Interest Rate Swap Policy of the City of Richmond
Established by the Finance Department

Fiscal Year 2018-19

Scope and Authority

This Interest Rate Swap Policy (the Policy), established by and for the Finance Department, is designed to provide procedural direction to the City of Richmond Finance Department, the Richmond Housing Authority, the Richmond Community Redevelopment Agency, the Richmond Joint Powers Finance Authority and the City itself regarding the utilization, execution, and management of interest rate swaps and related instruments (collectively, "interest rate swaps'). While adherence to this Policy is required in applicable circumstances, it is recognized that changes in the capital markets, agency programs, and other unforeseen circumstances may from time to time produce situations that are not covered by this Policy, and will require modifications or exceptions to achieve policy goals. In these cases, management flexibility is appropriate. Periodically, but at least annually, the City will review the Policy and shall make modifications as appropriate due to changes in the business environments or market conditions.

The City of Richmond is authorized under California Government Code Section 5922 to enter into interest rate swaps to reduce the amount and duration of rate, spread, or similar risk when used in combination with the issuance of bonds.

This Policy and any subsequent amendments hereto shall be on file with Finance Department, maintained on the City's website, with copies delivered to the City Clerk, the City Council and the Chair of the Finance Committee of the City Council.

Mission of the Finance Department Treasury Division
The Finance Department shall issue and manage short and long-term financings (bonds, TRANs, etc), both for capital improvement and operating needs, by balancing market and credit risk with satisfactory economic benefits and proper fiscal controls.

I. Interest Rate Swap Objectives

- Reduce or manage exposure to changes in interest rates on a particular financial transaction or in the context of the management of interest rate risk derived from the City's overall asset/liability balance consistent with prudent debt and risk guidelines.
- Result in a lower net cost of borrowing with respect to the City's debt or achieve a higher net rate of return on investments made in connection with, or incidental to the issuance, or carrying of the City's debt obligations or other City investments.
- Manage variable interest rate exposure consistent with prudent debt practices.

- Enhance investment returns within prudent risk guidelines.
- Manage exposure to changing market conditions in advance of anticipated bond issues (through the use of anticipatory hedging instruments).
- Achieve more flexibility in meeting overall financial objectives than can be achieved in conventional markets.

II. Permitted Instruments

The City may utilize the following financial products on a current, or forward basis, after identifying the objectives to be realized and assessing the attendant risks.

- Interest rate swaps, including (i) pay fixed/receive floating swaps (fixed rate swaps), (ii) receive floating/pay fixed swaps (floating rate swaps) and (iii) pay floating/receive floating swaps (basis swaps). Swaps may include option features, such as for the extension, cancellation, or index conversion of the swap.
- Interest rate caps, floors, and collars.
- Stand-alone options to enter into swaps (swaptions) on a particular date, series of dates, or during a particular period of time in the future.

III. Conditions for the Use of Interest Rate Swaps

Each Agreement and Transaction will be entered into not for purpose of speculation, but solely in connection with the financing activities of the City.

A. General Usage Interest rate swaps may be used to lock-in a fixed rate or, alternatively, to create additional variable rate exposure. Interest rate swaps may be used to produce interest rate savings, limit or hedge variable rate payments, alter the pattern of debt service payments, or for asset/liability matching purposes.

B. Liquidity Considerations The impact on the cost and availability of letters of credit and liquidity support for both new and existing variable rate programs shall be considered when evaluating the issuance of new variable rate bonds which are to be swapped to a fixed rate liquidity support. Due to the limited supply of letter of credit or liquidity facility support in connection with variable rate bonds, higher overall costs may result.

C. Call Option Value Considerations When considering the relative advantage of a fixed rate swap to fixed rate bonds, the value of the call option that would typically be purchased for the fixed rate bonds shall be compared to the incremental present value of the savings from using a swap. This shall be done to ensure the benefit from use of the swap will provide sufficient compensation to offset the expected value of any foregone future refunding savings.

IV. Interest Rate Swap Features

A. Interest Rate Swap Agreement Each interest rate swap executed by the City shall contain terms and conditions as set forth in an International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement, including any Schedules to the Master Agreement, Confirmations and Credit Support Annexes, or other comparable agreement widely used by recognized derivatives dealers. The swap agreements between the City and each qualified swap Counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions and provisions as the Finance Director deems necessary or desirable.

The City may use law firms and financial advisory firm(s) with recognized experience in derivatives transactions to assist in preparation of the swap documents.

B. Interest Rate Swap Counterparties The City will do business only with qualified swap counterparties. Qualified counterparties are institutions whose long-term credit rating or whose obligations are guaranteed by a financial institution whose long term credit rating are at the time the swap is entered into at least as high as "A" or "A2" or equivalent and that have a demonstrated record of successfully executing swap transactions. The City will structure interest rate swap agreements to protect itself from credit deterioration of counterparties, including the use of ratings-based termination events, credit support annexes or other forms of credit enhancement. Such protection shall include any terms and conditions which the City deems necessary or appropriate to protect its interests.

C. Term and Notional Amount The City shall determine the appropriate term and size for an interest rate swap agreement on a case-by-case basis. In connection with the issuance or carrying of bonds, the outstanding notional amount of a swap agreement should relate to the amortization of the related existing or anticipated debt of the City. While entering into a swap with a term less than the associated bonds may be appropriate, if the intent is to "rollover" the swap, the City will be subject to the uncertainties of entering into a new swap at then prevailing market conditions.

D. Collateral Requirements Terms imposing collateral requirements based on credit ratings of the counterparty, requiring collateralization or other forms of credit enhancements to secure any or all swap payment obligations may be included as part of any swap agreement. The collateral requirements will be determined in consultation with counsel and the financial advisor and/or swap advisor, and may require the counterparty to post securities, surety bonds, letters of credit or other credit enhancement if the highest credit rating of the counterparty, its parent, or guarantor is or falls below a rating of "AA-" or "Aa3". Additional collateral for further decreases in credit ratings of each counterparty shall be posted in accordance with the provisions contained in the CSA or other collateral support agreement of the Agreement.

Threshold collateral amounts shall be determined on a case-by-case basis. Reasonable threshold limits will be established for the initial deposit and for increments of collateral posting thereafter. Collateral shall be deposited with a third party trustee or as mutually agreed upon between the City and the counterparty. A list of acceptable securities that may be posted as collateral and the valuation of such collateral will be determined and mutually agreed upon during negotiation of the swap agreement with each swap counterparty. The market value of the collateral shall be determined on a monthly basis, or more frequently if the City determines it is in its best interest given the specific nature of the swap(s) and/or collateral security.

E. **Security and Source of Repayment** Generally, the same security and source of repayment (pledged revenues) will secure the interest rate swaps as is used to secure the bonds that are hedged or carried by the swap, if any. The costs and benefits of subordinating the payments under the swap and/or termination payment shall be considered.

F. **Cancellation Provisions** The benefit of purchasing the right to cancel the interest rate swap at no cost (par call) after a specified period of time, generally 5 to 10 years shall be evaluated. If the cancellation option is cost efficient relative to the cost of obtaining a bond call option for a similar starting period, it will be purchased. A par call termination provision mitigates some risks of the swap, by allowing a no-cost termination any time after the exercise date.

G. **Prohibited Interest Rate Swap Features** The City will not use interest rate swaps that (i) are speculative or create extraordinary leverage or risk, (ii) lack adequate liquidity to terminate without incurring a significant bid/ask spread, (iii) provide insufficient price transparency to allow reasonable valuation, or (iv)are used as investments.

V. Evaluation of Proposed Transactions

The City's staff shall undertake an evaluation of any proposed transaction. This will include, but not be limited to, consideration of the following:

- Assessment of all inherent risks of the transaction including, but not limited to those outlined below (see **Interest Rate Swap Risks)**
- Alternative financing options and a comprehensive evaluation of the potential risks and expected benefits of the interest rate swap relative to such other options.

- Security and source of payments, for both scheduled and termination payments, and the integration of the swap into the City's debt program.
- Procurement process and the suitability of the contemplated counterparties to the swap, taking into account any existing exposure to such counterparties.
- Impact on City's credit and liquidity profile and how other financial arrangements, existing or expected, may be impacted by the swap.
- Analysis of impact on the City's net variable rate interest exposure from the contemplated transaction and any potential budgetary impact.
- Cost and availability of on-going resources for the effective operations and risk management of the swap.
- Tax, accounting, or other compliance requirements relative to other options.
- If the transaction includes option components, analysis of circumstances under which the option will likely, or not likely, be exercised and the consequences of each outcome.
- Volatility Exposure (as outlined herein) for each counterparty for all existing and any proposed transactions.

VI. Interest Rate Swap Risks

Before proceeding with a swap transaction, the City must reasonably conclude that the expected benefits of the transaction outweigh the expected risks, that the risks are within acceptable levels, and that the contemplated transaction does not impose risks that threaten the City's ability to perform its core functions. The transaction must be reasonable in relation to the City's overall financial condition and capitalization.

The City shall, with its advisors and legal counsel, structure swap transactions with terms and provisions that will help mitigate such risks to the extent practicable and cost-effective. The City shall have a plan for the on-going monitoring and risk management of swap transactions.

A. **Counterparty Risk** The failure of the counterparty to make required payments or otherwise comply with the terms of the swap agreement. If the swap is terminated prior to its scheduled final cash flow date and the City's swap position has increased in value, the City will be owed a termination amount and therefore will have credit exposure to its counterparty for collection of any such amount.

   1. **Assessment** The City will monitor counterparty exposure levels, ratings thresholds, and collateralization requirements.

B. **Termination Risk** The risk that an interest rate swap agreement must be terminated prior to its stated final cash flow date, and that the City cannot obtain a replacement transaction with substantially similar term, including because of deterioration of the City's own credit. In such a circumstance, the City could owe, or be owed, a termination payment.

1. **Assessment** The City will compute, at least annually, the termination exposure for all existing and proposed swaps at market value and under an expected worse-case scenario. A contingency plan will be annually updated specifying how to finance a termination payment and/or replace the hedge.

C. **Collateral Posting Risk** The risk that the City will be required to secure its payment obligations under the swap. Posted collateral would not be available for the City's expenditure or reserve balance needs, potentially adversely impacting credit ratings and overall liquidity and budgetary efforts.

1. **Assessment** The City will review, on a case by case basis, the possible risk associated with posting collateral, taking into consideration any earnings potential on posted collateral.

D. **Basis Risk** The risk of a mismatch between actual variable rate debt service and variable rate indices used to determine swap payments.

1. **Assessment** On an annual basis the City will review historical trading differentials between the variable rate bonds and the indices.

E. **Tax Risk** The risk created by potential tax events that could affect sufficiency of swap payments.

1. **Assessment** The City will review all tax events in proposed swap agreements and evaluate the impact of potential changes in tax law on LIBOR indexed swaps.

F. **Rollover Risk** The risk of a mismatch of the maturity of the swap and the maturity of the underlying bonds.

1. **Assessment** The City will determine, in accordance with its Debt Policy, the capacity to issue variable rate bonds that may be outstanding after the maturity of a fixed rate swap.

G. **Liquidity Risk** In connection with a swap strategy which includes issuance of floating rate bonds that, absent the swap strategy would have been issued as fixed rate bonds, the risk that the City cannot secure a cost-effective renewal of a letter or line of credit or suffers a failed auction or remarketing with respect to the floating-rate bonds.

1. **Assessment** The City will evaluate the expected availability of liquidity support for hedged (swapped) and non-swapped variable rate debt.

H. **Credit Risk** The risk of an event occurring that modifies the credit quality or credit rating of the issuer of its counterparty.

1. Assessment The City will monitor the ratings of counterparties, insurers, and guarantors.

VII. Counterparty Credit Exposure

The City will manage its counterparty credit exposure (i.e., amounts which would become due to the City if the swaps with a particular counterparty were to terminate early pursuant to a default or other similar event) through diversification and active trade management. In order to manage the City's exposure, the City shall annually calculate and review the current market evaluation of all outstanding swaps, subtotaled by counterparty and by security and source of payment (as applicable). In addition, for each counterparty, the City will review the then current long-term credit ratings and the ratings outlook, including the date of the last rating update. The calculation of termination exposure per counterparty will be on a net basis by taking into consideration multiple transactions, some of which may offset the overall exposure to the City.

In addition, the City shall annually estimate the interest rate volatility risk ("Volatility Exposure") of the City's swap portfolio. The purpose of the Volatility Exposure is to measure what impact a significant change in interest rates would have on the City's swap portfolio. Volatility Exposure will be calculated assuming (i) an upward shift of 150 basis points in the yield curve and (ii) a downward shift of 150 basis points in the yield curve. The assumed shift will be reviewed periodically to ensure that they remain appropriate.

Example of Counterparty Credit Exposure Information (Illustration Purposes Only)

Counterparty	S&P (Date) Moody's (Date)	Outlook	Market Value of Transactions	Volatility Exposures Market Value
Provider A	**A+ (1/1/04)** **A2 (1/1/05)**	**Stable** **Negative**	**$3 million**	**VolExpup $4 million** **VolExpDown -$1 million**

A. Exposure Review of Existing Swaps While collateralization reduces credit risk, collateralization introduces other risks, principally legal and operational. In order to manage these other risks, the City shall limit the amount of exposure to any one counterparty, regardless of the counterparty credit ratings and threshold levels. Credit exposure may be reduced, for example, through a swap termination, in whole or in part, or a restructuring of the swap to an on-market rate with a smaller notional amount accompanied by a cash payment to the City, which could then be used to redeem underlying debt obligations. These counterparty credit risk guidelines will not mandate or otherwise force automatic termination by the City or the counterparty.

B. Exposure Review of Proposed Swaps Prior to entering into a new swap transaction, the City, as part of its evaluation of the proposed transaction, will compute the Volatility Exposure by treating the proposed swap transaction as an outstanding swap. Such provisions will act only as guidelines in making a determination as to whether or not a proposed transaction should be executed given certain levels of existing and projected net termination exposure to a specific counterparty. These guidelines are not intended to require retroactively additional collateral posting for existing transactions.

VIII. Ongoing Risk Management and Reporting Requirements

A. Active Management The City will seek to maximize the benefits and minimize the risks it carries by actively managing its interest rate swap program. This will entail monitoring the adequacy of posted collateral, compliance with accounting requirements, and periodic monitoring of market conditions for emergent opportunities and risks. Active management may require modifications of existing positions including, for example:

- Early Termination;
- Shortening or lengthening the term;
- Sale or purchase of options;
- Basis conversion

B. On-going Reporting A report providing the status of all interest rate swap agreements entered into by the City will be prepared no less frequently than annually and shall include the following:

- A description of all outstanding interest rate swap agreements, including project and bonds series, type of swap, rates paid and received by the City, total notional amount, average life of each swap agreement, and remaining term of each swap agreement.
- Highlights of all material changes to swap agreements or new swap agreements entered into by the City since the immediately preceding report.
- Market value of each of the City's interest rate swap agreements.
- The credit rating of each swap counterparty and credit enhancer insuring swap payments, if any.
- Listing of any credit enhancement, liquidity facility or reserves and accounting of all costs and expenses associated with the credit enhancement, liquidity facility or reserves.
- The market value for each transaction and the aggregate for each counterparty.