The City of Richmond

Pension Obligation Bond

Alternative Solutions

October 5, 2021



Pension Obligation Bonds: Problems to Solve

- Mandatory termination in 2023
- 1-Month LIBOR rate that the Bonds reference in Index Mode will be phased out in 2023
- A sense of urgency is appropriate

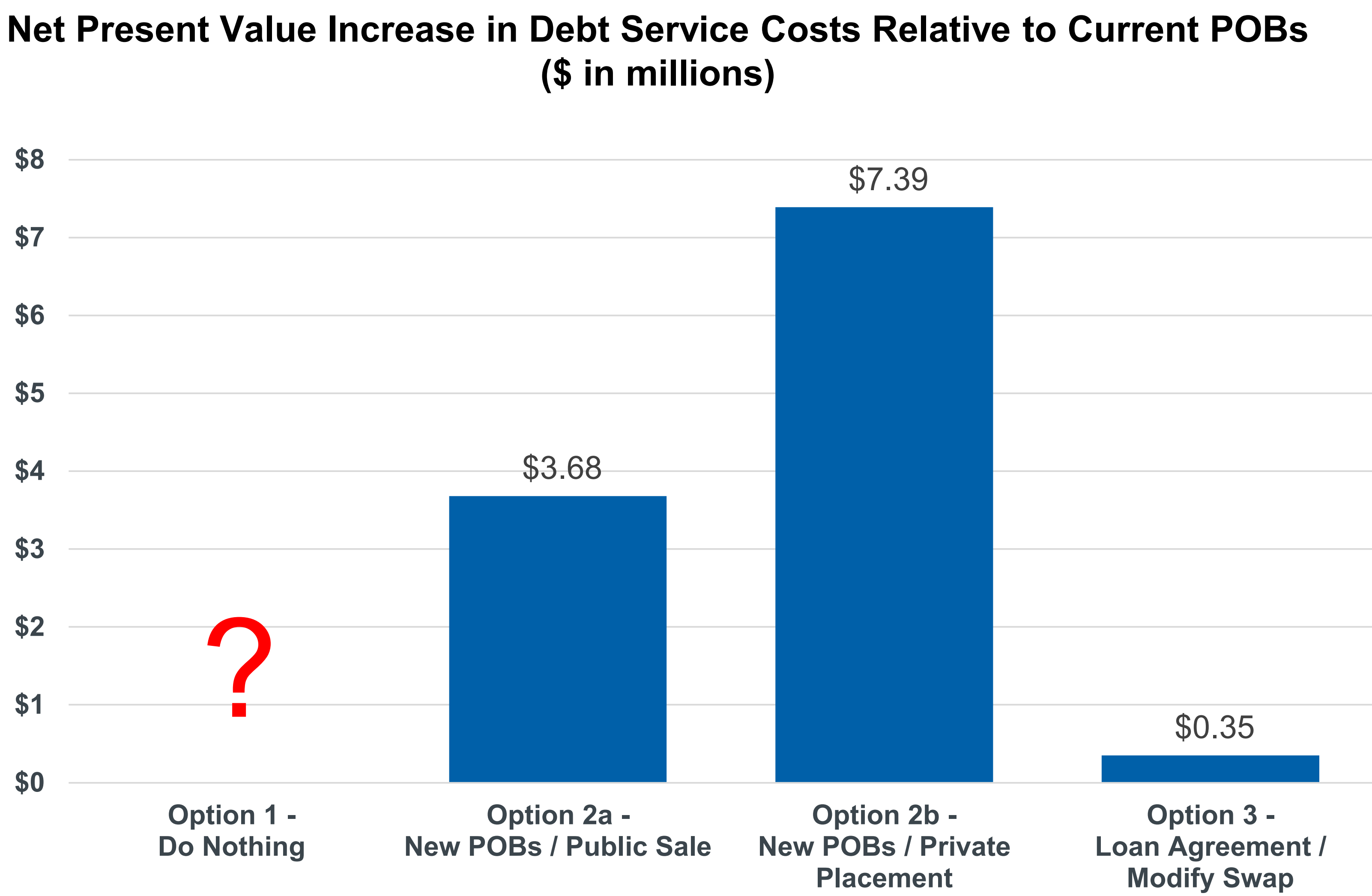
Pension Obligation Bonds: Challenges

- City's credit rating history
- Future interest rates cannot be known
- Uncertainty regarding future availability of alternatives that are available to the City today

Overview of Alternatives

Features	Option 1: Do Nothing Today	Option 2A: New POBs / Public Sale	Option 2B: New POBs / Private Placement	Option 3: Loan Agreement / Modify Swap
Description	• Leave current structure in place • Address in 2023	• Refund POBs in public capital market and terminate swaps	• Refund POBs through a private placement and terminate swaps	• Refund POBs with line of credit and 'buy down' swaps • Modify swaps to replace LIBOR and reduce rate
Cost Δ (NPV & Avg. Annual)	• **Unknown**	• **$3.68 million PV** • **$419,073 annually**	• **$7.39 million PV** • **$841,742 annually**	• **$352,000 PV** • **$41,209 annually**
Execution Risk	• **Unknown**	• **High**	• **Medium**	• **Low**
Execution Complexity	• **Unknown**	• **High**	• **High**	• **Low**
Long-Term Risk	• **Unknown**	• **Low**	• **Low**	• **Downgrade below BBB**
Long-Term Complexity	• **Unknown**	• **Low**	• **Low**	• **Medium (retains swap)**
Advantages	• Chance of better outcome	• Bondholders take downgrade risk	• Bondholder takes downgrade risk • Pricing locked in soon	• Lowest cost • Modest demands / risks
Disadvantages	• Risk of worse outcome	• Interest rates not locked in for 6-8 months	• Higher cost relative to other alternatives	• Retains downgrade risk
Time to Complete	• **Unknown**	• **~6-8 months**	• **~4-6 weeks for pricing; ~6-8 months to close**	• **~ 2 months**

Estimated Costs of Alternatives as of August 24, 2021



Estimated Costs of Alternatives as of August 24, 2021

Annual Debt Service Costs Relative to Current POBs

Bond Year	Current	Option 1: Do Nothing Today	Option 2A: New POBs / Public Sale	Option 2B: New POBs / Private Placement	Option 3: CNB Loan Agreement
8/1/2022	$12,532,688	?	$1,770	($2,006)	($7,917)
8/1/2023	6,760,702	?	361	(1,184)	(2,161)
8/1/2024	15,538,376	?	417,299	841,308	44,212
8/1/2025	15,296,318	?	419,337	842,670	43,142
8/1/2026	16,297,581	?	420,105	842,815	39,506
8/1/2027	16,137,349	?	419,909	843,145	37,266
8/1/2028	17,033,319	?	417,475	840,451	39,582
8/1/2029	16,954,392	?	417,426	840,959	40,092
8/1/2030	15,286,010	?	419,092	841,500	40,270
8/1/2031	19,729,026	?	420,356	844,441	39,867
8/1/2032	20,344,087	?	420,117	840,336	42,950
8/1/2033	21,082,609	?	418,661	840,002	43,643
8/1/2034	18,611,548	?	420,020	841,535	42,765
TOTAL:	**$211,604,005**	**?**	**$4,611,929**	**$9,255,971**	**$443,217**
		Average Annual Increase vs. Current	**$419,073**	**$841,742**	**$41,209**
		PV vs. Current @ 3%	**$3,683,802**	**$7,392,912**	**$352,068**

Alternatives Not Analyzed

- The prior alternative discussed was to amend the existing swap and amend the underlying POBs to remove the mandatory termination and change the LIBOR index
  - Not included in the options because the CNB Loan structure provides superior results with lower risks
- Refinancing the POBs and terminating the swap while leaving the POBs as variable rate bonds also was not included
  - City’s debt policy limits total variable rate exposure to 20%
  - Leaving the POBs as unhedged variable rate would result in approximately 65% variable rate exposure in the City’s General Fund-backed debt portfolio

Risks of CNB Loan and POB Bond Structures

- The primary risk of the CNB structure is that it includes downgrade pricing
  - City's credit rating could fall to BBB and the structure would still be economically similar to Option 2A
  - The CNB structure can be refinanced with Bonds - ~$2.25mm non-recoverable
- Swap would remain, but future termination values in the event of an ATE or optional termination would be *much* lower
  - Structure includes a payment to reduce the interest rate on the swap to a much lower current market rate
  - Market value of swap on the day of closing will be $0

Advantages of the CNB Loan Structure

- Lowest cost structure by a wide margin
- Manageable risks
- Ease of execution

Sole Sourcing the CNB Loan Structure

- Outreach to other commercial banks that may be interested in providing credit to the City was conducted

- While some may be willing to bid on a loan structure, no other bank was willing to offer a commitment to the maturity of the POBs (13 years)

  - Generally, 3-year commitments may be available, possibly 5 years for some

  - Acceleration of the loan in the event of a credit rating downgrade below a certain threshold is nearly certain to be part of any other proposal

- RFP process would add about 2 months to the schedule

- CNB and RBC proposed terms may not continue to be available

Recommendations and Next Steps

- Staff recommends the CNB Loan approach as the least costly, quickest to execute, and with manageable future risks

- If City prefers to take advantage of current low rates and terminate the swaps and refund the POBs, the process would be more lengthy, costly, and involved for City staff, and ultimate costs subject to future market conditions



APPENDIX

Glossary

- "ATE" means Additional Termination Event, which is an event spelled out in swap legal documents that permits the swap counterparty to compel the issuer to terminate its swap at the then-current market value. ATEs include credit rating downgrades below a level specified in the swap documents
- "Auction Rate Bonds" are variable rate bonds that are marketed through an auction process and are not supported by a bank liquidity facility; the auction rate bond market collapsed during the Financial Crisis.
- "CAB" means a Capital Appreciation Bond, which is a bond that does not pay current interest but instead is sold at a deep discount to par and interest accrues and is paid in full at the maturity of the bond..
- "Debt Service" means the sum of the principal and interest due on a series of bonds.
- "Escrow" means a portfolio of investments established to pay the debt service and redemption price of bonds that are being refunded until the redemption date.
- "Hedge" means a financial transaction that is designed to limit the investor's exposure to risk.
- "Index Rate Bonds" are variable rate bonds whose rate is based on a standard variable rate market index such as LIBOR.
- "Mandatory Termination" means a requirement to terminate an interest rate swap agreement at the then-current market value.
- "Negative Arbitrage" means invested bond funds (typically an Escrow) are earning less interest than the interest rate on the bonds that are the source of the invested funds.
- "POBs" means Pension Obligation Bonds, which are bonds sold to make a deposit to a pension system to fund all or a portion of an unfunded liability.
- "Refunding" means a refinancing of outstanding debt, typically for economic savings.
- "Swap" means an interest rate exchange agreement, whereby two parties agree to exchange interest payments.
- "Variable Rate Bonds" means bonds whose interest rate fluctuates from time to time.

City Credit Ratings – 2009 to Present

City Issuer Credit Rating

Year	Moody's	Standard & Poor's
2019	Baa3	AA-
2018	Baa3	A-
2017	Ba1	A-
2016	Ba1	BBB+
2015 (Sept)	Ba1	BBB+
2015 (May)	Baa1	AA-
2014*	A1	AA-
2013	A1	A+
2012	A1	A+
2011	Aa3	A+
2010*	Aa3	A+
2009	A2	A+

Lease Revenue Bond Ratings

Year	Moody's	Standard & Poor's
2019	Ba1	A+
2018	Ba1	BBB+
2017	Ba2	BBB+
2016	Ba2	BBB
2015 (Sept)	Ba2	BBB
2015 (May)	Baa2	A+
2014*	Baa1	A+
2013	Baa1	A
2012	Baa1	A
2011	A1	A
2010*	A1	A
2009	Baa1	A

Wastewater Bond Ratings

Year	Moody's	Standard & Poor's
2019	NR	AA-
2018	NR	AA-
2017	Baa2	AA-
2016	Baa2	AA-
2015 (Sept)	Baa2	AA-
2015 (May)	A2	AA-
2014*	A2	AA-
2013	A2	AA-
2012	A2	AA-
2011	A2	AA-
2010*	A2	AA-
2009	Baa2	AA-

- Moody's upgraded the City's issuer credit rating (i.e., implied GO) to Baa3 from Ba1 in November
- S&P upgraded the City's issuer credit rating to AA- in 2019
- Lease revenue bonds are generally rated one notch lower than the issuer credit rating