## Asset Liability Management Report

## 1Q2019

Performance Indicators and Key Measures

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

Restricted Cash and Investments Unrestricted Cash and Investments
Total Cash and Investments
560.5

1,687.2
2,247.7

Total Outstanding Debt

2,234.9
$\left.\left.\begin{array}{|c|c|}\hline \text { INVESTMENT } \\ \text { PERFORMANCE }\end{array} \right\rvert\, \begin{array}{c}\text { Above } \\ \text { Average }\end{array}\right)$

| CREDIT RISK |
| :---: |
| Agency is well diversified |
| against counterparty |
| credit risk. Investment |
| portfolios are within policy |
| parameters. |


| 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 $20^{\text {th }}$ 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



Tax Exempt Market Borrowing Rates as of 03/31/2019


## 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.

## 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\％介 |
| 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\％介 |
|  | 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

| Net Interest | 2018 Budget（\＄M） | 2018 Actual（\＄M） | 2019 Budget（\＄M） | Adjusted 2019 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Budget（\＄M） | 2019 Actual（\＄M） |  |  |  |  |
| Capapitalized Debt Interest Exp | $(14.3)$ | $(9.8)$ | $(24.8)$ | $(24.8)$ | $(24.5)$ |
| Interest Earnings＊ | $(95.3)$ | $(98.4)$ | 0.0 | 0.0 | 0.0 |
| Net Interest Expense | 19.5 | 37.6 | 8.4 | 8.4 | 12.7 |

[^0]
## 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 <br> Value | Net Change | Average Duration | Benchmark Duration | Risk Adj <br> 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 Resenve (intermal) | 29.9 | 5.7 | 0.05 |  |  |  | 2.53\% | 0.47 |
| Debt Serice 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 Serice Resene | 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. |  |  |  |  |  |  |  |  |
| **Balance is not included in total RAR cal culation since balance represents cash used for daily operations. |  |  |  |  |  |  |  |  |

## Investment Performance Portfolio Composition





## 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 | $35,710,000$ | $1.59 \%$ | $20 \%$ |
|  | $\mathbf{2 , 2 4 9 , 0 0 4 , 7 1 5}$ | $\mathbf{1 0 0 . 0 0 \%}$ |  |

## 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 | $\begin{array}{r} \text { All-in } \\ \text { Interest Cost } \end{array}$ | 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 Series | Issue Date | Final Maturity | Issue Size | Amount Outstanding | $\begin{array}{r} \text { All-in } \\ \text { Interest Cost } \end{array}$ | Financial Plan 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 TIFA Loans |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIPA 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 TIFA Loans |  |  | \$3,320,266,110 | \$56,605,824 | 3.13\% |  |
|  |  |  |  |  |  |  |
| Total Outstanding Debt |  |  |  | \$2,234,865,824 | 3.62\% |  |

Debt Portfolio Composition

## Oustanding Debt

Variable, \$150 M, 7\% TIFIA, \$57 M, 2\%


| Outstanding Par Breakdown <br> by Fixed and Variable Debt <br> Variable <br> $\$ 150 \mathrm{M}, 7 \%$ | Outstanding Par Breakdown <br> by Tax Status |
| :---: | :---: |
| Fixed $\$ 2,085 \mathrm{M}, 93 \%$ |  |

Q1 2019 Variable Rate Comparison and Pricing Estimate

| Actual-Sound Transit Q1 |
| :--- | :--- |
| Series 2015S-2A Borrowing Cost |


| Actual - Sound Transit Q1 |  |
| :--- | :--- |
| Series 2015S-2B Borrowing Cost |  |
| Q1 SIFMA Average | $\mathbf{1 . 5 4 \%}$ |
| Index Spread | $\mathbf{0 . 4 5 \%}$ |
| Remarketing Cost | $\underline{\mathbf{0 . 0 4 \%}}$ |
| Total FRN Cost | $\mathbf{2 . 0 3 \%}$ |


| Estimated - Sound Transit VRDB Q1 <br> Borrowing Cost |  |
| :--- | :--- |
| Q1 SIFMA Average | $\mathbf{1 . 5 4 \%}$ |
| Estimated LOC Cost* $^{\star}$ | $\mathbf{0 . 3 7 \%}$ |
| Remarketing Agent Fee | $\underline{\mathbf{0 . 0 8 \%}}$ |
| Total VRDB Cost | $\mathbf{1 . 9 9 \%}$ |



[^1]| Bond Ratings as of 03/31/2019 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Prior | Parity | TIFA |
| Moodys | Aaa | Aa1 |  |
| S\&P | AAA | AAA | AA + |
| Fitch |  |  | AA $_{+}$ |

## Asset Liability Management Report 1Q2019 Key for Performance Summary

|  | Above Average | Average | Below Average |
| :---: | :---: | :---: | :---: |
|  | Interest earnings forecast <br> to exceed budget. ST <br> Portfolio performance on a <br> risk adjusted basis at or <br> above the benchmark for a <br> INVESTMENT <br> PERFORMANCE | Interest earnings forecast <br> to meet budget. ST <br> Portfolio performance on a <br> risk adjusted basis near <br> benchmark for a rolling 1 <br> year period of time. | Interest earnings forecast <br> to be below budget. ST <br> Portfolio performance on a a time. <br> risk adjusted basis below <br> benchmark or a rolling 1 <br> year period of time. |


|  | Low | Medium | High |
| :---: | :---: | :---: | :---: |
| INTEREST RATE RISK | Change in interest rates will <br> have less than \$5M impact <br> on ST financial plan over 5- <br> year period. | Change in interest rates will <br> have less than \$10M <br> inpact on ST financial plan <br> over 5-year period. | Change in interest rates will <br> have less than \$20M <br> impact on ST financial plan <br> over 5-year period. |


| LIQUIDITY RISK | All reserves and liquidity <br> contingencies in place. <br> Current liquidity <br> contingency greater than <br> policy minimum. | All reserves and liquidity <br> contingencies in place. <br> Current liquidity <br> contingency equal to policy <br> minimum. | Not all reserves and <br> liquidity contingencies in <br> place. |
| :--- | :---: | :---: | :---: |


| CREDIT RISK | No known credit risks that <br> could materially impact ST <br> balance sheet. | Known credit risks could <br> potentially materially impact <br> ST balance sheet. | Known credit risks are likely <br> to materially impact ST <br> 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.


[^0]:    Budget based on the annual Adopted Budget．
    ＊Interest Earning without adjusted unrealized gains and losses

[^1]:    * Assumes 3-year letter of credit

