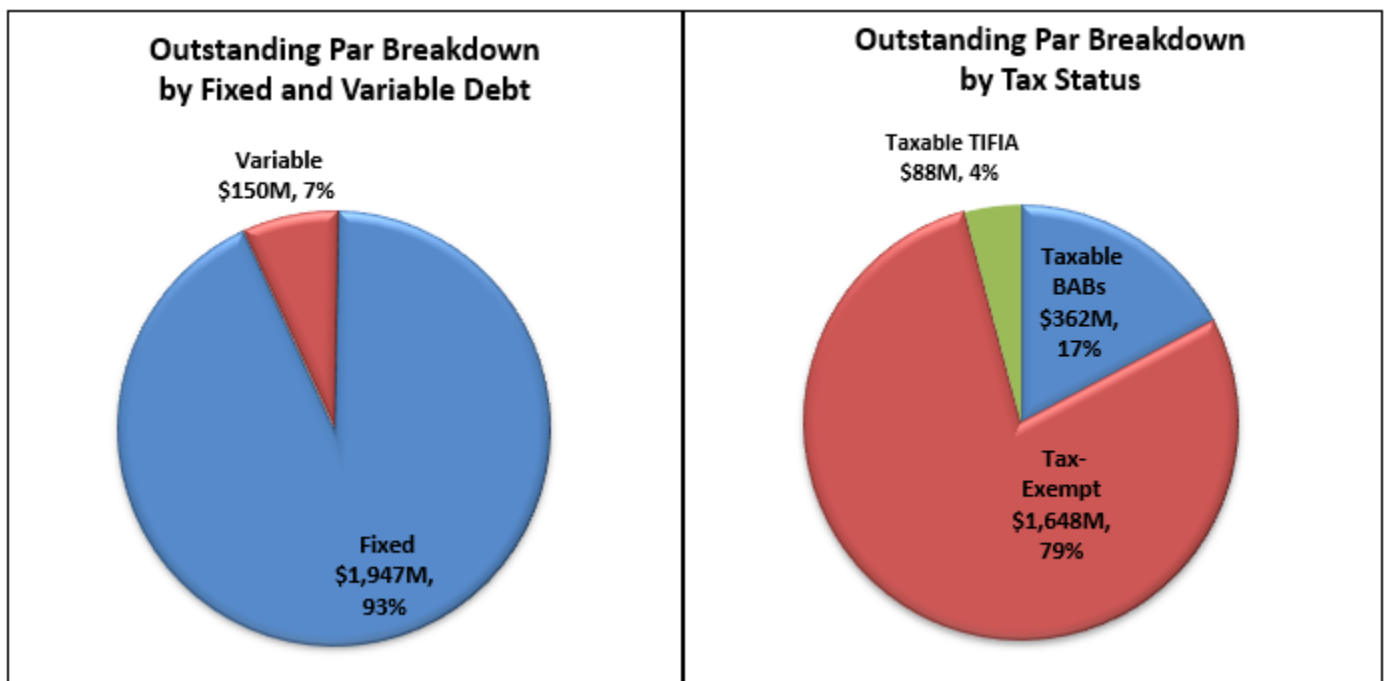
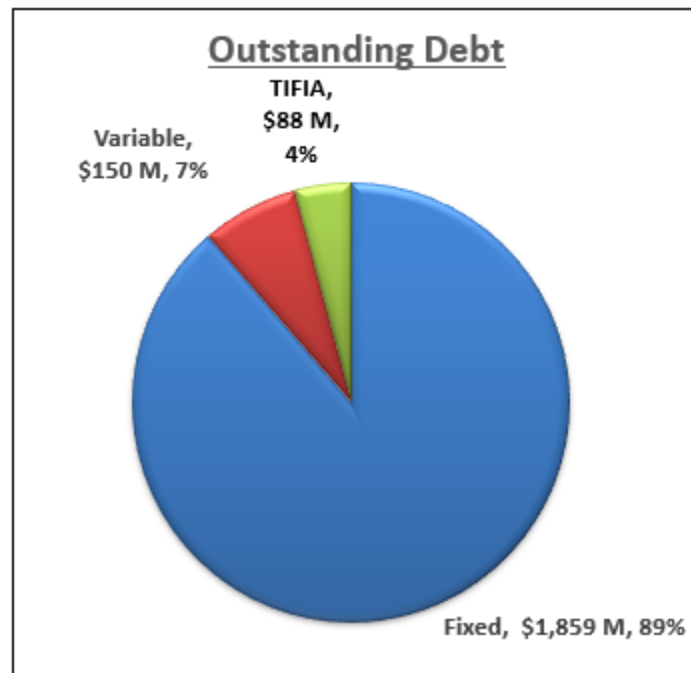
- The bond items discussed above are all reflected in this Q4 2021 ALM report.
- The 20-year MMD ended the quarter at 1.30%, 17 basis points lower than the September 30th rate. During the quarter, rates experienced continued volatility with a high of 1.53 % in late October and a low of 1.29\*% in late December. Market rates remained volatile due to mixed economic news throughout the quarter.
- The average spread between the 20-year AAA MMD and the 20-year A MMD was 32 basis points as of 12/31/21, which is 3 basis points higher than what was measured on 9/30/21.

Central Puget Sound Regional Transit Authority Summary of Outstanding Bonds					
<b>Prior Bonds</b>					
Series	Issue Date	Final Maturity	Issue Size	Amount Outstanding	All-in Int Cost
1999	1/6/1999	2/1/2028	\$350,000,000	\$206,365,000	5.03%
2009P-2T (BABs)	9/29/2009	2/1/2028	\$76,845,000	\$61,790,000	3.36%
2012P-1	8/22/2012	2/1/2028	\$216,165,000	\$0	2.62%
<b>Total Prior Bonds</b>			\$643,010,000	\$268,155,000	4.64%
<b>Parity Bonds</b>					
Series	Issue Date	Final Maturity	Issue Size	Amount Outstanding	All-in Interest Cost
2009S-2T (BABs)	9/29/2009	11/1/2039	\$300,000,000	\$300,000,000	3.66%
2012S-1	8/22/2012	11/1/2030	\$97,545,000	\$7,440,000	2.73%
2015S-1	9/10/2015	11/1/2050	\$792,840,000	\$22,185,000	3.89%
2015S-2A*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	1.22%
2015S-2B*	9/10/2015	11/1/2045	\$75,000,000	\$75,000,000	1.30%
2016S-1	12/19/2016	11/1/2046	\$400,000,000	\$392,175,000	3.60%
2021S-1	11/4/2021	11/1/2050	\$869,360,000	\$869,360,000	2.31%
<b>Total Parity Bonds</b>			\$2,609,745,000	\$1,741,160,000	2.76%
<b>Total Prior &amp; Parity Bonds</b>			<b>\$3,252,755,000</b>	<b>\$2,009,315,000</b>	<b>3.01%</b>
*2015S-2A and 2015S-2B are variable rate bonds. The all-in interest cost uses life-to-date average actuals.					

Central Puget Sound Regional Transit Authority Summary of Outstanding TIFIA Loans					
TIFIA Loan	Execution Date	Final Maturity	Loan Amount	Amount Drawn	Int Rate
East Link	9/10/2021	11/1/2058	\$1,330,000,000	\$0	1.91%
Northgate	9/10/2021	11/1/2056	\$615,267,000	\$0	1.91%
O&M Facility East	9/10/2021	11/1/2055	\$87,663,515	\$87,663,515	1.91%
Lynnwood Link	9/10/2021	11/1/2059	\$657,863,164	\$0	1.91%
Redmond	9/10/2021	11/1/2059	\$520,981,378	\$0	1.91%
Federal Way	9/10/2021	11/1/2059	\$629,472,431	\$0	1.91%
				\$0	
<b>Total TIFIA Loans</b>			<b>\$3,841,247,488</b>	<b>\$87,663,515</b>	<b>1.91%</b>
<b>Total Outstanding Debt</b>				<b>\$2,096,978,515</b>	<b>2.97%</b>

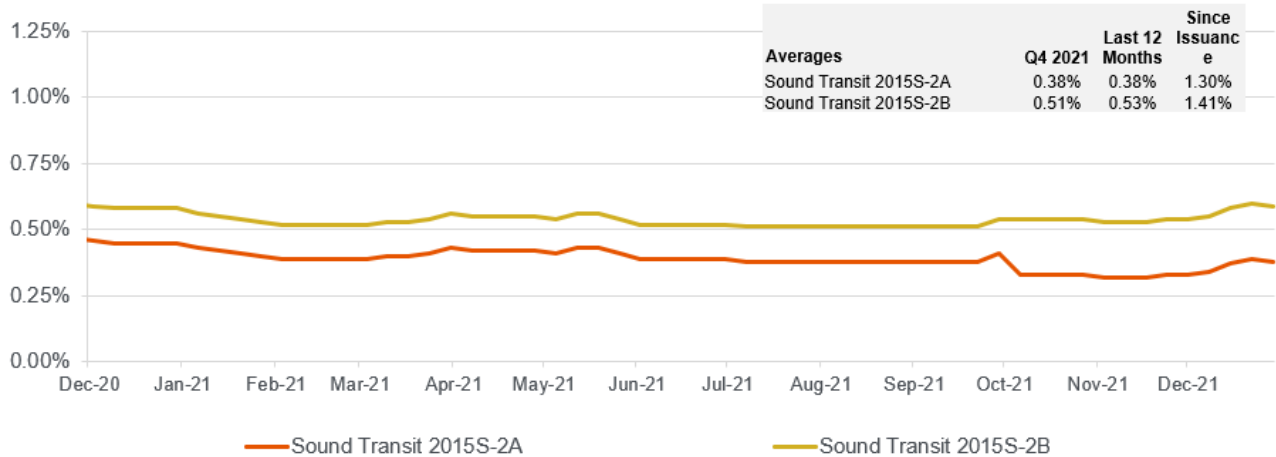


## Debt Portfolio Composition



## Q4 2021 Variable Rate Comparison and Pricing Estimate

Actual - Sound Transit Q4 Series 2015S-2A Borrowing Cost		Actual - Sound Transit Q4 Series 2015S-2B Borrowing Cost		Estimated - Sound Transit VRDB Q4 Borrowing Cost	
Q4 SIFMA Average	0.06%	Q4 SIFMA Average	0.06%	Q4 SIFMA Average	0.06%
Index Spread	0.20%	Index Spread	0.45%	Estimated LOC Cost*	0.45%
Remarketing Cost	0.08%	Remarketing Cost	0.04%	Remarketing Agent Fee	0.08%
Total FRN Cost	0.34%	Total FRN Cost	0.55%	Total VRDB Cost	0.59%



\* Assumes 3-year letter of credit

The credit rating agencies actively monitor the transit sector. The pandemic has introduced great uncertainty into the sector and the credit rating agencies have responded with a series of sector and transit agency specific negative credit watches and downgrades. The Agency's ratings were recently confirmed by all three agencies as part of the Q3/Q4 debt transactions in 2021. The investment balances and liquidity available via undrawn TIFIA loans provide Sound Transit with flexibility and are viewed very positively by the credit rating agencies. Sound Transit maintains a sector leading level of credit quality.

Bond Ratings as of 12/31/2021			
	Prior	Parity	TIFIA
Moody's	Aaa	Aa1	
S&P	AAA	AAA	AA+
Fitch			AA+

**Asset Liability Management Report**  
**Key for Performance Summary**

	Above Average	Average	Below Average
INVESTMENT PERFORMANCE	Interest earnings forecast to exceed budget.	Interest earnings forecast to meet budget.	Interest earnings forecast to be below budget.

	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.