Financing Andover’s Major Obligations

Integrated Financing Plan

West Elementary & Shawsheen Preschool & Unfunded Pension Liability

The Challenges – Major Obligations

- **Pension Liability - $165-185M**
  - Required by Massachusetts General Law (MGL) to be funded by 2040
  - Benefit structure defined by Massachusetts General Law (MGL)
  - Presents greatest threat to service levels and bond rating

- **West Elementary School & Shawsheen Preschool - $114M (Total Cost - $148M)**
  - Project accepted by Massachusetts School Building Authority (MSBA)
  - MSBA Reimbursement – Approx. 23% (40% of max. $333 per sq. ft)
  - Project would replace two existing school buildings and alleviate overcrowding at the other elementary schools

Important Terms

- **Proposition 2 ½** - A property tax limitation that only allows cities and towns in Massachusetts to increase the total tax levy (amount of all taxes that may be collected) by 2.5%
- **Debt Exclusion –** Allows any city or town to raise funds from taxation by more than 2.5%, but only by an amount needed to fund the **exempt debt service** which is required to fund both school building construction and pension obligation bonds
- **Pension Obligation Bonds (POBs) –** Bonds that will allow the Town to fully fund its unfunded pension liability and provide an option for fixed payments (rather than escalating pension appropriations) over a defined period
- **General Fund or Exempt Capacity:** An amount that could fund another expense or major project without an incremental tax increase
- **WESP:** Acronym for the West Elementary and Shawsheen School building project

Why Consider an Integrated Plan?

1) Leverage opportunity created by low interest rates to reduce pensions costs by approximately the same amount needed to construct two new schools
    a) Andover’s AAA bond rating allows favorable interest rates on loans
    b) Current interest rate is approximately 1.43% to 1.84% (as of 1/26/21) and plan models 3.5% rate in order to be conservative. Specific loan rate can be locked in only after voters approve plan

2) Preserve service levels by alleviating budget pressures created by increasing pensions costs
    a) Town has significant, existing pension debt that we are obligated to pay by 2040
    b) Payment of this existing obligation becomes increasingly difficult to maintain without cutting town and school services or passing operating overrides (prop 2 ½)

The Plan

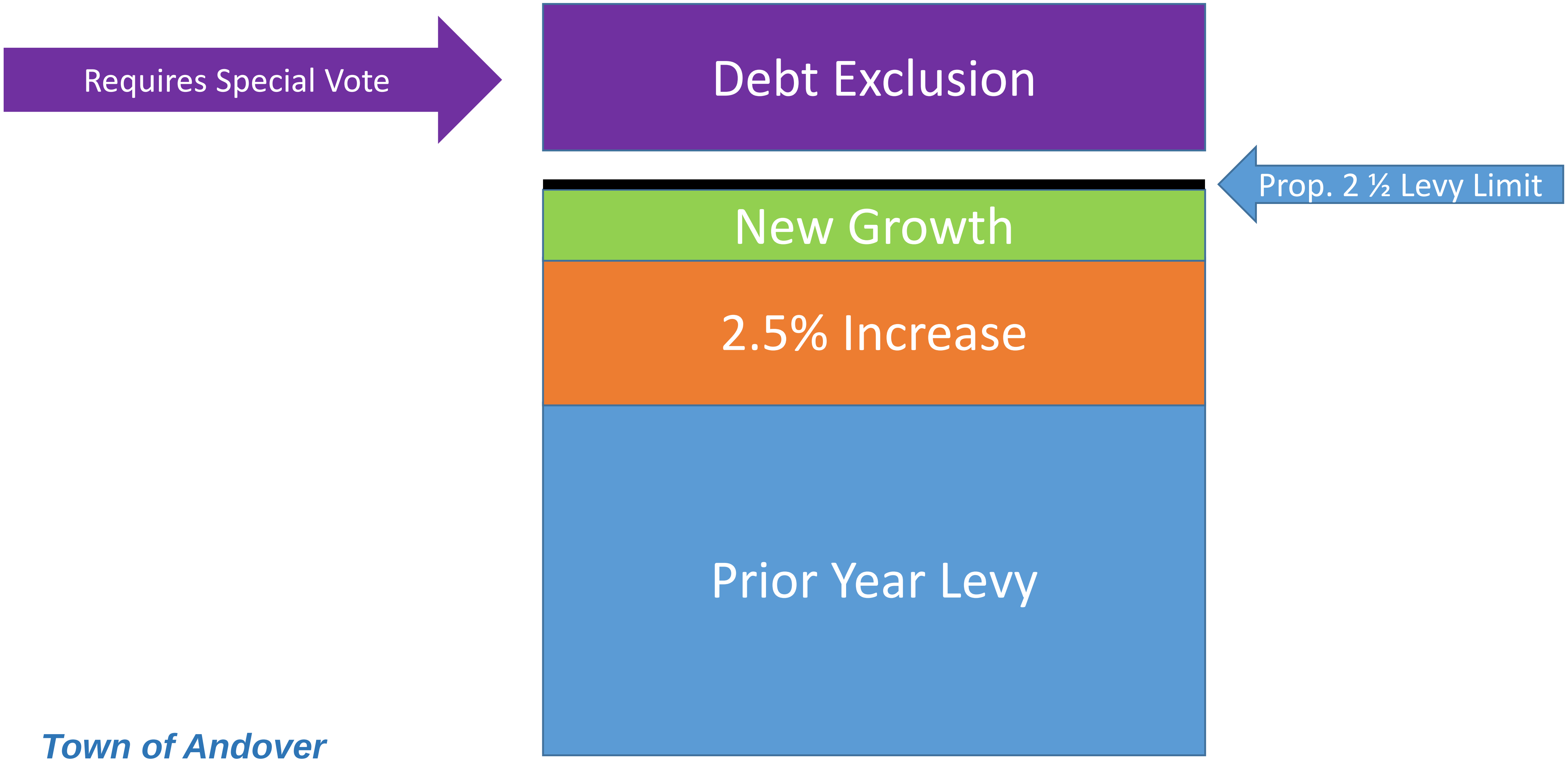
1) Raise revenue for two major expenditures through proposed Debt Exclusions:
   a) \$175M to fund Pension Obligation Bond (POB), 18 Year Borrowing Term
   b) \$114M to fund WESP building project, 30 Year Borrowing Term

2) Use revenues from Debt Exclusions to pay down the pension liability and pay for construction of the two new schools
   a) Reduce overall costs paid for pensions by approximately \$100M over 18 years
   b) Construct two new schools with a budgeted cost (Town Share) of \$114M

3) Increase annual allocation within the operating budget to address long term obligations
   a) This year's operating budget puts \$8.87M toward unfunded liability
   b) Under the plan, annually the operating budget will put approximately \$11M toward unfunded liabilities

4) Create future opportunities
   a) Fund a new building project in future years that will require no incremental increase in the tax bill or reduce the annual tax bill
   b) Use funds from the operating budget that are no longer needed to pay pension costs to pay the debt on the construction costs of WESP

Tax Levy and Exempt Debt – Building the Budget



Financing Plan Calculation – Understanding the Tax Increase

POB Debt Service	+	WESP Debt Service	−	Funds from the Operating Budget (Within Prop. 2 ½)	=	Amount Needed to Fund the Plan
$14,802,642	+	$6,149,398	−	$11,000,000	=	$9,952,040
$1,006	+	$418	−	$747	=	$677

Comparative Tax Impacts

Integrated Financing Plan	Existing Pension Schedule + WESP	Existing Pension Schedule	WESP Only
Year 1: $677 Year 18: $369 Avg: $541	$1,439	$1,006	$433

Financing Plan Calculation – Understanding the Tax Increase

	POB Debt Service	WESP Debt Service	Operating Funds	Amount Needed to Fund the Plan	Annual Tax Impact	% of Tax Bill
2022		$3,061,106		$3,061,106	$208	2.02%
2023	$14,802,642	$6,149,398	($11,000,000)	$9,952,040	$677	5.96%
2024	$14,802,642	$6,367,536	($11,000,000)	$10,170,178	$692	5.56%
2025	$14,802,642	$6,367,536	($10,875,000)	$10,295,178	$698	5.41%
2026	$14,802,642	$6,367,536	($11,146,875)	$10,023,303	$682	5.10%
2027	$14,802,642	$6,367,536	($11,425,547)	$9,744,631	$663	4.79%
2028	$14,802,642	$6,367,536	($11,711,186)	$9,458,992	$643	4.49%
2029	$14,802,642	$6,367,536	($12,003,965)	$9,166,213	$623	4.20%
2030	$14,802,642	$6,367,536	($12,304,064)	$8,866,114	$603	3.92%
2031	$14,802,642	$6,367,536	($12,611,666)	$8,558,512	$582	3.65%
2032	$14,802,642	$6,367,536	($12,926,958)	$8,243,220	$561	3.39%
2033	$14,802,642	$6,367,536	($13,250,132)	$7,920,046	$539	3.15%
2034	$14,802,642	$6,367,536	($13,581,385)	$7,588,793	$516	2.91%
2035	$14,802,642	$6,367,536	($13,920,919)	$7,249,259	$493	2.68%
2036	$14,802,642	$6,367,536	($14,268,942)	$6,901,236	$469	2.47%
2037	$14,802,642	$6,367,536	($14,625,666)	$6,544,512	$445	2.26%
2038	$14,802,642	$6,367,536	($14,991,308)	$6,178,870	$420	2.06%
2039	$14,802,642	$6,367,536	($15,366,090)	$5,804,088	$395	1.87%
2040	$14,802,642	$6,367,536	($15,750,243)	$5,419,935	$369	1.68%

Comparing Existing Schedule to POB Debt Schedule

	Existing Schedule	POB Debt Service	(+/-) Difference
FY 2023	$9,807,154	$14,802,642	-$4,995,488
FY 2024	$10,821,562	$14,802,642	-$3,981,080
FY 2025	$11,928,154	$14,802,642	-$2,874,488
FY 2026	$13,134,911	$14,802,642	-$1,667,731
FY 2027	$14,450,492	$14,802,642	-$352,150
FY 2028	$15,884,290	$14,802,642	$1,081,648
FY 2029	$17,446,499	$14,802,642	$2,643,857
FY 2030	$19,148,168	$14,802,642	$4,345,526
FY 2031	$21,001,286	$14,802,642	$6,198,644
FY 2032	$23,018,858	$14,802,642	$8,216,216
FY 2033	$25,214,983	$14,802,642	$10,412,341
FY 2034	$27,604,957	$14,802,642	$12,802,315
FY 2035	$30,205,362	$14,802,642	$15,402,720
FY 2036	$33,034,184	$14,802,642	$18,231,542
FY 2037	$35,970,770	$14,802,642	$21,168,128
FY 2038	$39,153,507	$14,802,642	$24,350,865
FY 2039	$42,625,743	$14,802,642	$27,823,101
FY 2040	$46,387,657	$14,802,642	$31,585,015

West El/Shawsheen
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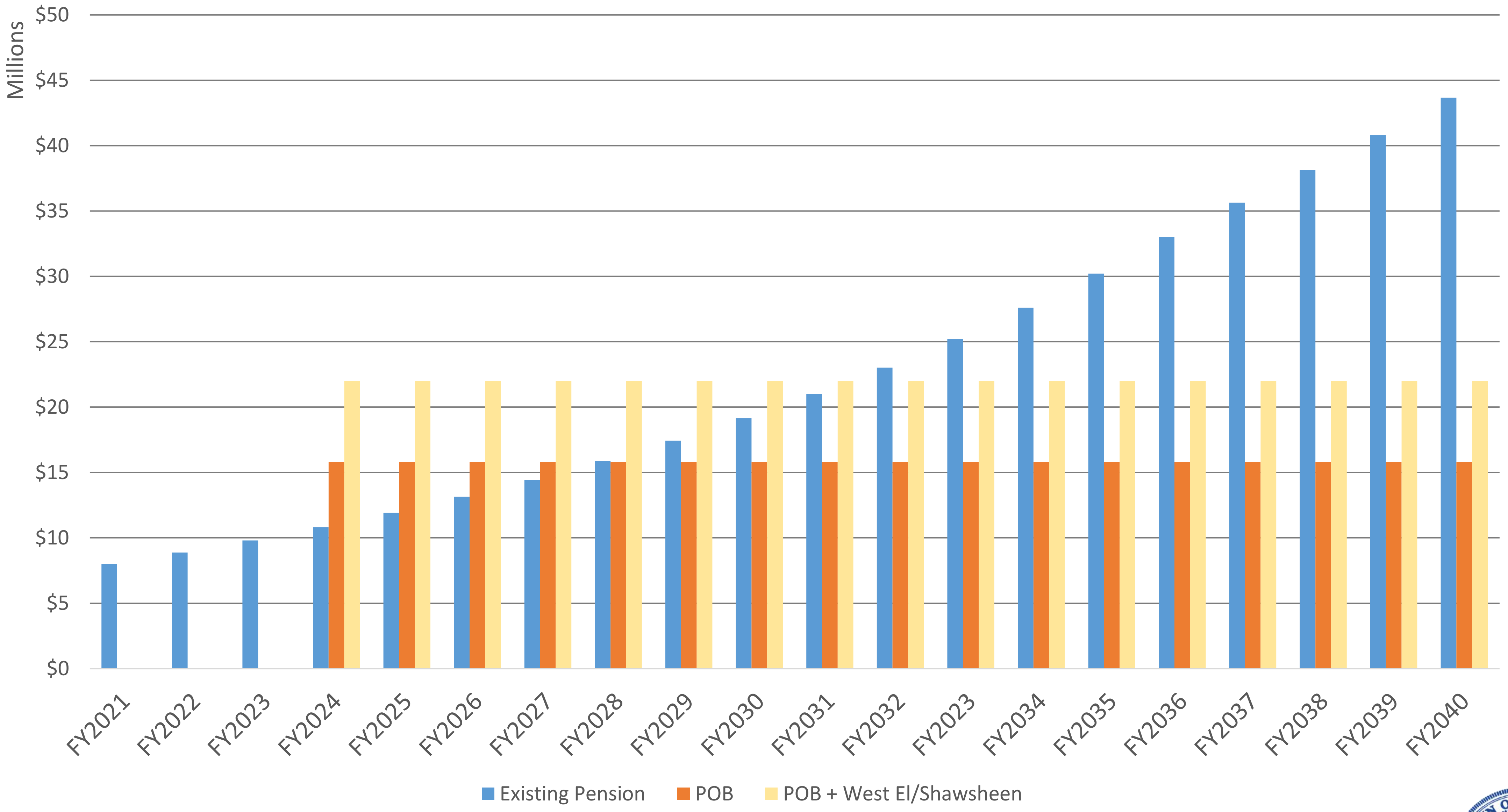
POB Breakeven

POB/WESP Breakeven



Integrated Financing Plan for Major Obligations

Understanding Pension Obligation Bonds

Pension Obligation Bonds

- Allow for fixed payments over a defined term ($14.8M per plan)
- Reduces the total amount required to pay off the liability
- For the plan to be successful, the assets generated from POBs must earn more than the interest rates on the debt service
- $252M (P&I) needed to pay off $175M liability

Existing Pension Schedule

- Requires that the Town make an annual appropriation in order to meet mandatory funding date of 2040 ($10M increasing 42M)
- Annual appropriation must increase by at least 8.35% every year
- Approx. $350-400M needed to pay off $175M liability

Risk	Impact	Mitigation Measure
Return on assets does not exceed borrowing rate	Create a "new" unfunded liability	Create stabilization fund from earnings and/or utlize GFMF in year 18 to reconcile unfunded liability
Legislature extends funding requirement beyond 2040	Required to pay annual debt service based on 17 year debt schedule and absorb impacts accordingly	Refinance debt service and extend schedule, alleviate impacts by spreading out over additional years

Low Risk High Reward Assessment

Rate	Current Allocation
2.00%	98.1%
2.50%	96.7%
3.00%	95.1%
3.50%	92.2%
4.00%	88.7%
4.50%	84.3%
6.25%	60.3%

- Based on Current Asset Allocation
- Probability Testing conducted by Segal Consulting

- Current Bond Market Expectation for AAA Community - 1.43%-1.84% (as of 1/26/21)
- Tucson, Arizona – 2.95%
- Flagstaff, Arizona – 2.7%

- Since 1950, the 20-year return on a POB issuance has never been below **5.59%**
- Since 1900, there have only been four 10-year periods where returns were negative (Great Depression & Great Recession)

**National Conference on Public Employee Retirement Systems*

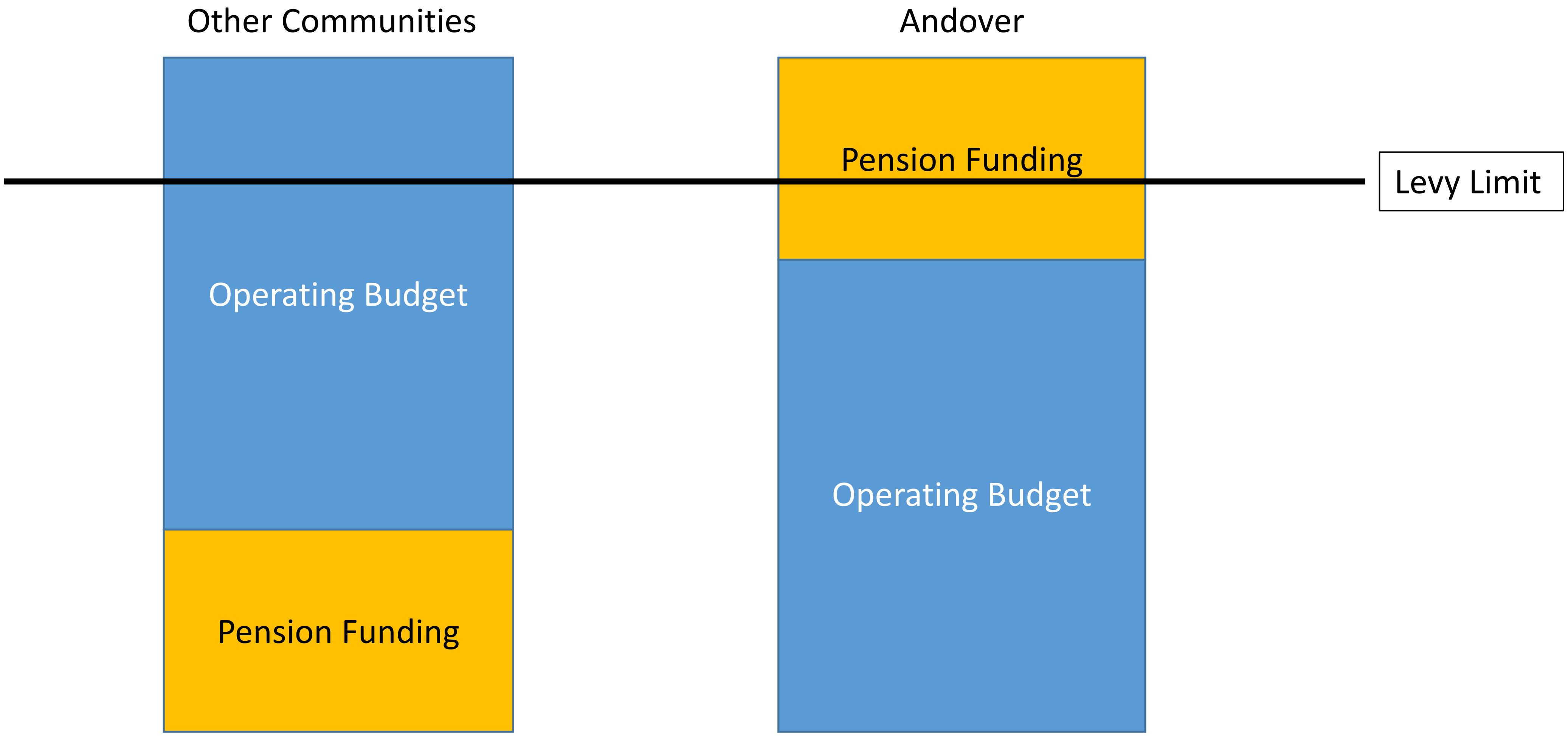
Active Employee Contributions & Reserve Fund

Establish Reserve Fund from Employee Contributions

- Funded by direct contributions from **active** employees
- Approx. 87% of active employees will contribute between $475-$2,100 annually to reserve fund
- Reserve Fund contributions from active employees would total approx. **$5.7M** over life of POB debt schedule
- Reserve fund will be used to offset losses and/or reconcile unfunded liability

Avg. Tax Bill	Active Employee Contribution (Average)	Active Employee (Low)	Active Employee (High)
$351	$775	$475	$2,100

How Andover and Other Communities have approached Pension Funding



Comparable Communities and Taxation

Comparable Communities Average Tax Bill and Override History					
		Excess Levy Capacity	Pension Fund (% Funded)	# Operating Overides	Average Tax Bill
1	Concord	Yes	86%	19	$17,003
2	Wellesley	No	78%	11	$15,760
3	Lexington	No	87%	16	$15,547
4	Winchester	No	80%	3	$14,298
5	Sudbury	No	Regional System	9	$13,769
6	Needham	No	68%	18	$12,272
7	Acton	No	Regional System	5	$11,970
8	Norwell	No	Regional System	4	$10,814
9	**Andover**	**Yes**	**48%**	**0**	**$10,223**
10	Hingham	No	70%	4	$9,988
11	Bedford	No	Regional System	0	$9,769
12	Arlington	No	52%	4	$9,126
13	Marblehead	No	53%	6	$9,068
14	Natick	No	Regional System	2	$8,410
15	Newburyport	No	65%	0	$7,929
16	North Andover	No	Regional System	5	$7,608

Comparable Communities with Approval of Integrated Plan in 2023

Comparable Communities Average Tax Bill and Override History						
		Excess Levy Capacity	Pension Fund (% Funded)	# Operating Overides	Average Tax Bill	FY2023 Projected Average Tax Bill
1	Concord	Yes	86%	19	$17,003	$18,249
2	Wellesley	No	78%	11	$15,760	$17,478
3	Lexington	No	87%	16	$15,547	$17,431
4	Winchester	No	80%	3	$14,298	$16,137
5	Sudbury	No	Regional System	9	$13,769	$14,778
6	Needham	No	68%	18	$12,272	$13,941
7	Acton	No	Regional System	5	$11,970	$13,416
8	Norwell	No	Regional System	4	$10,814	$12,141
9	**Andover**	**Yes**	**48%**	**0**	**$10,223**	**$12,125**
10	Hingham	No	70%	4	$9,988	$11,093
11	Bedford	No	Regional System	0	$9,769	$10,916
12	Arlington	No	52%	4	$9,126	$10,094
13	Marblehead	No	53%	6	$9,068	$10,115
14	Natick	No	Regional System	2	$8,410	$9,337
15	Newburyport	No	65%	0	$7,929	$8,693
16	North Andover	No	Regional System	5	$7,608	$8,527

2001-2020 Comparative Community Costs

	Cost of Average Single Family Tax Bills Over 20 Years			
		Pension Fund (% Funded)	# Operating Overides	20 Year Cost
1	Concord	86%	19	$225,040
2	Wellesley	78%	11	$220,457
5	Sudbury	Regional System	9	$214,647
3	Lexington	87%	16	$204,252
4	Winchester	80%	3	$190,816
7	Acton	Regional System	5	$179,579
6	Needham	68%	18	$157,870
8	Norwell	Regional System	4	$157,769
9	**Andover**	**48%**	**0**	**$153,764**
10	Hingham	70%	4	$149,821
11	Bedford	Regional System	0	$145,202
13	Marblehead	53%	6	$136,213
12	Arlington	52%	4	$126,827
16	North Andover	Regional System	5	$125,811
14	Natick	Regional System	2	$115,960
15	Newburyport	65%	0	$115,047

Conceptual Impacts of Redirecting Portion of Existing Tax Bill to Fund Current Schedule

- **Value of Incremental Service Impacts:** $56 - $1,982

- **Value of Fixed Service Impacts:** $853

Area/Program	Portion of Average Tax Bill
Solid Waste and Recycling	$229
Memorial Hall Library	$202
Recreation, Youth and Elder Services	$97
Closing a Fire Station	$63
Public Health Division	$35
Forestry/Tree Maintenance	$14
Sustainability	$7
Business, Arts, and Cultural Development	$7
Tree Program	$4
Public Works Dump Truck	$2

Impacts of Voting Yes vs. No on Pension Obligation Bond Article

Vote Yes

- Meets existing pension obligation with low-interest loan
- Preserves Services
- Increases average tax bill by approx. $259
- Pension Fully Funded in 2023

Total Expenditure
$266.4M

Vote No

- Becomes necessary to meet existing pension obligation through other mechanisms:
  - Decrease in services provided by town and schools, and/or
  - Pass operating (proposition 2 ½) overrides to maintain services
- Increases average tax bill by approx. $1,028
- Pension schedule drawn out to 2040

Total Expenditure
$350-425M

Summary

- Waiting a year (or more) increases the likelihood of higher borrowing costs *and* reduces the amortization schedule by another year (or more) which has a greater annual impact on the taxpayer

- If the worst-case scenario was realized and the assets earned less than the interest rate at which the funds were borrowed, we most likely would still be better off with POBs than with the existing funding schedule

- If we borrowed at Tucson's rate (2.95%), there is a 95.1% chance that the assets earn more than the rate they were borrowed at according to probability testing, and if so, the plan would have a favorable outcome

- If the Town takes **no action**, taxpayers will be responsible for paying at least $427M in pension costs between now and 2040

- **Primary question** – is the potential risk offset by the opportunity to generate enough savings from POBs to pay the costs of two new schools and provide the best opportunity to maintain services

Next Steps

- Special Legislation has been signed into law by Governor Baker (January)

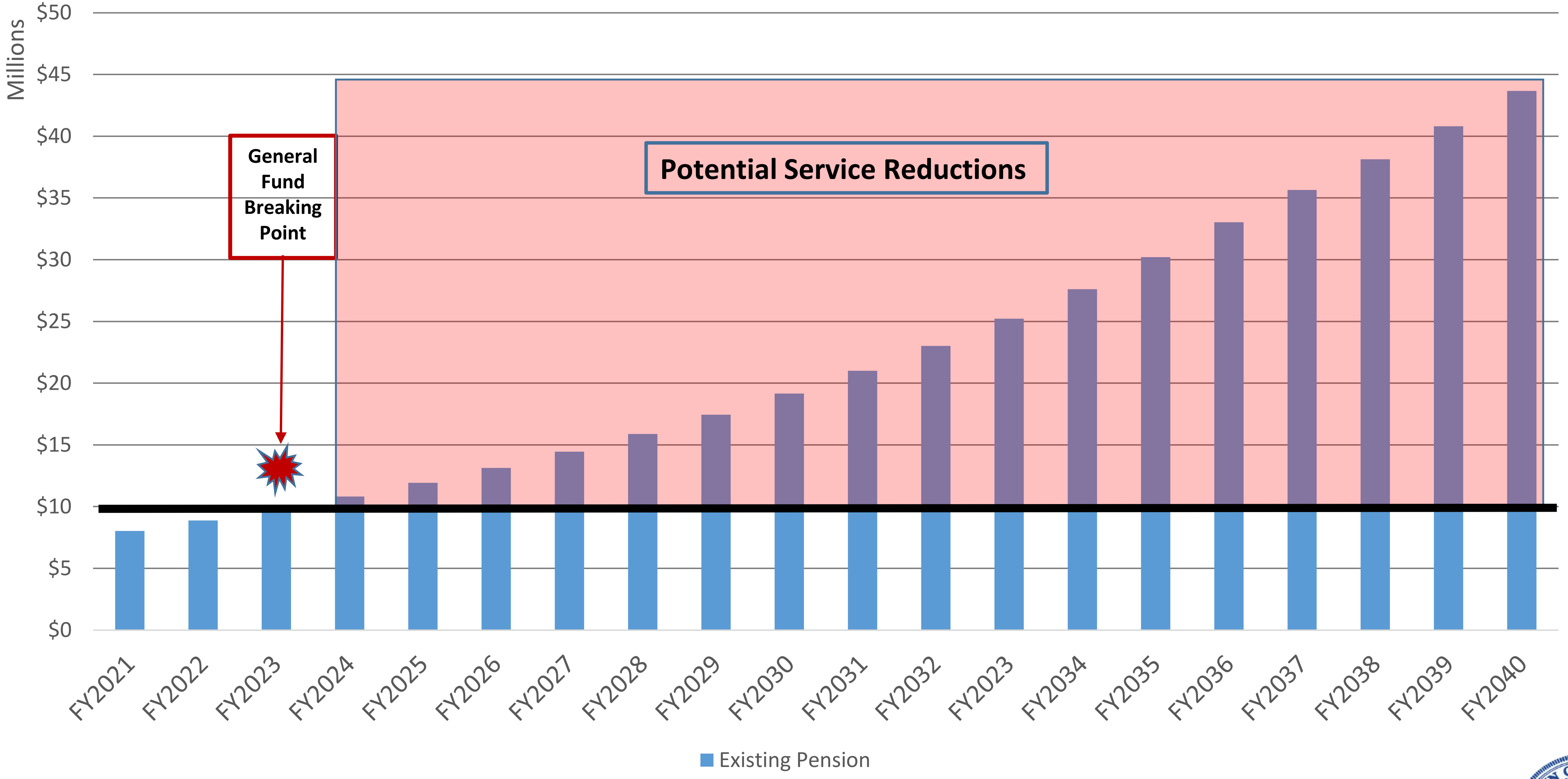
- Appoint Investment Advisory Committee (March)

- Public Outreach (March - June)
  - Standing Weekly Presentations
  - Weekly Virtual Office Hours

- Borrowing Authorizations for both West Elementary & Shawsheen Preschool Building Project and POBs will require Town Meeting approval (June 5th)

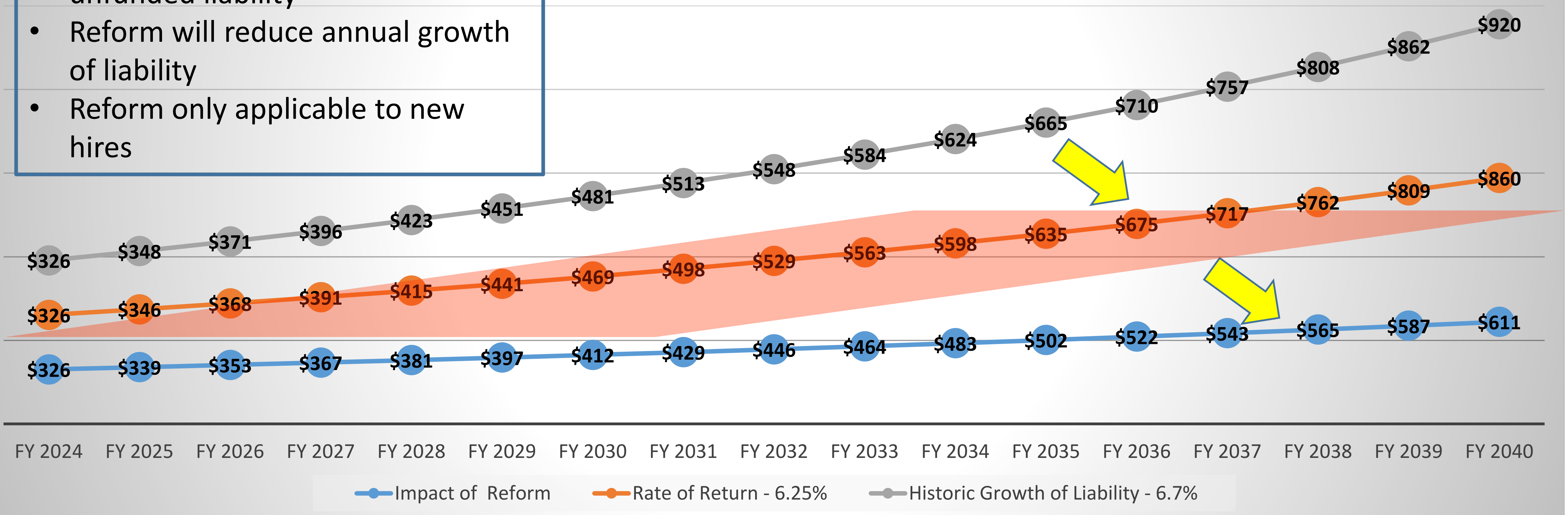
- Both West Elementary & Shawsheen Preschool Building Project and POBs will require debt exclusion votes (June 15th)

Proposition 2 ½ and the Existing Pension Funding Schedule



Conceptual Impact of Reform

- Reform will **not** reduce existing unfunded liability
- Reform will reduce annual growth of liability
- Reform only applicable to new hires



Summary

	A	B	C	D
	Vote **Yes** on Both	Vote **No** on Both	Vote **Yes** on Building Project and **No** on POBs	Vote **Yes** on POBs and **No** on Building Project
	Integrated Plan	**Existing Schedule**	**Existing Schedule + Building Project**	**POB Debt Service**
Unfunded Pension Costs	$242,507,408	$427,031,383	$427,031,383	$242,507,408
West El/Shawsheen Project	$114,000,000	$0	$114,000,000	$0
Total	**$356,507,408**	**$427,031,383**	**$541,031,383**	**$242,507,408**
Service Impacts	**None**	**Major**	**Major**	**Unknown***

*Additional costs associated with maintaining West El & Shawsheen may have impacts on services. Project cost escalation and loss of MSBA reimbursement are also considerations.

- Waiting a year (or more) increases the likelihood of higher borrowing costs *and* reduces the amortization schedule by another year (or more) which has a greater annual impact on the taxpayer

- If the worst case scenario was realized and the assets earned less than the interest rate at which the funds were borrowed, we most likely would still be better off with POBs than with the existing funding schedule

- If we borrowed at Tucson's rate (2.95%), there is a 95.1% chance that the assets earn more than the rate they were borrowed at according to probability testing, and if so, the plan would have a favorable outcome

- If the Town takes **no action**, taxpayers will be responsible for paying at least $427M in pension costs between now and 2040

- **Primary question** – is the potential risk offset by the opportunity to 1.) Save approx. $70M, build two schools and maintain services? or 2.) save $150M+ in pension costs and maintain services?

Collaboration with the Retirement Board

- Pursuant to the Town Charter, appoint Investment Advisory Committee
- Appointed by Town Manager in collaboration with the Retirement Board
- <u>Advise</u> Retirement Board on investment decisions and asset allocation
- Does not have any impact on Retirement Board's fiduciary responsibilities