

DRAFT



Town of Paradise Valley (AZ)

Presentation to Town Council

Cash and Pension Liability Management Options

9 May 2019

Comparison of Funding Options¹

Four options for applying contemplated FY2020 \$12 million cash surplus to repay pension UAAL and/or fund CIP

	OPTION 1. STATUS QUO	OPTION 2. ACCELERATED CASH PAYMENTS	OPTION 3. \$6M TAX-EXEMPT CIP BONDS	OPTION 4. \$12M TAXABLE PENSION BONDS
<i>Description</i>	- Apply cash surplus in equal annual installments - FY2020: \$6M to PSPRS - FY2021: \$6M to PSPRS	- Pay additional \$3M to PSPRS on 6/30/2019 - FY2020: \$6M to PSPRS - FY2021: \$3M to PSPRS	- Apply \$12M cash surplus to PSPRS on 7/2/2019 - Issue \$6M tax-exempt bonds for CIP	- Issue \$12M taxable pension bonds for UAAL - Retain \$12M cash surplus for payment fund @ 2.70%
<i>Benefits</i>	- Expedites repayment of UAAL currently accruing @ PSPRS' assumed rate of return of 7.40% - Projected FY2021 UAAL of \$696,980	- Faster UAAL repayment relative to OPTION 1; reduces UAAL balance to which the PSPRS 7.40% rate of return is applied, thereby reducing the amount of required future UAAL payments - Projected FY2021 UAAL of \$384,552	- Repays UAAL upfront, allowing PSPRS to earn 7.40% on \$12M - Projected FY2020 UAAL of \$62,056 - Interest on bonds payable @ 2.01%, relative to 7.40% PSPRS assumed rate - Upfront funds available for capital projects	- Repays UAAL upfront, 100% funding on 7/2/2019 - Replaces UAAL currently growing @ PSPRS rate of 7.40% with POB debt @ 3.13% - Retains \$12M cash surplus for ongoing earnings (\$6.7M) - All debt repaid by FY2025
<i>Opportunity Cost</i>	- Lost investment earnings on cash surplus (up to \$6.4M from 2020-2037) - Other capital projects that could be funded - Remaining UAAL still needs to be repaid until FY2037	- Lost investment earnings on cash surplus (up to \$6.6M from 2020-2037) - Other capital projects that could be funded - Remaining UAAL still needs to be repaid until FY2037	- Lost investment earnings on cash surplus (up to \$6.7M from 2020-2037) - New outflow of debt service expense - Modest remaining UAAL that needs to be amortized	- New outflow of debt service expense - Taxable borrowing rate higher than tax-exempt
<i>Net Earnings (Inflow)</i>	(\$6,412,509) (Inv. loss)	(\$6,563,743) (Inv. loss)	(\$6,715,905) (Inv. loss)	\$0 (Inv. loss)
<i>Net Payments (Outflow)</i>	(\$22,458,743) (UAAL gain)	(\$23,030,904) (UAAL gain)	(\$23,617,330) (UAAL gain) (\$6,994,700) (TE D/S)	(\$23,735,149) (UAAL gain) (\$13,218,428) (Txbl D/S)
<i>Net Budget Impact</i>	\$16,046,234	\$16,467,161	\$9,906,725	\$10,516,721
<i>PV Budget Impact</i>	\$8,208,737	\$8,362,748	\$3,208,895	\$2,043,621
<i>Upfront Funds</i>	-- (Cash Surplus Depleted)	-- (Cash Surplus Depleted)	\$6,000,000 (Bond Proceeds)	\$12,000,000 (Cash Surplus)
<i>Net Present Value</i>	\$8,208,737	\$8,362,748	\$9,208,895	\$14,043,621

1. Based on current actuarial valuation data as provided by Town. Market conditions as of April 30, 2019. Stifel does not commit to underwrite at these levels. Please see pension risk disclaimer in Appendix.

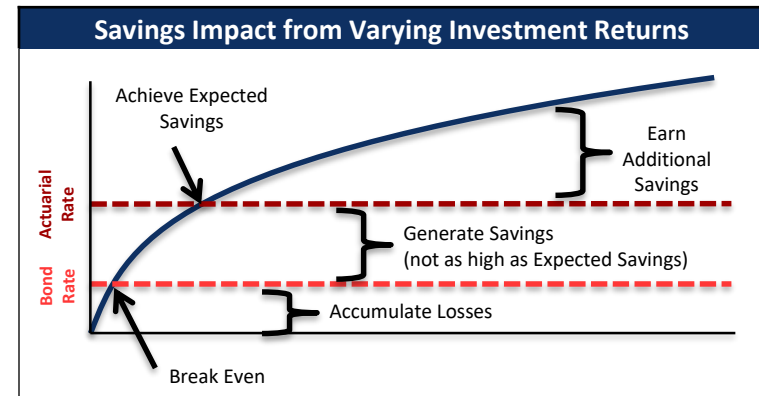
Comparison of Funding Options¹

	BASE: DO NOTHING		OPTION 1. STATUS QUO				OPTION 2. ACCELERATED CASH PAYMENTS				OPTION 3. \$6M TAX-EXEMPT CIP BONDS					OPTION 4. \$12M TAXABLE PENSION BONDS				
FY	A: Inflow Cash Earnings	B: Outflow Budget UAAL Payts	A1 Cash Earnings	B1 Budget UAAL Payts	(A1-A) – (B1-B) Net Budget Impact	PV Impact	A2 Cash Earnings	B2 Budget UAAL Payts	(A2-A) – (B2-B) Net Budget Impact	PV Impact	A3 Cash Earnings	B3 Budget UAAL Payts	Debt Service	(A3-A) – (B3-B) Net Budget Impact	PV Impact	A4 Cash Earnings	B4 Budget UAAL Payts	Debt Service	(A4-A) – (B4-B) Net Budget Impact	PV Impact
2020	300,000	947,949	175,000		822,949	766,247	100,000		747,949	696,414	0		135,400	512,549	477,234	300,000		164,488	783,461	729,480
2021	307,500	985,442	29,375		707,317	613,204	2,500		680,442	589,905	0	5,095	1,383,850	(711,004)	(616,401)	307,500		2,610,553	(1,625,111)	(1,408,882)
2022	315,188	1,026,646	5,109	60,106	656,461	529,903	2,563	33,163	680,858	549,596	0	5,308	1,373,700	(667,550)	(538,854)	315,188		2,608,984	(1,582,338)	(1,277,281)
2023	323,067	1,077,533	5,237	63,085	696,618	523,573	2,627	34,807	722,286	542,865	0	5,571	1,370,250	(621,355)	(467,007)	323,067		2,609,901	(1,532,368)	(1,151,718)
2024	331,144	1,122,962	5,368	65,745	731,441	511,868	2,692	36,274	758,236	530,620	0	5,806	1,368,250	(582,238)	(407,454)	331,144		2,612,783	(1,489,820)	(1,042,587)
2025	339,422	1,152,771	5,502	67,490	751,360	489,579	2,760	37,237	778,871	507,504	0	5,960	1,363,250	(555,862)	(362,194)	339,422		2,611,720	(1,458,949)	(950,636)
2026	347,908	1,193,117	5,640	69,852	780,996	473,826	2,829	38,540	809,497	491,117	0	6,169		839,040	509,041	347,908			1,193,117	723,857
2027	356,606	1,234,876	5,781	72,297	811,754	458,554	2,899	39,889	841,280	475,233	0	6,385		871,885	492,521	356,606			1,234,876	697,572
2028	365,521	1,278,097	5,925	74,827	843,674	443,747	2,972	41,285	874,262	459,836	0	6,608		905,967	476,512	365,521			1,278,097	672,241
2029	374,659	1,322,830	6,073	77,446	876,798	429,395	3,046	42,730	908,487	444,914	0	6,840		941,332	460,999	374,659			1,322,830	647,830
2030	384,025	1,369,129	6,225	80,157	911,172	415,483	3,122	44,226	944,000	430,452	0	7,079		978,024	445,967	384,025			1,369,129	624,306
2031	393,626	1,417,049	6,381	82,963	946,841	402,000	3,200	45,774	980,849	416,438	0	7,327		1,016,096	431,403	393,626			1,417,049	601,635
2032	403,467	1,466,645	6,540	85,866	983,852	388,933	3,280	47,376	1,019,083	402,860	0	7,583		1,055,595	417,294	403,467			1,466,645	579,788
2033	413,553	1,517,978	6,704	88,872	1,022,257	376,271	3,362	49,034	1,058,753	389,704	0	7,849		1,096,576	403,626	413,553			1,517,978	558,735
2034	423,892	1,571,107	6,872	91,982	1,062,104	364,001	3,446	50,750	1,099,911	376,958	0	8,123		1,139,092	390,386	423,892			1,571,107	538,445
2035	434,489	1,626,096	7,043	95,201	1,103,449	352,114	3,532	52,527	1,142,613	364,612	0	8,408		1,183,199	377,563	434,489			1,626,096	518,893
2036	445,352	1,683,009	7,219	98,534	1,146,344	340,598	3,621	54,365	1,186,914	352,652	0	8,702		1,228,956	365,143	445,352			1,683,009	500,050
2037	456,485	1,741,915	7,400	101,982	1,190,847	329,442	3,711	56,268	1,232,873	341,068	0	9,006		1,276,423	353,116	456,485			1,741,915	481,892
	6,715,905	23,735,149	303,396	1,276,406	16,046,234	8,208,737	152,162	704,245	16,467,161	8,362,748	0	117,819	6,994,700	9,906,725	3,208,895	6,715,905	0	13,218,428	10,516,721	2,043,621
			Upfront Cash Balance				0				Upfront Cash Balance					6,000,000				
			Net Present Value				8,208,737				Net Present Value					9,208,895				
			Net Present Value				8,362,748				Net Present Value					12,000,000				
			Net Present Value				8,362,748				Net Present Value					14,043,621				

1. Based on current actuarial valuation data as provided by Town. Market conditions as of April 30, 2019. Stifel does not commit to underwrite at these levels. Please see pension risk disclaimer in Appendix.

Pension Bond Risks

- Pension bonds carry three distinct types of risks: i) actuarial risk, ii) market risk, and iii) other risks
- Actuarial Risk.** Any retirement system's independent actuaries calculate projections for plan assets and liabilities, and these projections are premised on a variety of assumptions such as investment returns, payroll increase, COLA, mortality, early retirement, and benefit payments
 - Annual employer contributions are calculated based on these assumptions
 - Any revision or variance from these assumptions will alter projections and required contributions, regardless of the issuance of pension bonds
 - Actuarial risk is inherent to all pension funds, and all projections of future contributions and payouts
- Market Risk.** The primary risk associated with pension bonds is long-term investment return performance
 - The bond rate is impacted by market risk at the time the bonds are sold, but is locked in after that
- Other Risks.** Pension funding bonds have numerous risks including, but not limited to, variance from the anticipated investment return, payroll increase, COLA, mortality, early retirement, covered payroll and other assumptions contained in the actuarial reports, CAFR and other documents
 - All references to expected savings are for potential savings and are based on achieving rates assumed in actuarial reports, CAFR and other documents
 - Issuing pension bonds could result in savings that are greater or less than stated in the analysis, or could result in a loss
 - Potential savings vary from year to year; Actual savings or losses and the success of the pension bond transaction cannot be known until the amortization of the final pension bond maturity
- Additional risks may also exist



Pension Risk Disclaimer and Engaged Underwriter Disclosure

Pension Obligation Bonds (“POBs”) are a source of financing for unfunded actuarial liabilities of pension funds and can serve a valuable function. However, the success of a POB financing is dependent on a number of assumptions proving to be accurate, and the failure of any of these assumptions is a risk that a government issuing POBs should consider.

Among the assumptions that are important to a POB financing, and the risks associated with those assumptions providing to be inaccurate, are the following:

- **Assumption:** The investment yield on the POB proceeds once deposited in the pension fund will equal or exceed the yield on the POBs. **Risk:** If the investment yield on the POB proceeds is less than the yield on the POBs, and the decline is not offset by positive changes in other assumptions, the issuance of the POBs may actually increase the unfunded actuarial liability.
- **Assumption:** Payroll increases during the term of the POBs will be as anticipated when the unfunded actuarial liability was estimated at POB issuance. **Risk:** If payroll increases during the term of the POBs exceed expectations, and the increases are not offset by positive changes in other assumptions, the POB proceeds will not suffice to cover the unfunded actuarial liability.
- **Assumption:** Cost of living adjustments (“COLAs”) will be as anticipated when the unfunded actuarial liability was estimated at POB issuance. **Risk:** If COLAs exceed expectations during the term of the POBs, and the increases are not offset by positive changes in other assumptions, the POB proceeds will not suffice to cover the unfunded actuarial liability.
- **Assumption:** Various assumptions used in calculating the unfunded actuarial liability -- such as mortality rates, early retirement incentives, types of payrolls covered by the pension fund -- will be as anticipated at the time of POB issuance. **Risk:** If there are reductions in mortality rates, increases in early retirement incentives, expansions of the payrolls covered by the pension plan during the term of the POBs, and these changes are not offset by positive changes to other assumptions, the POB proceeds will not suffice to cover the unfunded actuarial liability.

In addition to analyzing potential benefits that are based on achieving assumptions made in estimating the unfunded actuarial liability, we will also analyze potential budgetary benefits or losses based on various prospective levels of the pension systems’ earnings to assist you in gauging the likelihood of success of a POB transaction. It should be noted that potential budgetary benefits vary from year to year. Actual benefits or losses and the success of the POB financing cannot be known until the POBs have been paid in full.

Stifel, Nicolaus & Company, Incorporated (“Stifel”) has been engaged or appointed to serve as an underwriter or placement agent with respect to a particular issuance of municipal securities to which the attached material relates and Stifel is providing all information and advice contained in the attached material in its capacity as underwriter or placement agent for that particular issuance. As outlined in the SEC’s Municipal Advisor Rule with current effective implementation date of July 1, 2014, Stifel has not acted, and will not act, as your municipal advisor with respect to the issuance of the municipal securities that is the subject to the engagement.

Stifel is providing information and is declaring to the proposed municipal issuer and any obligated person that it has done so within the regulatory framework of MSRB Rule G-23 as an underwriter (by definition also including the role of placement agent) and not as a financial advisor, as defined therein, with respect to the referenced proposed issuance of municipal securities. The primary role of Stifel, as an underwriter, is to purchase securities for resale to investors in an arm’s-length commercial transaction. Serving in the role of underwriter, Stifel has financial and other interests that differ from those of the issuer. The issuer should consult with its own financial and/or municipal, legal, accounting, tax and other advisors, as applicable, to the extent it deems appropriate.

These materials have been prepared by Stifel for the client or potential client to whom such materials are directly addressed and delivered for discussion purposes only. All terms and conditions are subject to further discussion and negotiation. Stifel does not express any view as to whether financing options presented in these materials are achievable or will be available at the time of any contemplated transaction. These materials do not constitute an offer or solicitation to sell or purchase any securities and are not a commitment by Stifel to provide or arrange any financing for any transaction or to purchase any security in connection therewith and may not relied upon as an indication that such an offer will be provided in the future. Where indicated, this presentation may contain information derived from sources other than Stifel. While we believe such information to be accurate and complete, Stifel does not guarantee the accuracy of this information. This material is based on information currently available to Stifel or its sources and is subject to change without notice. Stifel does not provide accounting, tax or legal advice; however, you should be aware that any proposed indicative transaction could have accounting, tax, legal or other implications that should be discussed with your advisors and /or counsel as you deem appropriate.