

# BOARD OF FINANCE MEETING

February 17, 2021

# AGENDA

Pension Options

Plan Performance

Pension Obligation Bond

General Fund / Debt Service

Pension Scenarios & DIY Kit

# PENSION OPTIONS

## Stay the Course:

- Continue to fully fund ADC annually
- Achieve 100% Funded in 13-years
- Hold ROR at 6.5% in FY21/22

## Pension Obligation Bond:

- Issue a taxable bond 2.5% - 2.75%
- 80% Funded Ratio requires \$27M at 6.5% ROR
- Subject to voter approval at referendum

## Reduce ROR:

- 6.5%, ADC of \$10.038M± (Town \$7.246M±)
- 6.375%, ADC of \$10.479M± (Town \$7.564M±)
- 6.25%, ADC of \$10.921M ± (Town \$7.883M±)
- Plan Performance:
  - Since Inception (1/1/03)... 7.3%
  - Past 10 Years... 8.1%

## Reallocate Funds from Capital Transfer:

- Multiple scenarios exist
- Issue debt to fund projects; reallocate transfer to fund Pension (lump sum / ROR)
- Outer year consideration of debt service and need to possibly reestablish Capital Transfer
- Subject to voter approval at referendum

# PLAN PERFORMANCE

AS OF DECEMBER 31, 2020

## Trailing Performance Summary

	QTR	Jul-2020 To Dec-2020	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Plan	11.7	17.4	16.8	9.2	10.1	7.4	8.1	7.3	01/01/2003
Blended Benchmark	9.1	14.8	13.7	8.6	9.6	7.2	7.5	7.6	
Difference	2.6	2.6	3.1	0.6	0.5	0.2	0.6	-0.3	

## Calendar Year Performance Summary

	2019	2018	2017	2016	2015	2014	2013	2012
Total Plan	18.8	-6.1	15.9	7.1	-1.8	3.7	15.1	15.4
Blended Benchmark	18.8	-5.3	14.9	7.4	-1.5	4.5	13.8	11.0
Difference	0.0	-0.8	1.0	-0.3	-0.3	-0.8	1.3	4.4

1/31/2021	Asset Allocation													Forecasts				Past (1/88-1/21)			
	Fixed Income	Equity	Real Assets	Alternatives	Cash	TIPS	US Bond	Global Bonds	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Real Estate	Broad Real Assets	Private Equity	Annualized Return	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Return	Annualized Volatility
Current Mix (A)	33%	61%	7%		0.8%	1.7%	25.9%	4.4%	29.4%	13.8%	12.0%	5.4%	4.8%	2.0%		6.0%	11.9%	-21%	-30%	9.0%	10.1%
Mix 1	45%	47%	8%			3.1%	36.0%	6.1%	19.4%	6.5%	14.5%	6.4%	4.9%	3.2%		5.5%	10.3%	-18%	-26%	8.3%	8.2%
Mix 2	31%	60%	9%			2.1%	24.8%	4.2%	24.9%	8.3%	18.7%	8.2%	5.4%	3.6%		6.2%	12.4%	-22%	-31%	8.7%	10.2%
Mix 3	26%	65%	9%			1.8%	20.8%	3.5%	26.8%	8.9%	20.1%	8.8%	5.6%	3.7%		6.5%	13.1%	-23%	-32%	8.9%	10.9%
Observation Mix (A)	43%	40%	7%	10%			37.3%	5.4%	16.7%	5.6%	12.5%	5.5%	4.3%	2.9%	10.0%	6.0%	10.0%	-17%	-23%	8.9%	7.4%
Observation Mix (B)	33%	49%	8%	10%			29.2%	4.2%	20.2%	6.7%	15.2%	6.6%	4.6%	3.1%	10.0%	6.5%	11.3%	-19%	-27%	9.2%	8.6%

- Forecasts exclude incremental return of active management

# PENSION OBLIGATION

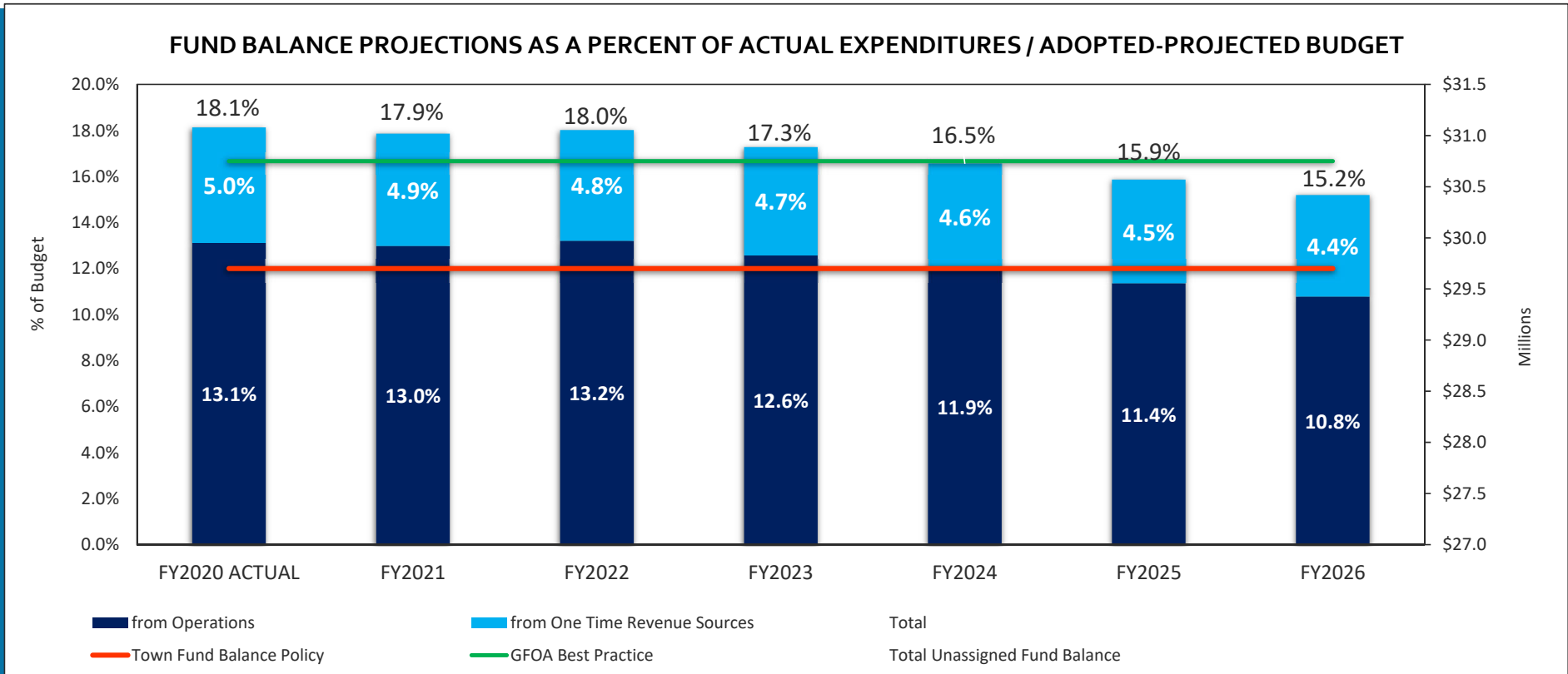
TAXABLE BOND 2.5% - 2.75%

July 1, 2020	ROR of 6.5%
Total Pension Liability	\$237,172,324
Assets	\$162,766,959
Net Liability	\$74,405,365
Funded Ratio	68.6%
1%-Pt Inc. to Funded Ratio	\$2.37M

Lump Sum to Inc. Funded Ratio to:			
ROR:	6.5%	6.375%	6.25%
70%	\$3.25	\$5.65	\$8.11
75%	\$15.11	\$17.68	\$20.31
80%	\$26.97	\$29.71	\$32.52
85%	\$38.83	\$41.74	\$44.73
90%	\$50.69	\$53.77	\$56.93
95%	\$62.55	\$65.80	\$69.14
100%	\$74.41	\$77.83	\$81.34

# GENERAL FUND - FUND BALANCE\*

Unassigned Fund Balance = \$30M  
 Town Policy of 12% = \$21M  
 GFOA Best Practice: 16.7% = \$29M

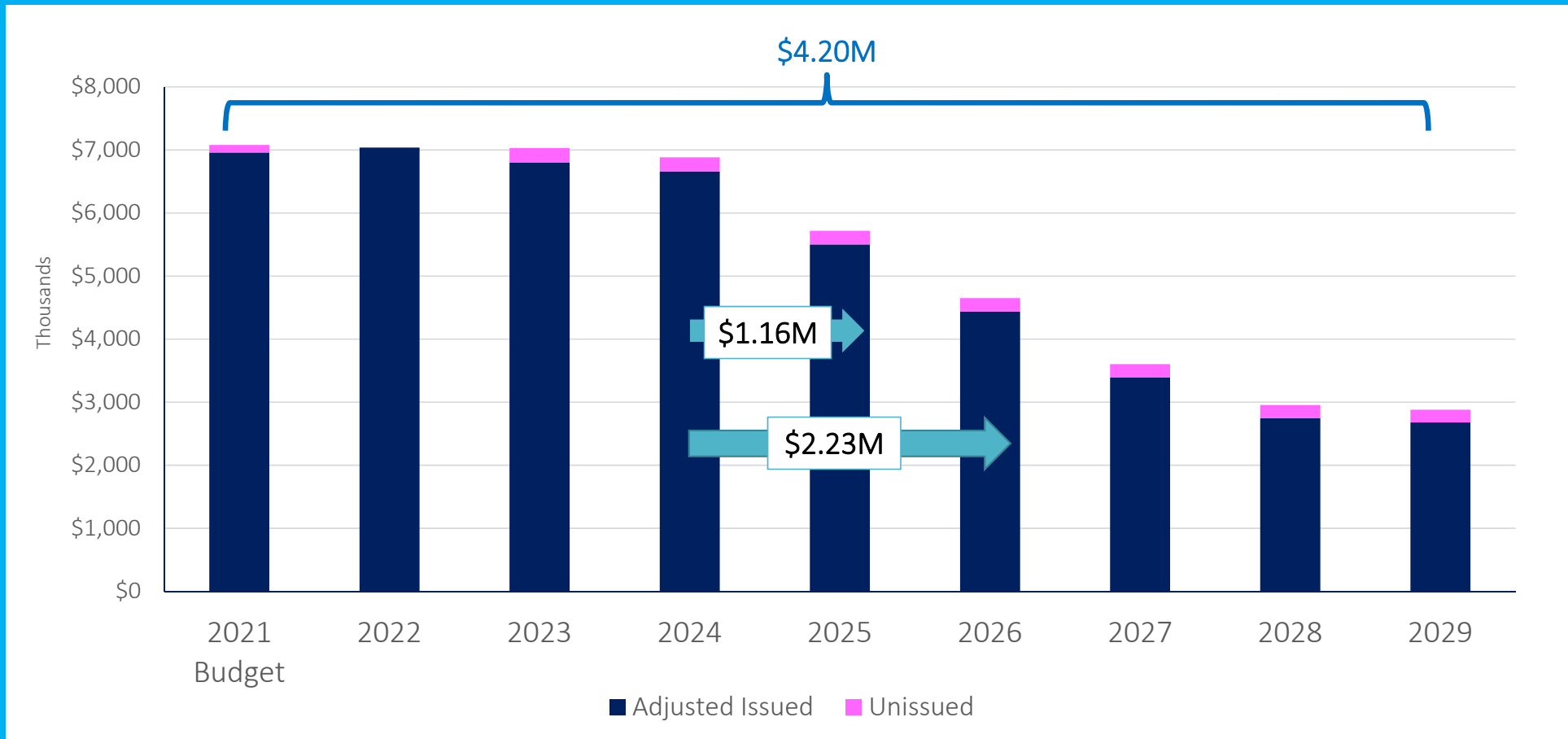


\*Assumes General Fund Transfer In Remains at \$975K / year.

# Debt Service Projected

Annual Principal & Interest

- Excludes WWTP / CWF
- July 2020 – Library & Land Acquisitions \$10.4M
- Includes \$3M land



# FUNDING / BORROWING – Reallocate Savings

Borrow \$12.5M (20-Yr Bond)  
 Capital Reserve @\$4M/Yr  
 Net Savings Reallocated to Pension

	Years 1-5	Years 6-20
Capital projects @ \$6M/year	\$30M	\$90M
Funding Resources		
Capital Reserve @ \$4M/year	\$20M	\$60M
Bond Issue – Year 1	\$12.5M	-
<b>Total</b>	<b>\$32.5M</b>	<b>(\$30M)</b>
Cost @ \$4M/year	\$20M	
Debt Service @ 2%	\$4.25M	
<b>Total</b>	<b>\$24.25M</b>	
Capital Transfer @ \$5.75M	\$28.75M	
<i>One-time reallocation of \$900K± in Year 1</i>		

- • \$2M annual shortfall for capital projects years 6-20
- • \$600-\$800K / year of Debt Service
- Cost escalation



# FUNDING / BORROWING – Reallocate Savings

Borrow \$5.0M (20-Yr Bond)  
 Capital Reserve @\$4.75M/Yr  
 Net Savings Reallocated to Pension

	Years 1-5	Years 6-20
Capital projects @ \$6M/year	\$30M	\$90M
Funding Resources		
Capital Reserve @ \$4.75M/year	\$23.75M	\$86.3M
Bond Issue – Year 1	\$5M	-
<b>Total</b>	<b>\$28.75M</b>	<b>(\$3.7M)</b>
Cost @ \$4.75M/year	\$23.75M	
Debt Service @ 2%	\$1.7M	
Total	\$25.45M	
Capital Transfer @ \$5.75M	\$28.75M	
One-time reallocation of \$650K± in Year 1		

• \$5.75M in Years 6-20

- \$350-\$255k / year of Debt Service
- Cost escalation

# FUNDING / BORROWING – Lump Sum to Pension

Borrow \$11.5M (10-Yr Bond)  
Annual Transfer of \$5.75M, net of debt service, Lump Sum to Pension

	Year 1	Year 2	Year 3
Borrow (10-year bond @ 1.75%)	\$11.5M*	-	-
"Capital" Transfer	\$5.75M	\$5.75M	\$5.75M
<i>To Fund Capital Projects</i>	_*	_*	\$5.75M
<i>To Fund Debt Service</i>	\$1.35M	\$1.33M	\$1.31M
<i>Transfer Lump Sum to Pension</i>	\$4.40M	\$4.42M	-
Funded Ratio w/ Lump Sums (from 68.6%)	70.5%	72.3%	-
Reduction in ADC (\$1M Lump Sum = \$100k±)	\$440K	\$442K	-
Budgetary Effect	(\$440K)	(\$442K)	+\$1.31M
Tax Effect (ATM FY21-22 of <span style="border: 1px solid black; border-radius: 10px; padding: 2px;">37.55 / 1.76%</span> )	37.45 / 1.5%	37.35 / 1.2%	<span style="border: 1px solid black; border-radius: 10px; padding: 2px;">37.65 / 2.0%</span>

- \$5.75M in all years
- \$1.35M - \$1.15M / year of Debt Service
- Cost escalation
- Will cost tax payers 1/10 of a mill or +0.24% tax increase.

# FUNDING / BORROWING – Lump Sum to Pension

Borrow \$11.5M (20-Yr Bond)  
Annual Transfer of \$5.75M, net of debt service, Lump Sum to Pension

	Year 1	Year 2	Year 3
Borrow - 20-year bond @ 1.75%	\$11.5M*	-	-
“Capital” Transfer	\$5.75M	\$5.75M	\$5.75M
To Fund Capital Projects	-*	-*	\$5.75M
To Fund Debt Service	\$776K	\$766K	\$756K
Transfer Lump Sum to Pension	\$4.974M	\$4.984M	-
Funded Ratio w/ Lump Sums (from 68.6%)	70.7%	72.8%	-
Reduction in ADC (\$1M Lump Sum = \$100k±)	\$497K	\$498K	-
Budgetary Effect	(\$497K)	(\$498K)	+\$756K
Tax Effect (ATM FY21-22 of 37.55 / 1.76%)	37.44 / 1.5%	37.32 / 1.1%	37.50 / 1.6%

- \$5.75M in all years
- \$776k – 585k / year of Debt Service
- Cost escalation

# FUNDING / BORROWING – DIY KIT

## Other Considerations:

- Referendum Outcome
- Timing of Referendum
- Pension ADC to be paid in July 2021

## Historical CIP:

- \$6M of Capital Projects /Year
- Capital Transfer of \$5.75M to Fund (cash basis)

## Cost to Borrow:

- Current market: 20-Yr Bond at 1.5% to 2.0%
  - Principal spread equally over life of Bond
  - Interest calculated on remaining principal owed
- Cost to issue debt - \$60K

## Pension ADC / Funded Ratio:

- Reducing 1/8 %-Pt of ADC costs \$440K± (72% to Town)
- Every \$1M Lump Sum to Pension reduces ADC by \$100K±
- Every 1%-Pt Inc. to Funded Ratio costs \$2.37M
- Current ROR of 6.5%

## Impact on Budget / Mill Rate:

- Expenditure reductions should be compared to prior year budget (i.e. not considered cumulatively)
- Value of a mill ~ \$4.3M
- Each expenditure reduction of \$1M equates to a mill rate reduction of 0.23 (\$100K ~ 0.02).
- Current FY2021 Mill Rate: 36.90  
Annual Town Meeting Prop. FY2022 Mill Rate: 37.55

# DISCUSSION

SLIDES FROM BOF MEETING ON  
**FEB 8, 2021**

# AGENDA

Supplemental Appropriations

Pension

General Fund

Illustrative Scenarios

- Bond Issue and Capital Reserve
- Use of Fund Balance
- Pension Obligation Bond

# SUPPLEMENTAL TRANSFER & APPROPRIATION

## MARCH 2020 – FEBRUARY 2021

Fund	Amount	Project
Capital Reserve Fund	\$50,000	Uranium – Public Water Service
General Fund	\$150,000	Public Access Television – 100% Grant
General Fund	\$100,000	Sale of Fill to Establish Bulky Waste Closure Fund
General Fund	\$150,000	Police Body Cameras – Police Accountability – 50% Grant
Capital Reserve Fund	\$225,000	Cotton Hollow Mill
General Fund	\$150,000	Repairs & Updates to 2157 Main Street
General Fund	\$400,000	SCBA to Take Advantage of \$80,000 Purchasing Economy
General Fund	\$53,000	Cost for November Election - \$37,000 Grant Offset
<b>Total</b>	<b>\$1,278,000</b>	
<b>Net of Grants</b>	<b>\$1,016,000</b>	

Does not include \$80,000 cost avoidance for SCBA. \$400K to be reimbursed through capital program.



# PENSION HISTORY

Valuation Year	Funded Ratio	% of ADC	Investment ROR
2020	68.6%	100%	6.5%
2019	67.3	100%	6.5%
2018	71.6	100%	6.5%
2017	70.5	100%	6.625%
2016	70.9	100%	6.875%
2015	72.2	100%	7.00%
2014	70.6	100%	7.125%
2013	66.9	100%	7.25%
2012	66.6	100%	7.50%
2011	76.5	100%	7.50%
2010	78.1	79%	7.75%
2009	73.1	100%	7.75%
2008	92.5	100%	8.00%
2007	94.5	100%	8.25%
2006	94.6	100%	8.75%

# PENSION ADC – ROR ASSUMPTION

	6.500%	6.375%	6.250%
FY 2020-2021 Budget	\$9.358M	-	-
FY 2021-2022 Budget	\$10.0M	\$10.5M	\$10.9M
FY 2023	10.5	11.0	11.5
FY 2024	11.1	11.6	12.0
FY 2025	11.6	12.1	12.6
<b>Year-Over-Year Change</b>			
FY 2022	\$680K	\$1,121K	\$1,563K
FY 2023	502	524	546
FY 2024	527	550	573
FY 2025	553	578	602

Each 1/8%  
ROR  
reduction =  
\$440K

# PENSION LUMP SUM CONTRIBUTION

## ROR AND FUNDED RATIO

Each 1% on funded ratio totals \$2.37M

	6.50%	6.375%	6.25%
Additional contribution needed to offset impact of interest rate reduction on ADC	-	\$4,238,172	\$8,616,367
Accrued Liability	\$237,172,324	\$240,601,389	\$244,108,802
Actuarial Value of Assets	\$162,766,959	\$167,005,131	\$171,383,326
Funded Ratio	68.6%	69.4%	70.2%
ADC	\$10,037,785	\$10,037,785	\$10,037,785

# PENSION OBLIGATION

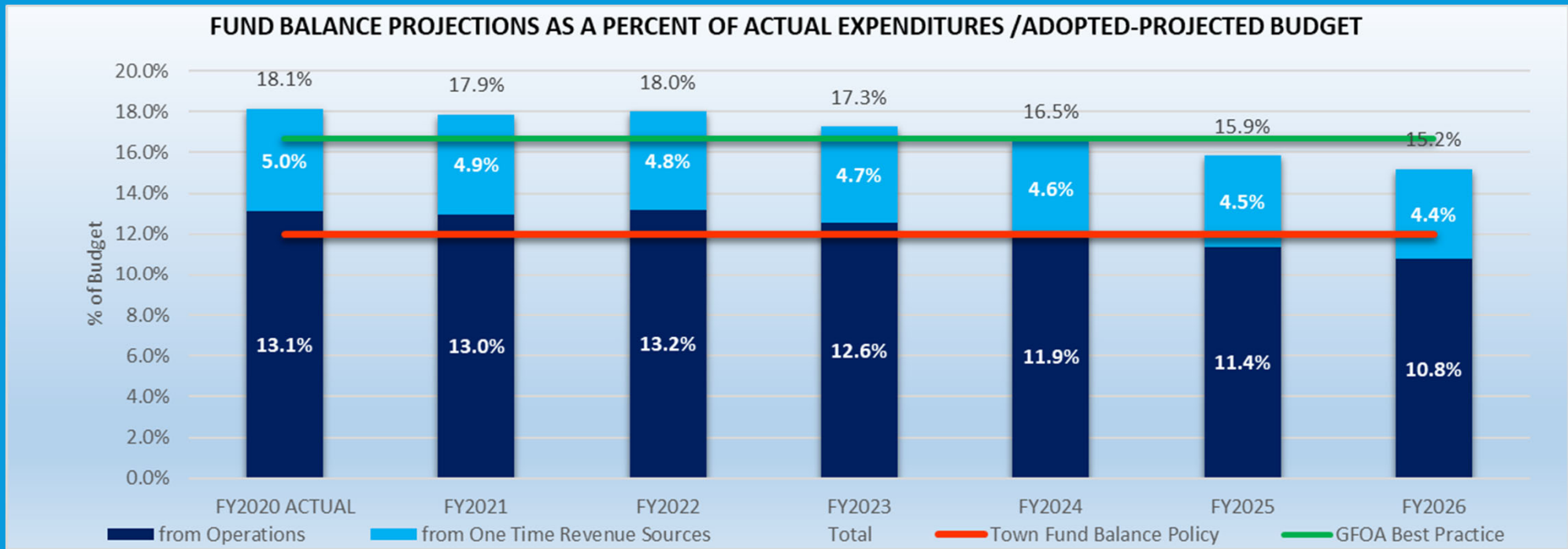
TAXABLE BOND 2.5% - 2.75%

July 1, 2020	
Total Pension Liability	\$237,172,324
Assets	\$162,766,959
Net Liability	\$74,405,365
Funded Ratio	68.6%
1%-Pt Inc. to Funded Ratio	\$2.37M

Additional Contribution to Increase Funded Ratio to:	
70%	\$3.25M
75%	\$15.11M
80%	\$26.97M
85%	\$38.83M
90%	\$50.69M
95%	\$62.55M
100%	\$74.41M

# GENERAL FUND - FUND BALANCE\*

Unassigned Fund Balance = \$30M  
 Town Policy of 12% = \$21M  
 GFOA Best Practice: 16.7% = \$29M



\*Assumes General Fund Transfer In Remains at \$975K / year.

# CAPITAL BOND ISSUE

## Scenario A

Gideon Welles (GW) Roof	\$2.0M
Naubuc Boiler	\$850,000
GW Boiler	\$950,000
School RTUs	\$1.7M
School Lockers	\$460,000
GHS Lockers/Restrooms	\$2.5M
	\$8.46M
Allocation - Design, CA	\$250,000
	\$8.710M
Escalation at 5%	\$435,000
<b>Total (rounded)</b>	<b>\$10M±</b>

## Scenario B

Fire Apparatus	\$1.4M
Fire Apparatus	\$550,000
New Sidewalks	\$1.2M
Grange Pool	\$1.5M
Gideon Welles (GW) Roof	\$2.0M
Naubuc Boiler	\$850,000
GW Boiler	\$950,000
School RTUs	\$1.7M
Intersection	\$1.0M
Subtotal	\$11.15M
Allocation - Design, CA	\$350,000
	\$11.5M
Escalation at 5%	\$575,000
<b>Total (rounded)</b>	<b>\$12.5M±</b>

# FUNDING / BORROWING – Reallocate Savings

	Years 1-5	Years 6-20
Capital projects @ \$6M/year	\$30M	\$90M
Funding Resources		
Capital Reserve @ \$4M/year	\$20M	\$60M
Bond Issue – Year 1	\$12.5M	-
<b>Total</b>	<b>\$32.5M</b>	<b>(\$30M)</b>
Cost @ \$4M/year	\$20M	
Debt Service @ 2%	\$4.25M	
<b>Total</b>	<b>\$24.25M</b>	
Capital Transfer @ \$5.75M	\$28.75M	
<i>One-time reallocation of \$900K± in Year 1</i>		

- \$2M annual shortfall for capital projects years 6-20
- \$600-\$800K / year of Debt Service
- Cost escalation

# FUNDING / BORROWING – Lump Sum to Pension

	Years 1-5	Years 6-20
Capital projects @ \$6M/year	\$30M	\$90M
Funding Resources		
Capital Reserve @ \$3.5M/year	\$17.5M	\$86.25M
Bond Issue: \$2.5M/year	\$12.5M	-
<b>Total</b>	<b>\$30M</b>	<b>(\$3.75M)</b>
Cost @ \$3.5M/year	\$17.5M	
Debt Service @ 2%	\$2.575M	
<b>Total</b>	<b>\$20.075M</b>	
Total Transfer @ \$5.75M	\$28.75M	
Estimated funding to <b>re-program</b> years 1-5 of \$2.075M - \$1.4M		
Estimated issuance costs (Years 2-5)	\$250K	

Assumes 2% borrowing rate available for 5 years

- \$250K annual shortfall for capital projects years 6-20
- \$600-\$800K / year of Debt Service
- Cost escalation



(\$ in millions)	2020/2021 Budget	2021/2022 Proposed	Variance	
Wages	\$ 22.1	\$ 22.5	\$ 0.4	0.8 Pts
Insurance	\$ 6.6	\$ 6.1	\$(0.5)	-1.1 Pts
Pension	\$ 6.3	\$ 7.0	\$ 0.7	1.5 Pts
Data Processing	\$ 0.7	\$ 0.8	\$ 0.1	0.3 Pts
Utilities & Fuel	\$ 1.0	\$ 1.1	\$ 0.0	0.1 Pts
Capital Outlay	\$ 1.7	\$ 1.7	\$(0.1)	-0.1 Pts
Contractual Services	\$ 1.2	\$ 1.2	\$(0.0)	0 Pts
All Others	\$ 5.3	\$ 5.4	\$ 0.1	0.3 Pts
<b>Town Op. BUD</b>	<b>\$ 45.0</b>	<b>\$ 45.8</b>	<b>\$ 0.8</b>	<b>1.70%</b>

**Financial Projections**  
**For Discussion Purposes Only**  
**Results Will Vary Based on Assumptions Selected**

**Assumes a 2% year-over-year increase in Operating Expenditures.**

Financial Projections								Assumption
ADOPTED FY20/21	PROPOSED FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27		

**REVENUE**

	ADOPTED FY20/21	PROPOSED FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	Assumption
Total Grand List <sup>(A)</sup>	\$ 4,279,213,990	\$ 4,315,682,110	\$ 4,354,523,249	\$ 4,572,249,411	\$ 4,613,399,656	\$ 4,654,920,253	\$ 4,696,814,535	GL Growth, Non-Reval Yrs 0.90%
Mill Rate	36.90	37.55	37.55	37.55	37.55	37.55	37.55	
Tax Revenue	155,633,075	159,585,674	161,031,032	169,133,069	170,664,354	172,209,421	173,768,393	99.10% Collection Rate
Non-Tax Revenue (Ex. Use of Fund Balance)	13,823,074	12,841,669	12,841,669	12,841,669	12,841,669	12,841,669	12,841,669	
Use of Fund Balance	975,000	975,000	875,000	775,000	675,000	975,000	975,000	
Reduction in State Aid	-	-	(262,952)	(262,946)	(262,946)	(262,946)	(262,946)	ECS: FY22 \$5.1m; FY27 \$3.8m
Other Increasing Revenues	-	-	100,000	100,000	100,000	100,000	100,000	
<b>Total Revenues</b>	<b>\$ 170,431,149</b>	<b>\$ 173,402,343</b>	<b>\$ 174,584,749</b>	<b>\$ 182,586,792</b>	<b>\$ 184,018,077</b>	<b>\$ 185,863,144</b>	<b>\$ 187,422,116</b>	

(A) The above analysis assumes 0.93% Grand List growth in FY'22, 5% Grand List growth from revaluation in FY'24, and 0.9% Grand List growth in all other years.

**OPERATING EXPENDITURES**

Town	\$ 44,995,304	\$ 45,761,196	\$ 46,676,420	\$ 47,821,894	\$ 48,778,332	\$ 49,753,899	\$ 50,748,977	2.00%
Education	111,754,046	114,067,405	116,348,753	118,754,119	121,129,202	123,551,786	126,022,821	
OPEB & Dog Fund	855,000	787,000	802,740	818,795	835,171	851,874	868,912	
Reduction in Pension Rate of Return Assumption <sup>(B)</sup>	-	-	284,644	-	-	-	-	
<b>Total Operating Expenditures</b>	<b>\$ 157,604,350</b>	<b>\$ 160,615,601</b>	<b>\$ 164,112,557</b>	<b>\$ 167,394,808</b>	<b>\$ 170,742,704</b>	<b>\$ 174,157,558</b>	<b>\$ 177,640,710</b>	

(B) The above analysis assumes Pension Investment Assumption of: 6.5% in FY22 plus \$150k over funding of ADC and 6.375% in FY23.

**FINANCIAL REVIEW**

Debt & Transfers							
Debt Service Costs	\$ 6,772,818	\$ 6,796,742	\$ 6,788,363	\$ 6,642,492	\$ 5,478,995	\$ 4,411,094	\$ 3,363,325
Temporary Interest	303,981	240,000	240,000	240,000	240,000	240,000	240,000
Total Debt Service	7,076,799	7,036,742	7,028,363	6,882,492	5,718,995	4,651,094	3,603,325
Transfer to Capital Reserve	5,750,000	5,750,000	5,750,000	5,750,000	5,750,000	5,750,000	5,750,000
Total Debt & Transfers (Ex. Dog Fund & OPEB)	12,826,799	12,786,742	12,778,363	12,632,492	11,468,995	10,401,094	9,353,325
<b>Total Operating Expenses, Debt &amp; Transfers</b>	<b>\$ 170,431,149</b>	<b>\$ 173,402,343</b>	<b>\$ 176,890,920</b>	<b>\$ 180,027,300</b>	<b>\$ 182,211,699</b>	<b>\$ 184,558,652</b>	<b>\$ 186,994,035</b>
<b>Revenue Shortfall</b>	<b>\$ (0)</b>	<b>\$ 2,306,171</b>	<b>\$ (2,559,492)</b>	<b>\$ (1,806,378)</b>	<b>\$ (1,304,491)</b>	<b>\$ (428,081)</b>	
Adjusted Mill Rate	36.90	37.55	38.09	36.99	37.16	37.27	37.46
Mill Rate Increase (Rounding May Impact Hundredths Place)		1.76%	1.44%	-2.89%	0.46%	0.30%	0.51%

# ILLUSTRATIVE DEBT SERVICE SCENARIOS

(Assumes 20-Year Bond at Various Interest Rates)

Year/ Bond	\$5M		\$10M		\$15M		\$20M	
	2.00%	2.50%	2.00%	2.50%	2.00%	2.50%	2.00%	2.50%
<b>1</b>	\$ 350,000	\$ 375,000	\$ 700,000	\$ 750,000	\$ 1,050,000	\$ 1,125,000	\$ 1,400,000	\$ 1,500,000
<b>2</b>	\$ 345,000	\$ 368,750	\$ 690,000	\$ 737,500	\$ 1,035,000	\$ 1,106,250	\$ 1,380,000	\$ 1,475,000
<b>3</b>	\$ 340,000	\$ 362,500	\$ 680,000	\$ 725,000	\$ 1,020,000	\$ 1,087,500	\$ 1,360,000	\$ 1,450,000
<b>4</b>	\$ 335,000	\$ 356,250	\$ 670,000	\$ 712,500	\$ 1,005,000	\$ 1,068,750	\$ 1,340,000	\$ 1,425,000
<b>5</b>	\$ 330,000	\$ 350,000	\$ 660,000	\$ 700,000	\$ 990,000	\$ 1,050,000	\$ 1,320,000	\$ 1,400,000