Lakeview School District

SWAP MANAGEMENT PLAN

Updated: July 1, 2019

LAKEVIEW SCHOOL DISTRICT

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A. GENERAL

1) Introduction

The purpose of this Swap Management Plan (the "Plan") is to comply with the requirements of Act 34 of 2001 as revised, the Revised Municipal Finance Act (the "Act") and to govern the use by Lakeview School District ("LVSD") of various types of derivative financial instruments; swaps, caps, floors, collars, options, forwards and other Interest Rate Management Agreements (referred to herein as "Swaps" or "Agreements"), in conjunction with the administration of its comprehensive debt management strategy. It is also the intent of LVSD to conform this Plan to the requirements for over-the-counter derivatives transactions under the Wall Street Transparency and Accountability Act of 2010, as supplemented and amended from time to time ("Dodd-Frank").

This Plan is structured to provide an outline of the appropriate use and procurement of derivative products, current regulatory requirements, guidelines for the structuring of and terms to be included in new transactions as well as a review of the general risks associated with the use of derivative products. In addition, details on LVSD's current swap portfolio and a risk analysis are detailed in Appendix A included herein.

2) Scope and Authority

The Plan describes the circumstances and methods by which Swaps will be utilized and the guidelines to be employed in the structuring and implementation of Agreements. While adherence to the Plan is required in applicable circumstances, LVSD recognizes that changes in the capital markets, programs and other unforeseen circumstances may from time to time produce situations that are not covered by the Plan and will require modifications or exceptions to achieve Plan goals. In these cases, management flexibility is appropriate provided specific authorization by the School Board of LVSD (the "Board") is obtained.

This Plan shall be reviewed and, if necessary, updated or amended on at least an annual basis. Any amendments to the Plan resulting from any new swap positions, revision to any existing swap position or changes in the structure of the underlying debt must be approved by the Board. The Superintendent of Schools and the Director of Finance (in consultation with LVSD's Financial Advisor) are the designated administrators of the LVSD's Swap Management Plan. The Director of Finance shall have the day-to-day responsibility for managing interest rate swaps.

Echo Financial Products, LLC ("Echo"), working in consultation with LVSD's Financial Advisor, Public Financial Management Inc., acted as Swap Advisor to LVSD in developing this Plan. Echo, or any other swap advisor subsequently engaged by LVSD to assist in consideration and/or implementation of Swaps or Agreements, is referred to herein as the "Swap Advisor".

3) Legality/Approval

To enter into any Agreement, LVSD must retain counsel and a swap advisor and (i) receive approval from the Board, (ii) receive an opinion acceptable to the market from a nationally recognized law firm specializing in governmental finance that the Agreement is a legal, valid and binding obligation of LVSD, (iii) receive a fair market pricing opinion of LVSD's Swap Advisor that the terms of the Agreement are fair and reasonable and (iv) take all steps and measures necessary to comply with the requirements of the Act.

4) Dodd-Frank Act – Qualified Independent Representative

For purposes of satisfying the requirements of Dodd-Frank, LVSD will designate one or more agents as its Qualified Independent Representative ("QIR") within the meaning of CFTC Regulation 23.450 to assist in its evaluation and execution of derivative products. LVSD will use only a QIR with demonstrated experience and expertise in the relevant subject matter and will receive representations from any such QIR that it (i) is capable of evaluating derivative products on behalf of LVSD; (ii) has written policies and procedures reasonably designed to ensure that the QIR satisfies the requirements of CFTC 23.450(b)(1), and (iii) will exercise independent judgment in its evaluation of any derivative proposals on LVSD's behalf. Currently, LVSD has received such representation from and selected Echo to serve as its QIR in regards to its outstanding swap portfolio. As part of its ongoing evaluation, LVSD will monitor the performance of Echo or any subsequent QIR to ensure the continued compliance with the requirements of CFTC Regulation 23.450.

Additionally, LVSD will perform and execute all necessary documentation and adhere to all regulations in order to satisfy the requirements of Dodd-Frank (including the elections necessary in the accompanying Protocols) and other similar federal legislation as enacted. Working with the QIR, LVSD will monitor changes and take actions as necessary in order maintain compliance on a continuing basis.

If and when LVSD desires to execute a derivative product without the assistance of a QIR, it will designate a person or persons internally to evaluate and execute any proposed derivative transaction. In doing so, LVSD will take steps to ensure that such person(s) (i) is capable of evaluating the proposed transactions, (ii) possesses the tools, resources and

knowledge to make trading decisions on behalf of LVSD, and (iii) is exercising independent judgment in evaluation of any derivative proposals on LVSD's behalf.

5) Permitted Uses

This Plan recognizes that the reasons for the use of Swaps may change over time. While LVSD may use Swaps for managing risk and other business reasons listed below, it does not and will not enter into Swaps for purely speculative purposes. Among the strategies which LVSD will consider in entering into Swaps are:

- (i) Managing exposure to floating and fixed interest rates;
- (ii) Hedging floating interest rate risk;
- (iii) Locking in prevailing fixed interest rates for transactions expected to occur at a later date;
- (iv) Reducing the cost of fixed or floating interest rate debt to create "synthetic" fixed or floating interest rate debt;
- (v) More rapidly accessing the capital markets than may be possible with conventional debt instruments;
- (vi) Managing exposure to the risk of changes in the legal and regulatory treatment of tax-exempt bonds, including changes in federal marginal tax rates and other changes in tax laws that may affect the value of tax-exempt bonds relative to other investment alternatives;
- (vii) Managing credit exposure to financial institutions and other entities through the use of offsetting swaps and other credit management products; and
- (viii) Other applications to enable LVSD to increase income, lower costs, or strengthen its balance sheet and overall financial condition.

6) Qualified Hedges

LVSD understands that, if payments on and receipts from an Agreement are to be taken into account in computing the yield on the related bonds, the Agreement must meet the requirements for a "qualified hedge" under federal tax law (sometimes referred to as an "integrated" swap). LVSD will consult with bond counsel regarding parameters for the structure, terms, and procurement process which must be satisfied in order to achieve integration, if desired.

B. FEATURES OF THE AGREEMENTS

1) Documentation Guidelines

An Agreement will use terms and conditions as set forth in the International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement as a framework for documentation. Any Agreement between LVSD and a counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions, provisions and safeguards as LVSD, in consultation with its legal counsel and QIR, deems necessary or desirable.

2) Terms of Agreements Relating to Interest Rate Swaps

Subject to the provisions contained herein, the terms of any Agreement shall use the following guidelines:

- (i) *Security.* Unless otherwise specifically approved by the Board for a particular Agreement, payment of LVSD's obligations under an Agreement will be limited to the same or less security and source of repayment as is pledged for the debt that is hedged or carried by the swap, if any, provided however, that such security provisions shall in every case, comply with limitations established within the Act.
- (ii) *Downgrade provisions* triggering terminations, if applicable, shall in no event be less favorable for LVSD than those affecting the counterparty.
- (iii) Governing law for Agreements will be determined at the time of the Agreement, except that matters relating to the power, authority and capacity of the Agreement against LVSD will be governed by the laws of Michigan.
- (iv) *The specified indebtedness related to credit events* in any Agreement should be narrowly defined and refer only to indebtedness of LVSD that could have a materially adverse effect on LVSD's ability to perform its obligations under the Agreement.
- (v) *Collateral thresholds* should be set on a sliding scale reflective of credit ratings, size and directional market risk of the transaction. Collateral requirements, including safekeeping requirements, should be established and based upon the credit ratings of the counterparty or guarantor.
- (vi) *Eligible collateral* should generally be limited to cash, direct obligations of the United States, and direct obligations of Federal Agencies unless otherwise specifically authorized by the Board for a particular Agreement.

- (vii) LVSD shall have the right to *optionally terminate* an Agreement at "market", at any time over the term of the Agreement.
- (viii) *Termination value* should be set by utilizing a Market Quotation Methodology, Second Method (as that is defined in the ISDA documentation), unless LVSD deems an alternate method as appropriate/acceptable.

3) Qualified Counterparties and Exposure

LVSD shall seek to enter into Agreements with qualified swap counterparties that have a general credit rating (or the credit rating of such counterparties' guarantor) in the "A" category or above by one of the nationally recognized rating agencies, per the Act. The nationally recognized rating agencies currently include Moody's Investors Services, Inc., Standard & Poor's Rating Services and Fitch Investors Ratings Service. In addition, eligible counterparties should have a demonstrated experience in successfully executing derivative transactions.

While LVSD shall have a strict credit standard to comply with the Act, LVSD shall seek additional credit enhancement for any transaction in the form of:

- Contingent credit support or enhancement;
- Collateral in appropriate circumstances consistent with the policies contained herein;
- Ratings downgrade triggers; and/or
- Guaranty of parent, if any.

Derivative products create continuing exposure to the creditworthiness of financial institutions serving as counterparties to LVSD. To protect its interests in the event of credit deterioration of a counterparty after execution, LVSD will institute a three-tiered approach:

- (i) Use of highly rated and experienced counterparties: Standards of creditworthiness, as measured by credit ratings as well as experience, will determine eligible counterparties. Differing standards may be employed depending on among other things, the structure, term, size and interest-rate sensitivity of a transaction. In addition, eligible counterparties should have demonstrated experience in successfully executing derivative transactions.
- (ii) Termination: LVSD will seek, when possible, to include rating triggers in its swap documents allowing LVSD to terminate Agreements upon downgrade of its counterparty beyond predetermined levels. LVSD will seek to require, whenever possible, that terminations triggered by a counterparty credit event will occur on the side of the bid-offered spread which is most beneficial to LVSD.

(iii) Diversification: LVSD will monitor its market exposure to each counterparty on a continuing basis through the use of an ongoing monitoring system. While no maximum exposure limit is dictated by this Plan, LVSD will take into account current market exposure to any counterparty when seeking to enter additional transactions.

4) Methods of Procurement

Agreements may be procured via competitive selection process or on a negotiated basis as determined by LVSD on a case-by-case basis and consistent with LVSD's standard procurement policies and procedures. If undertaken by a competitive bid, the bid should include a range of firms (a minimum of three firms is desirable) with counterparty ratings as set forth herein.

LVSD may procure Agreements on a negotiated basis when LVSD makes a determination that:

- (i) Due to the complexity of a particular financing, a negotiated transaction would result in the most favorable pricing; or
- (ii) That in light of the facts and circumstances, doing so will promote LVSD's interest by encouraging and rewarding innovation; or
- (iii) Marketing of the swap will require complex explanations about the credit quality or security for repayment; or
- (iv) Market timing is essential and/or complex, for example a coordination of multiple components of the financing is required; or
- (v) Based on the recommendation of the QIR, special circumstances exist such that a negotiated transaction would result in the most favorable outcome.

Regardless of the method of procurement, LVSD shall obtain an independent finding from a QIR that the terms and conditions of any Agreement entered into reflect a fair market value of such Agreement as of the date of its execution.

5) Term and Notional Amount

LVSD shall determine the appropriate term for an Agreement on a case-by-case basis. In connection with the issuance or proposed issuance of any debt position, the term of a swap agreement between LVSD and a qualified swap counterparty shall not extend beyond the final maturity date of the related debt. The notional amount of the Agreement at no time will exceed the outstanding principal amount of the related debt.

6) Prohibited Agreements

LVSD will not enter into Agreements:

- (i) That are speculative or create extraordinary leverage or risk;
- (ii) For which LVSD lacks adequate liquidity to terminate without incurring a significant bid/ask spread;
- (iii) That do not provide sufficient price transparency to allow reasonable valuation; or
- (iv) That create cumbersome ongoing monitoring/administrative issues.

C. RISK CONSIDERATIONS AND MANAGEMENT OF THE AGREEMENTS

Prior to the execution of any Agreement, LVSD, its QIR, and counsel shall evaluate the proposed transaction and report the findings to the Board of LVSD. Such a review shall include the identification of the proposed benefit and the potential risks associated with the financing as well as how the swap affects the current risk profile of LVSD. An analysis of LVSD's current risk profile is contained in Appendix A.

1) Risk Considerations

LVSD, along with its QIR, will specifically review the following areas of potential risk associated with any proposed Agreement and will develop procedures to evaluate, quantify and mitigate such risks, in the event that unfavorable conditions occur:

Interest Rate Risk:

The risk that changes in the interest rate environment result in an increase in the cost of an Agreement or overall financing structure.

Basis Risk:

The risk of a mismatch between the rate or index received under an Agreement and the actual liability being hedged. Such a mismatch has the potential to create additional cost to LVSD.

Termination Risk:

Termination risk occurs when there is a need to terminate the Agreement, for any reason, in an interest rate environment which dictates a termination payment by LVSD to the counterparty.

Counterparty Risk:

Counterparty risk occurs when there is the failure of the counterparty to make required payments under the Agreement, or the failure to maintain adequate ratings levels or otherwise satisfy its obligations under the Agreement. Counterparty risk may result in swap termination requiring LVSD to make a termination payment.

Credit Risk:

Credit risk occurs when an event modifies the credit rating of LVSD, the counterparty or any guarantor. Credit risk may result in swap termination requiring LVSD to make a termination payment.

Liquidity Risk:

Liquidity risk occurs when there is an inability to renew or replace a required liquidity or similar financing facility on a variable rate bond issue and may result in increased net interest costs and/or a premature refunding of debt and require termination requiring a termination payment.

Tax Risk:

The risk that a material change in the federal tax code will negatively impact a financing structure and result in increased net costs to LVSD.

Yield Curve Risk:

The risk that a prolonged flat or inverted yield curve may result in reduced or negative cashflows from a Constant Maturity Swap resulting in higher net interest costs to LVSD. This risk is particular to the Constant Maturity Swap structure.

2) Managing Agreement Risks

Reports to the Board:

LVSD will evaluate the risks associated with all outstanding Agreements, at least annually and as requested by the Board, and make reports available to the Board of the findings. This evaluation will include the following information:

- (i) A description of all outstanding Agreements, including related bond series, types of Agreements, rates paid and received under Agreements, notional amounts, average life and the remaining term, and the current termination value of all Agreements.
- (ii) The credit rating of each Agreement counterparty and credit support provider, if any.
- (iii) Actual collateral postings by LVSD or the counterparty, if any.
- (iv) Information concerning any material event involving outstanding Agreements, including defaults by a counterparty, counterparty downgrades, or termination events.

(v) The status of any liquidity support used in connection with variable rate bonds being hedged with Agreements, including the remaining term and current fee.

Contingency:

LVSD and its Swap Advisor shall compute the termination exposure of each of its Agreements and its total Agreement termination payment exposure as part of its ongoing monitoring and prepare a contingency plan to either replace the Agreements or fund the termination payments, if any, in the event one or more outstanding Agreements are terminated. LVSD shall assess its ability to obtain replacement Agreements and identify revenue sources to fund potential termination payments.

3) Terminating Agreements

Optional Termination:

LVSD, in consultation with its QIR and counsel, and as directed in an authorizing resolution, may optionally terminate any Agreement if it determines such termination to be in its best interest.

Mandatory Termination:

In the event that an Agreement is terminated as a result of a termination event, such as a default or a decrease in credit rating of either LVSD or the counterparty, LVSD along with the QIR and Financial Advisor will evaluate whether it is financially advantageous to obtain a replacement Agreement, or, depending on market value, make or receive a termination payment.

In the event LVSD makes a termination payment, LVSD and its Swap Advisor shall attempt to follow the process identified in this Plan.

D. DISCLOSURE AND FINANCIAL REPORTING

LVSD will take steps to ensure that there is full and complete disclosure of all Agreements to the Board, to rating agencies, and in any relevant disclosure documents. With respect to its financial statements, LVSD will adhere to GASB.

E. ONGOING MONITORING

LVSD shall utilize an independent swap monitoring service (the "Swap Monitor") to provide ongoing, relevant market and transactional information to assist in compliance of monitoring, valuation, and reporting requirements of this Plan.

Utilizing the information provided by the Swap Monitor, LVSD will seek to maximize the benefits and minimize the risks it carries by managing its swap exposure as an integral piece of its overall debt and investment management plan. This will entail frequent monitoring of market conditions by LVSD and its advisors for emergent opportunities and risks. Such management may require modifications of existing positions including, for example:

- Early termination;
- Shortening or lengthening the term;
- Sale or purchase of options.
- Adding new complementary positions as market opportunities appear

Any monitoring service should provide monitoring and documentation of the following items:

- (i) Maintaining a database of existing swaps including a description of all outstanding interest rate swap agreements, type of swap, rates paid and received by LVSD, total notional amount, average life of each swap agreement and the remaining term of each swap agreement.
- (ii) The ability to monitor the ongoing and past cashflows on each swap to verify payments and receipts on each transaction.
- (iii) Material changes to swap agreements.
- (iv) Termination exposure of each of LVSD's interest rate swap agreements on a total basis as well as exposure to each individual counterparty.
- (v) Credit rating of each swap counterparty and any credit support provider, if any.
- (vi) If applicable, information concerning any default by a swap counterparty to LVSD, including but not limited to the financial impact to LVSD, if any.

LVSD is currently utilizing Echo Monitoring Solutions ("EMS") to provide ongoing monitoring of its swap portfolio. EMS meets or exceeds all of the criteria listed above, supplying LVSD with the means necessary to manage risks and opportunities as they materialize.

APPENDIX A

Summary of Current Swap Positions and Risk Profile

LVSD currently has one outstanding swap position, a fixed pay interest rate swap (the "Fixed Pay Swap") hedging its County of Calhoun, State of Michigan, 2002 School Building and Site Bonds, Series B. Details of the swap transaction is listed below.

FIXED PAY SWAP

General

Counterparty:	UBS AG
Trade Date:	November 14, 2002
Effective Date:	December 4, 2002
Amendment Date:	January 28, 2011
Am. Effective Date:	January 1, 2011
Maturity Date:	May 1, 2032
Associated Bonds:	County of Calhoun, State of Michigan, 2002 School Building and
	Site Bonds, Series B
Original Notional:	\$32,785,000
Current Notional:	\$32,785,000

LVSD Pays

Type of Payment:	Fixed rate
Amortization:	See below
Payment Dates:	Monthly
Fixed Rate:	3.9385%
Day Count:	30/360

LVSD Receives

Type of Payment:	Variable
Amortization:	See below
Payment Dates:	Monthly
Variable Rate:	SIFMA Municipal Bond Index
Day Count:	Act/Act

Swap Amortization:

Begin	End	Notional
7/1/2019	5/1/2021	\$32,785,000
5/1/2021	5/1/2022	30,705,000
5/1/2022	5/1/2023	28,525,000
5/1/2023	5/1/2024	26,240,000
5/1/2024	5/1/2025	23,845,000
5/1/2025	5/1/2026	21,335,000
5/1/2026	5/1/2027	18,700,000
5/1/2027	5/1/2028	15,940,000
5/1/2028	5/1/2029	13,045,000
5/1/2029	5/1/2030	10,010,000
5/1/2030	5/1/2031	6,830,000
5/1/2031	5/1/2032	3,495,000

Counterparty Ratings (as of July 1, 2019)

UBS AG	
S&P:	A+
Fitch:	AA-
Moody's:	Aa2

Downgrade Triggers

At any time that the rating issued by S&P and Moody's with respect to either party's long-term unsecured indebtedness is below A- in the case of S&P and A3 in the case of Moody's will trigger an Additional Termination Event under the Swap documents. In addition, if the credit ratings of LVSD are terminated or withdrawn for any reason unrelated to creditworthiness, it will not be an ATE if the long-term general obligation indebtedness of the State of Michigan remain above such levels and the obligations of LVSD remain qualified for the State Qualification and Loan Program.

Collateral Posting Requirements

There are no collateral posting requirements for either party.

Mark to Market Sensitivity Analysis

The following table illustrates the market value (and estimated termination value) of the Swap under various interest rate scenarios. Negative values would result in LVSD making a termination payment to the Counterparty, positive values would result in receiving a payment.

Lakeview School District					
Notional Amount:		\$	32,785,000		
Amended Effective I	Date:		1/1/2011		
Maturity Date:			5/1/2032		
Pay Fixed:			3.9385%		
Receive Floating:			SIFMA		
			Swap		
Yield Curve	Corresponding	Maı	k-to-Market		
Shift ⁽¹⁾⁽³⁾	10YR LIBOR Rate ⁽⁴⁾		Value		
2.00%	3.96%		(2,451,343)		
1.00%	2.96%		(4,248,871)		
0.50%	2.46%		(5,194,757)		
0.25%	2.21%		(5,680,129)		
Current ⁽²⁾	1.96%		(6,174,048)		
-0.25%	1.71%		(6,676,716)		
-0.50%	1.46%		(7,188,340)		
-1.00%	0.96%		(8,239,309)		

(1) Yield Curve Shift reflects the amount of the interest rate change relative to the current LIBOR yield curve on 6-28-2019. Shifts are applied to all points on the yield curve. Assumes current SIFMA/LIBOR relationship remains constant.

(2) The yield curve shift amount of "Current" reflects the swap mark-to-market value using rates as of 6-28-2019.

(3) Yield curve shifts occur today - reflecting the highest sensitivity to interest rate changes.

(4) Rates as of 6-28-2019 are for indicative presentation purposes only and are subject to change.

Current Swap Portfolio - Risk Analysis

This section reviews the risks in LVSD's current swap portfolio:

- Interest Rate Risk The risk that a generally adverse move in variable rates increases the overall cost of borrowing or that credit concerns relating to LVSD (or its credit enhancer, if applicable) will have the same impact. LVSD currently has hedged exposure to variable rates on its 2002 Bonds via the Fixed Pay Swap. A sharp or sustained rise in short term interest rates should not have a negative impact on LVSD's finances as interest costs on that amount will be offset by a corresponding move in the variable receipt on the Fixed Pay Swap. If LVSD would terminate the existing Fixed Pay Swap without refinancing the 2002 Bonds to a fixed rate, LVSD will be directly exposed to interest rate risk. LVSD will need to address the structure of the 2002 Bonds going forward upon their Tender Date of October 1, 2020.
- 2. Basis Risk The risk of a mismatch between the interest rate received from the Fixed Pay Swap and the rate paid on the 2002 Bonds is a form of Basis Risk. The original structure of the 2002 Bonds had limited Basis Risk as the rate on the 2002 Bonds and the receipt on the Fixed Pay Swap were based upon the same index, SIFMA, a weekly tax-exempt variable rate that is the basis for the short-term tax-exempt market creating a near perfect hedge. Upon the refinancing of the 2002 Bonds to a direct bank purchase structure, the receipt on the Fixed Pay Swap and the rate paid on the 2002 Bonds were no longer established on the same basis. The Fixed Pay Swap receipt is based on SIFMA while the interest payable on the 2002 Bonds is currently based upon 70% of 1month LIBOR, a taxable index. The two rates should be closely correlated based on historical results although they will vary over time resulting in both negative and positive results which are typically minor and average out over time. A substantial and prolonged negative divergence of the two indices from factors beyond control could result in higher net interest costs to LVSD. The rate differential as of the date of this report remains slightly positive but no assurance can be given that this will continue for any period of time.

The use of a short-term basis swap can eliminate this risk by effectively matching the net rate paid on the Bonds and received on the Swap and should be considered if market conditions are favorable. LVSD had previously addressed Basis Risk on a short-term basis through the use of a basis swap, exchanging the receipt on the Fixed Pay Swap for a receipt based upon SIFMA through October 1, 2015. A replacement Basis Swap should be considered if market conditions permit. In the interim, good financial management and continued monitoring of the ongoing basis differential are recommended and may need to be addressed if a negative condition becomes persistent.

3. <u>Termination Risk</u> — The risk that a swap could be terminated (while valued in favor of the Counterparty and against LVSD) as a result of any of several events, which may include a ratings downgrade for LVSD or the Counterparty, covenant violation by either party, bankruptcy of either party, swap payment default of either party, and other default

and termination events as defined by the documents. Any such termination may require LVSD to make a significant termination payment (depending on prevailing market conditions) on the Swap even if the termination is not caused or forced by LVSD. Terminations in certain interest rate environments could result in a payment to LVSD. (An analysis of the market sensitivity of LVSD's Fixed Pay Swap is contained herein.) If the Fixed Pay Swap were to be terminated as a result of a counterparty event, it is likely that the Fixed Pay Swap could be assigned to another party, provided that the credit rating and financial situation of LVSD has been maintained. The risk of an LVSD event precipitating a termination is mitigated by the State's high credit rating, good financial management and maintenance of a high credit rating by LVSD.

- 4. <u>Counterparty Credit Risk</u> The risk of a payment default on the Fixed Pay Swap by the Counterparty results in an economic loss to LVSD. For example, if the Counterparty does not perform pursuant to the terms of the respective Agreements and/or suffers from a credit issue including downgrade below the A-/A3 level or default, UBS currently maintains ratings of A+/Aa2/AA-. In the current interest rate environment, if the Counterparty were to default, LVSD would be exposed to Termination Risk, possibly resulting in a termination payment due from LVSD on the Fixed Pay Swap. The amount of any termination payment would be dependent on the relative level of interest rates at the time and/or the relationship of taxable and tax-exempt rates, as the reason for the termination is not the determining factor of the termination payment. Steps have been taken in the documentation to protect LVSD from Counterparty Credit Risk through the use of termination events. Proper monitoring of such risk by LVSD, strict adherence to the documents and good financial management will allow LVSD to effectively manage Counterparty Credit Risk.
- 5. <u>Market Access Risk</u> The risk that LVSD is unable to access the debt market or obtain liquidity for any variable rate bonds in the future. This risk is subject to overall general market conditions as well as LVSD's credit and is mitigated to some degree by the fact that LVSD currently has a favorable rating of "NR/AA- (AA- underlying)" and should therefore be able to access the market at competitive rates in the future. LVSD should monitor this risk and react appropriately should its credit rating decline in the future and consider options as it approaches the October 1, 2020 mandatory tender date.
- 6. <u>Liquidity / Remarketing Risk</u> The risk that the LVSD cannot secure a cost-effective renewal of liquidity for its underlying variable rate bonds or an efficient variable rate financing vehicle, experiences higher than expected remarketing agent fees or suffers a failed remarketing with respect to the 2002 Bonds. This risk is mitigated by the LVSD's current favorable rating of "NR/AA- (AA- underlying)" and the general availability of credit in the current market.

However, the cost of liquidity has increased and in some cases resulted in the inability to secure liquidity or an alternative variable rate financing vehicle at a cost effective rate. Much of this risk has abated in the last few years and liquidity costs have decreased, although there is no assurance that the availability of liquidity at a reasonable level will continue. If such a situation should occur at a time when LVSD is seeking liquidity, it

may be necessary to refinance the 2002 Bonds and terminate the Fixed Pay Swap in a negative market environment resulting in a termination payment due to the Counterparty. Continued monitoring of credit markets and LVSD's liquidity provider/bank purchase options is necessary to mitigate this risk. This risk will become more prevalent as the termination of the current financing approaches the October 1, 2020 mandatory tender date.

7. <u>Tax Risk</u> — The risk that there is a change in the benefit of tax-exemption of municipal bonds which would affect the relationship between 70% of LIBOR (the underlying rate basis for the payment on the 2002 Bonds) and SIFMA (the underlying index for the receipt on the Fixed Pay Swap). Typically in municipal bond transactions, debt is based on a tax-exempt index and the swap on a taxable index, therefore a reduction or elimination in tax-exempt benefit to municipal bonds would result in a negative divergence of the two rates for the municipal issuer (i.e. the payment on the Bonds would go up and the receipt on the swap would remain unchanged). In LVSD's current structure, a reduction in the benefits of tax-exemption on municipal bonds would likely mean in a higher receipt on the Fixed Pay Swap with the payment on the Bonds remaining the same resulting in lower net interest costs to LVSD (see below). Conversely, an increase in the benefits of tax-exemption would have a negative impact on cashflows. The possibility of an increase in tax-exempt benefits is remote and there is no reason to believe that it will occur any time in the near future or even through the October 1, 2020 Tender Date.

As briefly mentioned above, as a result of the passage of the Tax Cuts and Jobs Act in late 2017, the top corporate tax rate was reduced from 35% to 20% which could potentially affect LVSD and the underlying Bonds now or in the future. Initially, it was unknown if the corporate tax rate change would alter the historic relationship of 1M LIBOR and SIFMA. As stated previously SIFMA has averaged approximately 70% of 1M LIBOR and the hedging strategy of the Swap is based upon this average result. If this relationship were to change on an ongoing basis, it could potentially alter the effects of the hedging strategy. Theoretically, in LVSD's case, this would decrease overall cost as cashflows as the SIFMA receipt on the Swap would go up and payment on the Bonds would remain the same, locked at 70% of 1M LIBOR through the term of the Bank Purchase. (In many cases, banks negotiated the ability to increase their return as a result of a corporate tax rate reduction but LVSD's % is essentially fixed through term). Over the course of the last year the percentage has trended towards historical averages (a small current benefit to LVSD) and LVSD may not gain any significant advantage going forward. This will need to be monitored going forward and taken into consideration upon the refinancing of the 2002 Bonds on the Tender Date in 2020.

8. <u>Yield Curve Risk</u> — The risk particular to a product known as a Constant Maturity Swap ("CMS"). A CMS is utilized to capitalize on certain anomalies in the slope of the yield curve, i.e. a flat yield curve. Historically, the yield curve is upward sloping with longer term rates exceeding short term rates. In a CMS, the exchange of the payment of a short term indexed rate for receipt of a longer term indexed rate creates has historically created positive cashflows and reduced interest costs. LVSD previously entered into a CMS in

2006 which resulted in net positive cashflows from 2006-2011. In 2011, LVSD terminated the CMS and received a termination payment that was used to reduce the fixed rate on the Fixed Pay Swap by 59.15 basis points (0.5915%) for the remainder of its term of the Fixed Pay Swap. Yield Curve Risk occurs when the indexed interest rate yield curve becomes flat or inverted, when interest rates on short-term maturities are higher than long term maturities. Should the yield curve remain relatively flat or invert for a significant period of time, the benefits of a CMS would be negatively impacted and may result in negative cashflows. As LVSD does not currently have any CMS exposure, this risk does not exist in the current portfolio.

As described above, risks associated with the Fixed Pay Swap cannot be eliminated, as numerous factors contribute to performance of derivative transactions and it does not contemplate every possible or conceivable risk but attempts to identify those most relevant. Good financial management and LVSD's use of a Swap Monitor to provide ongoing surveillance of its swap portfolio and the inherent risks associated with it will significantly mitigate the majority of the risk profile.