



PENSION OBLIGATION BONDS

POTENTIAL IMPACT – OPERATING & CAPITAL BUDGETS

March 14, 2020

PENSION OBLIGATION BONDS



- Fixed Annual Cost
- Fully Fund Pension System
- Amortization Schedule through 2040
- Reduce Overall Required Contribution
- Provide potential Operating Capacity and Flexibility
- Mitigate Tax Impacts
- Potential Integration with large school Capital Building Projects

EXISTING FUNDING SCHEDULE



	Amortization of Unfunded Liability	Normal Cost	Total Required Appropriation
FY 2022	\$9,943,061	\$2,948,500	\$12,891,561
FY 2023	\$10,757,074	\$3,062,680	\$13,819,754
FY 2024	\$11,633,517	\$3,181,259	\$14,814,776
FY 2025	\$12,577,036	\$3,304,404	\$15,881,440
FY 2026	\$13,592,614	\$3,432,290	\$17,024,904
FY 2027	\$14,685,598	\$3,565,099	\$18,250,697
FY 2028	\$15,861,727	\$3,703,020	\$19,564,747
FY 2029	\$17,127,160	\$3,846,249	\$20,973,409
FY 2030	\$18,488,506	\$3,994,988	\$22,483,494
FY 2031	\$19,952,856	\$4,149,450	\$24,102,306
FY 2032	\$21,527,819	\$4,309,853	\$25,837,672
FY 2033	\$23,221,560	\$4,476,424	\$27,697,984
FY 2034	\$25,042,838	\$4,649,401	\$29,692,239
FY 2035	\$26,462,375	\$4,829,027	\$31,291,402

ASSUMPTIONS



- \$150M to be borrowed through one issuance
- Debt Service begins in FY 2022
- Amortization Schedule through 2040
- Pension Normal Costs -\$2,948,500, increasing 3.5% annually
- “Pension Funding Deficit” and/or “Pension Funding Surplus” defined as the difference between the required pension appropriation (per current schedule) and the amount needed to fund POB debt service

COMPARISON TO EXISTING SCHEDULE – LEVEL PRINCIPAL



Existing Funding Schedule - Normal Cost + Unfunded				
	Liability	Debt Service	Normal Cost	(+/-) Existing Schedule
FY 2022	\$12,891,561	\$14,333,333	\$2,948,500	-\$4,390,272
FY 2023	\$13,819,754	\$14,000,000	\$3,062,680	-\$3,242,926
FY 2024	\$14,814,776	\$13,666,667	\$3,181,259	-\$2,033,150
FY 2025	\$15,881,440	\$13,333,333	\$3,304,404	-\$756,297
FY 2026	\$17,024,904	\$13,000,000	\$3,432,290	\$592,614
FY 2027	\$18,250,697	\$12,666,667	\$3,565,099	\$2,018,931
FY 2028	\$19,564,747	\$12,333,333	\$3,703,020	\$3,528,394
FY 2029	\$20,973,409	\$12,000,000	\$3,846,249	\$5,127,160
FY 2030	\$22,483,494	\$11,666,667	\$3,994,988	\$6,821,839
FY 2031	\$24,102,306	\$11,333,333	\$4,149,450	\$8,619,523
FY 2032	\$25,837,672	\$11,000,000	\$4,309,853	\$10,527,819
FY 2033	\$27,697,984	\$10,666,667	\$4,476,424	\$12,554,893
FY 2034	\$29,692,239	\$10,333,333	\$4,649,401	\$14,709,505
FY 2035	\$31,291,402	\$10,000,000	\$4,829,027	\$16,462,375
FY 2036	\$5,015,588	\$9,666,667	\$5,015,588	-\$9,666,667
FY 2037	\$5,191,134	\$9,333,333	\$5,191,134	-\$9,333,333
FY 2038	\$5,372,823	\$9,000,000	\$5,372,823	-\$9,000,000
FY 2039	\$5,560,872	\$8,666,667	\$5,560,872	-\$8,666,667
Total	\$315,466,802	\$207,000,000	\$74,593,061	\$33,873,741

- Creates \$4.4 “pension funding deficit” in FY 2022
- Creates “pension surplus” beginning in FY 2026, increasing to \$16.4M in FY 2035
- Savings \$33.8M over the borrowing term

COMPARISON TO EXISTING SCHEDULE – LEVEL PRINCIPAL



	Existing Funding Schedule	Debt Service	Normal Cost	(+/-) Existing Schedule
FY 2022	\$12,891,561	\$14,333,333	\$2,948,500	-\$4,390,272
FY 2023	\$13,819,754	\$14,000,000	\$3,062,680	-\$3,242,926
FY 2024	\$14,814,776	\$13,666,667	\$3,181,259	-\$2,033,150
FY 2025	\$15,881,440	\$13,333,333	\$3,304,404	-\$756,297
FY 2026	\$17,024,904	\$13,000,000	\$3,432,290	\$592,614
FY 2027	\$18,250,697	\$12,666,667	\$3,565,099	\$2,018,931
FY 2028	\$19,564,747	\$12,333,333	\$3,703,020	\$3,528,394
FY 2029	\$20,973,409	\$12,000,000	\$3,846,249	\$5,127,160
FY 2030	\$22,483,494	\$11,666,667	\$3,994,988	\$6,821,839
FY 2031	\$24,102,306	\$11,333,333	\$4,149,450	\$8,619,523
FY 2032	\$25,837,672	\$11,000,000	\$4,309,853	\$10,527,819
FY 2033	\$27,697,984	\$10,666,667	\$4,476,424	\$12,554,893
FY 2034	\$29,692,239	\$10,333,333	\$4,649,401	\$14,709,505
FY 2035	\$31,291,402	\$10,000,000	\$4,829,027	\$16,462,375
Total	\$294,326,385	\$170,333,333	\$53,452,644	\$70,540,408

- Creates \$4.4 “pension funding deficit” in FY 2022
- Creates “pension surplus” beginning in FY 2026, increasing to \$16.4M in FY 2035
- Savings \$70.5M over the term of the existing schedule

COMPARISON TO EXISTING SCHEDULE – LEVEL DEBT



	Existing Funding Schedule	Debt Service	Normal Cost	(+/-) Existing Schedule
FY 2022	\$12,891,561	\$11,848,999	\$2,948,500	-\$1,905,938
FY 2023	\$13,819,754	\$11,848,999	\$3,062,680	-\$1,091,925
FY 2024	\$14,814,776	\$11,848,999	\$3,181,259	-\$215,482
FY 2025	\$15,881,440	\$11,848,999	\$3,304,404	\$728,037
FY 2026	\$17,024,904	\$11,848,999	\$3,432,290	\$1,743,615
FY 2027	\$18,250,697	\$11,848,999	\$3,565,099	\$2,836,599
FY 2028	\$19,564,747	\$11,848,999	\$3,703,020	\$4,012,728
FY 2029	\$20,973,409	\$11,848,999	\$3,846,249	\$5,278,161
FY 2030	\$22,483,494	\$11,848,999	\$3,994,988	\$6,639,507
FY 2031	\$24,102,306	\$11,848,999	\$4,149,450	\$8,103,857
FY 2032	\$25,837,672	\$11,848,999	\$4,309,853	\$9,678,820
FY 2033	\$27,697,984	\$11,848,999	\$4,476,424	\$11,372,561
FY 2034	\$29,692,239	\$11,848,999	\$4,649,401	\$13,193,839
FY 2035	\$31,291,402	\$11,848,999	\$4,829,027	\$14,613,376
FY 2036	\$5,015,588	\$11,848,999	\$5,015,588	-\$11,848,999
FY 2037	\$5,191,134	\$11,848,999	\$5,191,134	-\$11,848,999
FY 2038	\$5,372,823	\$11,848,999	\$5,372,823	-\$11,848,999
FY 2039	\$5,560,872	\$11,848,999	\$5,560,872	-\$11,848,999
Total	\$315,466,802	\$213,281,986	\$74,593,061	\$27,591,755

- Creates \$1.9M “pension funding deficit” in FY 2022
- Creates “pension surplus” beginning in FY 2025, increasing to \$14.6M in FY 2035
- Savings \$27.5 over the borrowing term

COMPARISON TO EXISTING SCHEDULE – LEVEL DEBT



	Existing Funding Schedule	Debt Service	Normal Cost	(+/-) Existing Schedule
FY 2022	\$12,891,561	\$11,848,999	\$2,948,500	-\$1,905,938
FY 2023	\$13,819,754	\$11,848,999	\$3,062,680	-\$1,091,925
FY 2024	\$14,814,776	\$11,848,999	\$3,181,259	-\$215,482
FY 2025	\$15,881,440	\$11,848,999	\$3,304,404	\$728,037
FY 2026	\$17,024,904	\$11,848,999	\$3,432,290	\$1,743,615
FY 2027	\$18,250,697	\$11,848,999	\$3,565,099	\$2,836,599
FY 2028	\$19,564,747	\$11,848,999	\$3,703,020	\$4,012,728
FY 2029	\$20,973,409	\$11,848,999	\$3,846,249	\$5,278,161
FY 2030	\$22,483,494	\$11,848,999	\$3,994,988	\$6,639,507
FY 2031	\$24,102,306	\$11,848,999	\$4,149,450	\$8,103,857
FY 2032	\$25,837,672	\$11,848,999	\$4,309,853	\$9,678,820
FY 2033	\$27,697,984	\$11,848,999	\$4,476,424	\$11,372,561
FY 2034	\$29,692,239	\$11,848,999	\$4,649,401	\$13,193,839
FY 2035	\$31,291,402	\$11,848,999	\$4,829,027	\$14,613,376
Total	\$294,326,385	\$165,885,989	\$53,452,644	\$74,987,752

- Creates \$1.9M “pension funding deficit” in FY 2022
- Creates “pension surplus” beginning in FY 2025, increasing to \$14.6M in FY 2035
- Savings \$74.9 over the term of the existing funding schedule

WEST ELEMENTARY DEBT SCHEDULE



	West El Debt Service
FY 2022	
FY 2023	\$6,833,333
FY 2024	\$6,716,667
FY 2025	\$6,600,000
FY 2026	\$6,483,333
FY 2027	\$6,366,667
FY 2028	\$6,250,000
FY 2029	\$6,133,333
FY 2030	\$6,016,667
FY 2031	\$5,900,000
FY 2032	\$5,783,333
FY 2033	\$5,666,667
FY 2034	\$5,550,000
FY 2035	\$5,433,333

- Assumes \$100M Town Contribution
- 30 Year Borrowing Term
- Level Principal

PENSION OBLIGATION + WEST EL (LEVEL PRINCIPAL)



	Existing Pension Funding Schedule	POB Debt Service	Pension Normal Cost	Variance(+/-) from Existing Schedule	West El Debt Service	Pension Costs + West El	Levy Contribution	Net to be Raised	Tax Impact
FY 2022	\$12,891,561	\$14,333,333	\$2,948,500	-\$4,390,272					
FY 2023	\$13,819,754	\$14,000,000	\$3,062,680	-\$3,242,926	\$6,833,333	\$23,896,013	(13,819,754)	\$10,076,259	\$681
FY 2024	\$14,814,776	\$13,666,667	\$3,181,259	-\$2,033,150	\$6,716,667	\$23,564,592	(13,819,754)	\$9,744,838	\$654
FY 2025	\$15,881,440	\$13,333,333	\$3,304,404	-\$756,297	\$6,600,000	\$23,237,737	(13,819,754)	\$9,417,983	\$633
FY 2026	\$17,024,904	\$13,000,000	\$3,432,290	\$592,614	\$6,483,333	\$22,915,623	(13,819,754)	\$9,095,869	\$613
FY 2027	\$18,250,697	\$12,666,667	\$3,565,099	\$2,018,931	\$6,366,667	\$22,598,432	(13,819,754)	\$8,778,678	\$592
FY 2028	\$19,564,747	\$12,333,333	\$3,703,020	\$3,528,394	\$6,250,000	\$22,286,353	(13,819,754)	\$8,466,599	\$572
FY 2029	\$20,973,409	\$12,000,000	\$3,846,249	\$5,127,160	\$6,133,333	\$21,979,582	(13,819,754)	\$8,159,828	\$552
FY 2030	\$22,483,494	\$11,666,667	\$3,994,988	\$6,821,839	\$6,016,667	\$21,678,321	(13,819,754)	\$7,858,567	\$531
FY 2031	\$24,102,306	\$11,333,333	\$4,149,450	\$8,619,523	\$5,900,000	\$21,382,783	(13,819,754)	\$7,563,029	\$511
FY 2032	\$25,837,672	\$11,000,000	\$4,309,853	\$10,527,819	\$5,783,333	\$21,093,186	(13,819,754)	\$7,273,432	\$490
FY 2033	\$27,697,984	\$10,666,667	\$4,476,424	\$12,554,893	\$5,666,667	\$20,809,757	(13,819,754)	\$6,990,003	\$470
FY 2034	\$29,692,239	\$10,333,333	\$4,649,401	\$14,709,505	\$5,550,000	\$20,532,734	(13,819,754)	\$6,712,980	\$450
FY 2035	\$31,291,402	\$10,000,000	\$4,829,027	\$16,462,375	\$5,433,333	\$20,262,360	(13,819,754)	\$6,442,606	\$436
	\$294,326,385	\$170,333,333	\$53,452,644	\$70,540,408	\$79,733,333	\$286,237,477	-\$179,656,802	\$106,580,675	\$7,185

- POB: \$150M, Level Principal
- West El: \$100M, Level Principal
- \$13.8M General Fund Contribution

PENSION OBLIGATION + WEST EL (LEVEL DEBT)



	Existing Pension Funding Schedule	POB Debt Service	Pension Normal Cost	Variance(+/-) from Existing Schedule	West El Debt Service	Pension Costs + West El	Levy Contribution	Net to be Raised	Tax Impact
FY 2022	\$12,891,561	\$11,848,999	\$2,948,500	-\$1,905,938					
FY 2023	\$13,819,754	\$11,848,999	\$3,062,680	-\$1,091,925	\$6,833,333	\$21,745,013	(13,819,754)	\$7,925,259	\$531
FY 2024	\$14,814,776	\$11,848,999	\$3,181,259	-\$215,482	\$6,716,667	\$21,746,925	(13,819,754)	\$7,927,171	\$527
FY 2025	\$15,881,440	\$11,848,999	\$3,304,404	\$728,037	\$6,600,000	\$21,753,403	(13,819,754)	\$7,933,649	\$524
FY 2026	\$17,024,904	\$11,848,999	\$3,432,290	\$1,743,615	\$6,483,333	\$21,764,623	(13,819,754)	\$7,944,869	\$521
FY 2027	\$18,250,697	\$11,848,999	\$3,565,099	\$2,836,599	\$6,366,667	\$21,780,765	(13,819,754)	\$7,961,011	\$517
FY 2028	\$19,564,747	\$11,848,999	\$3,703,020	\$4,012,728	\$6,250,000	\$21,802,019	(13,819,754)	\$7,982,265	\$516
FY 2029	\$20,973,409	\$11,848,999	\$3,846,249	\$5,278,161	\$6,133,333	\$21,828,582	(13,819,754)	\$8,008,828	\$514
FY 2030	\$22,483,494	\$11,848,999	\$3,994,988	\$6,639,507	\$6,016,667	\$21,860,654	(13,819,754)	\$8,040,900	\$512
FY 2031	\$24,102,306	\$11,848,999	\$4,149,450	\$8,103,857	\$5,900,000	\$21,898,449	(13,819,754)	\$8,078,695	\$510
FY 2032	\$25,837,672	\$11,848,999	\$4,309,853	\$9,678,820	\$5,783,333	\$21,942,186	(13,819,754)	\$8,122,432	\$509
FY 2033	\$27,697,984	\$11,848,999	\$4,476,424	\$11,372,561	\$5,666,667	\$21,992,090	(13,819,754)	\$8,172,336	\$508
FY 2034	\$29,692,239	\$11,848,999	\$4,649,401	\$13,193,839	\$5,550,000	\$22,048,400	(13,819,754)	\$8,228,646	\$506
FY 2035	\$31,291,402	\$11,848,999	\$4,829,027	\$14,613,376	\$5,433,333	\$22,111,360	(13,819,754)	\$8,291,606	\$504
	\$294,326,385	\$165,885,989	\$53,452,644	\$74,987,752	\$79,733,333	\$284,274,467	-\$179,656,802	\$104,617,665	\$6,699

- POB: \$150M, Level Debt
- West El: \$100M, Level Principal
- \$13.8M General Fund Contribution

TAX IMPACTS



	A	B	C	D
	Tax Impact Existing Schedule	Tax Impact POB + West El (LD)	Tax Impact POB + West El (LD)	Tax Impact Existing Schedule + West El
	\$61	\$681	\$531	\$524
	\$68	\$654	\$527	\$518
	\$136	\$633	\$524	\$578
	\$218	\$613	\$521	\$654
	\$300	\$592	\$517	\$729
	\$388	\$572	\$516	\$810
	\$484	\$552	\$514	\$899
	\$586	\$531	\$512	\$995
	\$695	\$511	\$510	\$1,090
	\$811	\$490	\$509	\$1,199
	\$933	\$470	\$508	\$1,314
	\$1,069	\$450	\$506	\$1,444
	\$1,178	\$436	\$504	\$1,546
13 Year Total (2035)	\$6,927	\$7,185	\$6,699	\$12,300

- **Scenario A:** Impact based on difference between required pension appropriation & FY 2023 appropriation (\$13.8M) to be raised outside the levy Represents the funding requirements of current pension schedule
- **Scenario B:** Impact based on debt service (Level Principal) for POBs & West El building project, less FY 2023 required pension appropriation, to be raised outside the levy
- **Scenario C:** Impact based on debt service (Level Debt) for POBs & West El building project, less FY 2023 required pension appropriation, to be raised outside the levy
- **Scenario D:** Impact based on debt service for West El building project and required appropriation for existing pension schedule, to be funded outside the levy

NEXT STEPS + CONSIDERATIONS



NEXT STEPS

- Town Meeting Approve Home Rule Petition (April 2020)
- Legislature Approve Home Rule Petition (Fall 2020)
- Approval of Secretary of Administration & Finance (Fall 2020)
- Town Meeting Approve Borrowing Authorization (April/May 2021)
- Proceed with debt issuance (May 2021)
- FY 2022/FY 2023 Annual Budget

CONSIDERATIONS

- Role of Retirement Board
- Offsetting Pension Funding Deficit in early years
- Integration of Reform