

# Town of Hamden

## PENSION PLAN REVIEW AND OPTIONS

### Presentation to Town Council

January 31, 2013

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Consulting Actuary

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## ① **Background**

- Actuarial Concepts and Terminology
- Retirement Plans Overview

## ② Current State

- 2012 Valuation Highlights
- How Did We Get Here?

## ③ Path Forward

- Overview of Options
- Plan Design Considerations

## ④ Appendices

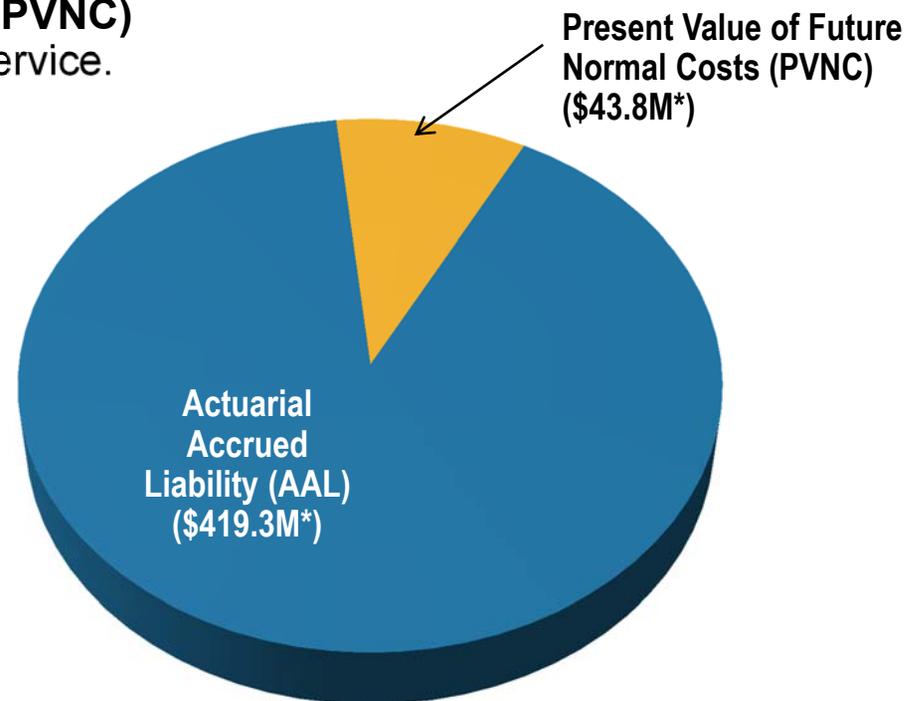
- Glossary of Terms
- Risk and Features of Retirement Plans
- Assumptions and Methodology
- Pension Obligation Bond Considerations
- Trends

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# Actuarial Concepts and Terminology

- The **Present Value of Future Benefits (PVB)** is the present value of total benefits promised to current participants, based on projected pay and service at retirement.
- The **Actuarial Cost Method** is a mechanism to allocate the present value of future benefits (PVB) to time periods (i.e., benefits related to past service vs. future service):
  - The **Present Value of Future Normal Cost (PVNC)** is the portion of the PVB allocated to future service.
  - The **Actuarial Accrued Liability (AAL)** is the portion of PVB allocated to past service.

**Present Value of Future Benefits (PVB) = Present Value of Future Normal Cost (PVNC) + Actuarial Accrued Liability (AAL) = \$463.1M**

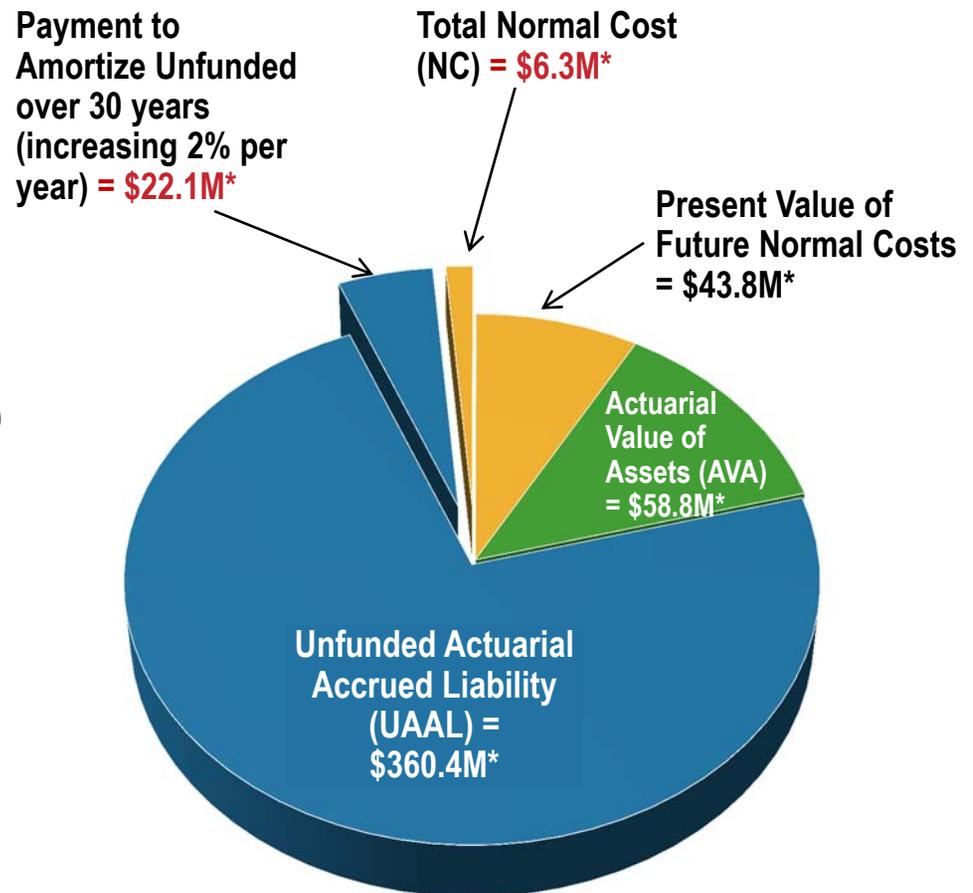


\* Based on current data, plan provisions and assumptions as stated in the July 1, 2012 valuation. PVNC reflects expected future salary increases.

# Actuarial Concepts and Terminology

➤ **Annual Required Contribution (ARC) = Normal Cost + Payment to Amortize (i.e., pay down) Unfunded Actuarial Accrued Liability**

- **Normal Cost (NC)** = Cost attributable to benefits accruing during upcoming year
- **Unfunded Actuarial Accrued Liability (UAAL)** = Actuarial Accrued Liability (AAL) – Actuarial Value of Assets (AVA)



**NOTE:** UAAL plus AVA does not exactly sum to AAL on prior slide, due to rounding.

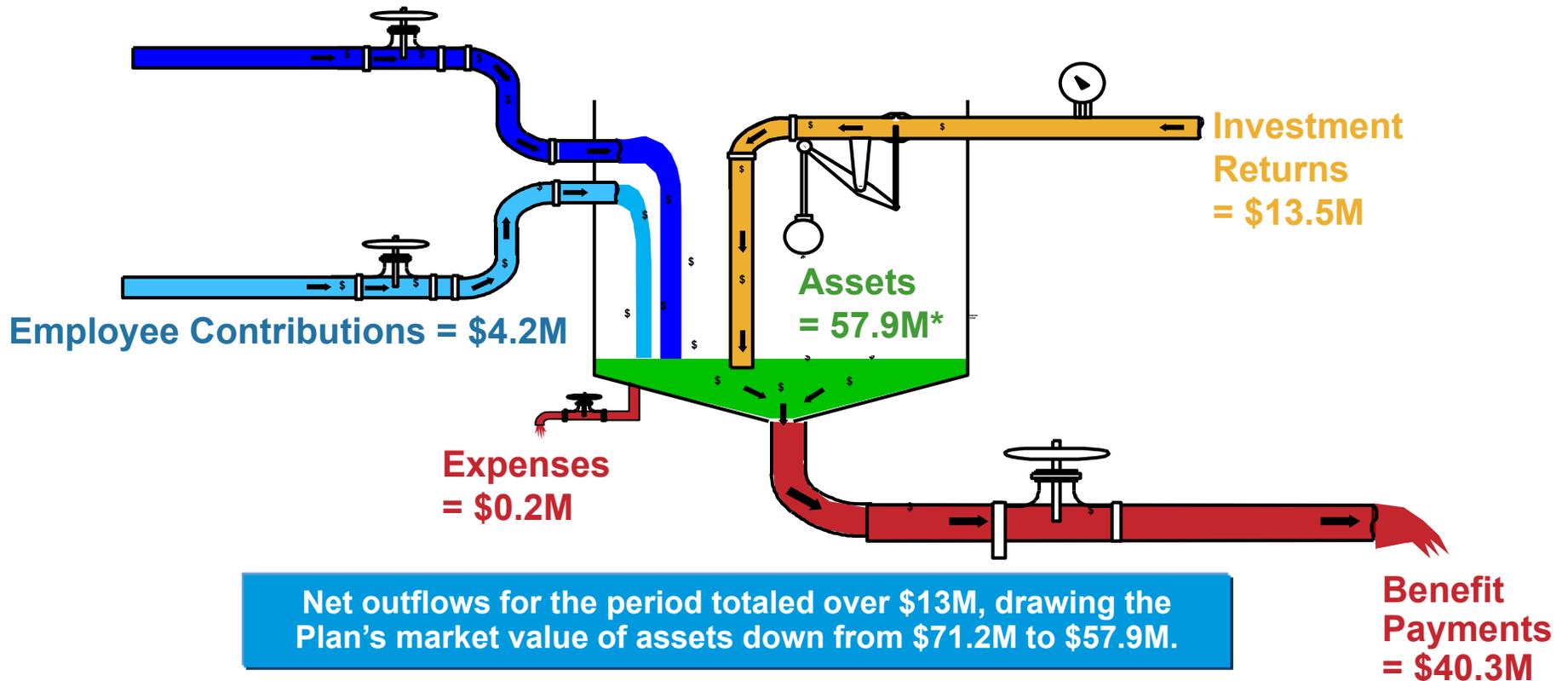
\* Based on current data, plan assets, plan provisions and assumptions as stated in the July 1, 2012 valuation.

# Actuarial Concepts and Terminology

$$\text{Contributions} + \text{Investment Return} = \text{Benefits} + \text{Expenses}$$

The chart below shows the cash flows of the Town's Defined Benefit Plan for the two-year period July 1, 2010 through June 30, 2012.

**Town Contributions = \$9.6M**



\* The Market Value of Assets has further declined to \$56M as of December 31, 2012.

# Retirement Plans Overview

## Defined Benefit vs. Defined Contribution

- Retirement Plans fall into two broad categories:
  1. **Defined Benefit (DB) Plans:** focus on benefit security
  2. **Defined Contribution (DC) Plans:** focus on wealth accumulation
- **Defined Benefit Plans** include final average salary plans, career average salary plans, flat dollar plans, and cash balance plans:
  - Risk borne by Town
  - Risks include: investment risk, inflation risk, longevity risk, interest rate risk, wage inflation risk, incentive risk, and regulatory risk
- **Defined Contribution Plans** include 401(a), 457, and matching plans:
  - Risk borne by Employee
  - Risks include: investment risk, inflation risk, longevity risk, wage inflation risk, interest rate risk, incentive risk, regulatory risk, non-participation risk, leakage risk, and will-power risk
- **Hybrid Plans** combine elements of a Defined Benefit plan and a Defined Contribution plan:
  - Risks are shared between Town and Employee

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## Summary of Key Valuation Results

	July 1, 2012 <sup>1</sup>	July 1, 2010
<b>A. Actuarial Accrued Liability</b>		
1. Retirees, Beneficiaries, Disableds and Vested Terms	\$284,400,000	\$213,900,000
2. Active Participants	<u>134,900,000</u>	<u>109,900,000</u>
<b>3. Total</b>	<b>\$419,300,000</b>	<b>\$323,700,000</b>
<b>B. Unfunded Actuarial Accrued Liability (UAAL)</b>		
4. Actuarial Accrued Liability (AAL)	\$419,300,000	\$323,700,000
5. Actuarial Value of Assets (AVA)	<u>58,800,000</u>	<u>81,400,000</u>
<b>6. Unfunded Actuarial Accrued Liability [ (4) – (5) ]</b>	<b>\$360,400,000</b>	<b>\$242,400,000</b>
7. Funded Ratio – Actuarial Basis [ (5) ÷ (4) ]	14.0%	25.1%
<b>C. Annual Required Contribution (ARC)</b>		
	<b>Fiscal Year 2013</b>	<b>Fiscal Year 2011</b>
8. Net Normal Cost (offset by Expected Employee Contributions)	\$4,100,000	\$4,000,000
9. Payment to amortize Unfunded (UAAL)	<u>22,100,000</u>	<u>14,400,000</u>
<b>10. Total ARC [ (8) + (9), adjusted for timing ]</b>	<b>\$27,100,000</b>	<b>\$19,100,000</b>
<b>11. Town Contribution</b>	<b>\$9,400,000</b>	<b>\$6,550,000</b>
<b>12. Town Contribution as % of ARC [ (11) / (10) ]</b>	<b>34.7%</b>	<b>34.3%</b>

**FY 2013 results reflect assumption changes and a change in amortization methodology.**

<sup>1</sup> Most recent valuation. The 2012 payment to amortize the UAAL is based on a 30-year amortization period with payments increasing 2.0% per year. In 2010, the payment was based on a 26-year amortization period with payments increasing 4.0% per year.

**NOTE:** Numbers in the chart above may not sum due to rounding.

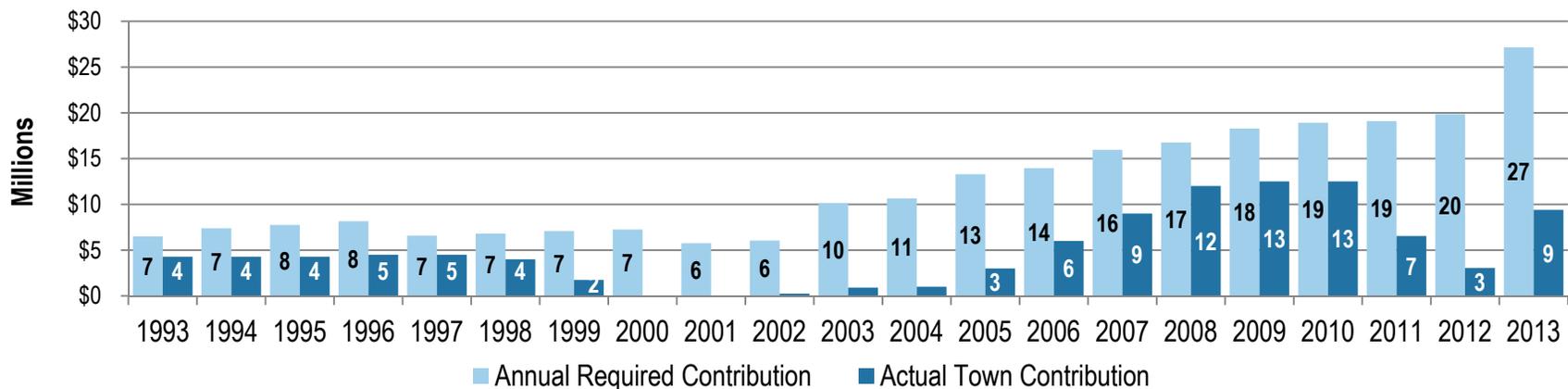
## Breakdown of Change in ARC from FY '11 to FY '13

<b>Annual Required Contribution for FY '11</b>	<b>\$19,100,000</b>
<b>1. Change in actuarial assumptions</b> <ul style="list-style-type: none"> <li>Lowering investment return assumption from 8.0% to 7.0%;</li> <li>Lowering salary growth assumption from 4.0% to 2.5%;</li> <li>Updating mortality table to anticipate improved life expectancy; and</li> <li>Changing disability and retirement rates</li> </ul>	6,700,000
<b>2. Actual contributions less than ARC</b> <ul style="list-style-type: none"> <li>Town contributed about \$30M less than ARC the last 2 years</li> </ul>	2,000,000
<b>3. Expected increase</b> <ul style="list-style-type: none"> <li>Unfunded amortization payment was based on level percent-of-pay amortization and expected to increase 4.0% annually</li> </ul>	1,200,000
<b>4. Earning less than 8.0% assumed investment return</b> <ul style="list-style-type: none"> <li>Earned 20.5% and 0.0% the last 2 years on Market value of assets basis;</li> <li>Actuarial value of assets (i.e. smoothed value) earned 4.3% and 1.6%</li> </ul>	500,000
<b>5. Retirement Incentive Program</b> <ul style="list-style-type: none"> <li>Retirement Incentive Program of 2012</li> </ul>	200,000
<b>6. Experience gains/losses</b> <ul style="list-style-type: none"> <li>Experience gains/losses due to salary, turnover, retirement, disability and mortality</li> </ul>	100,000
<b>7. Change in Amortization Method</b> <ul style="list-style-type: none"> <li>Extending Unfunded amortization period from 24 to 30 years and lowering expected rate of increase from 4.0% to 2.0%</li> </ul>	(2,700,000)
<b>Annual Required Contribution for FY '13*</b>	<b>\$27,100,000</b>

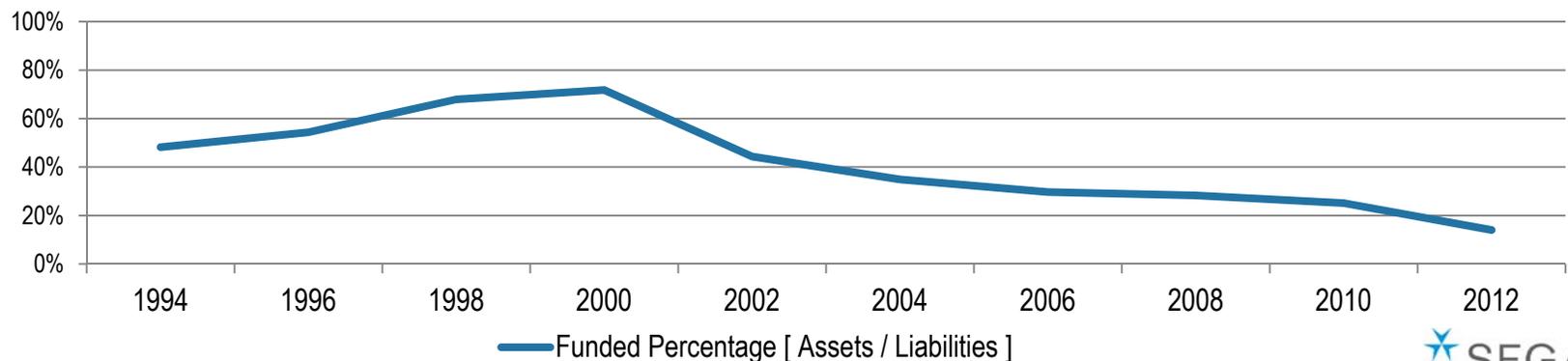
\* Based on July 1, 2012 valuation; reflects assumption and method changes.

# How Did We Get Here?

- The Town has failed to contribute the Annual Required Contribution (ARC) every year since FY '93, an amount totaling about \$132M through 2012. An additional underpayment of about \$18M is expected for 2013.



- In the 1990s, investment returns largely covered for the shortfall of contributions. However, the funded percentage has declined steadily since 2000 as the economy has struggled and benefits/liabilities have continued to accrue while the ARC has not been paid.



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# Overview of Options

1

## Do Nothing

- No change in benefits nor immediate injection of cash

2

## Reduce Benefits Only

- Reduce benefits for future hires and/or current employees and/or current retirees
- No immediate injection of cash

3

## Immediate Injection of Cash; No Change in Benefits

- Immediate injection of cash via Pension Obligation Bond (POB) or other vehicle
- No change in benefits

4

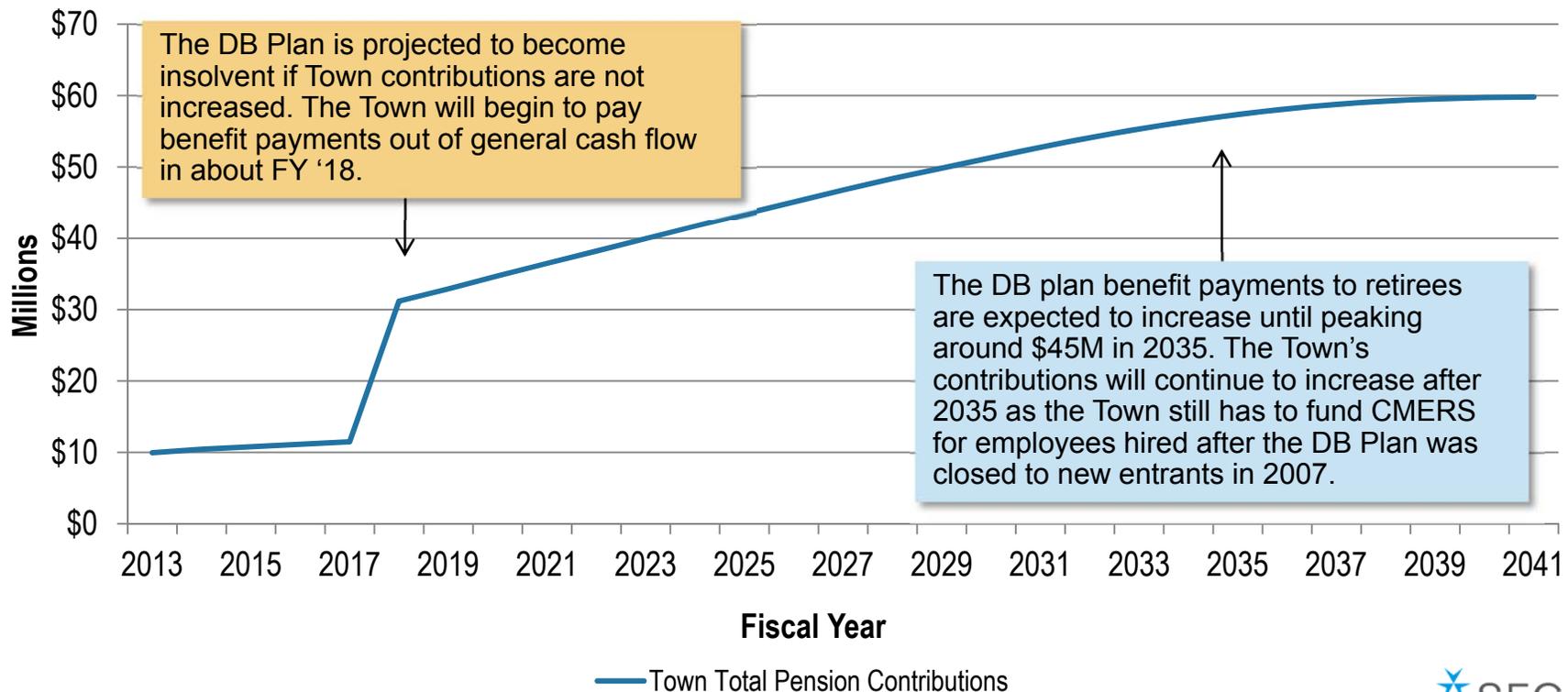
## Immediate Injection of Cash and Reduce Benefits

- Immediate injection of cash via Pension Obligation Bond (POB) or other vehicle
- Reduce benefits for future hires and/or current employees and/or current retirees

There are several options to reduce benefits.

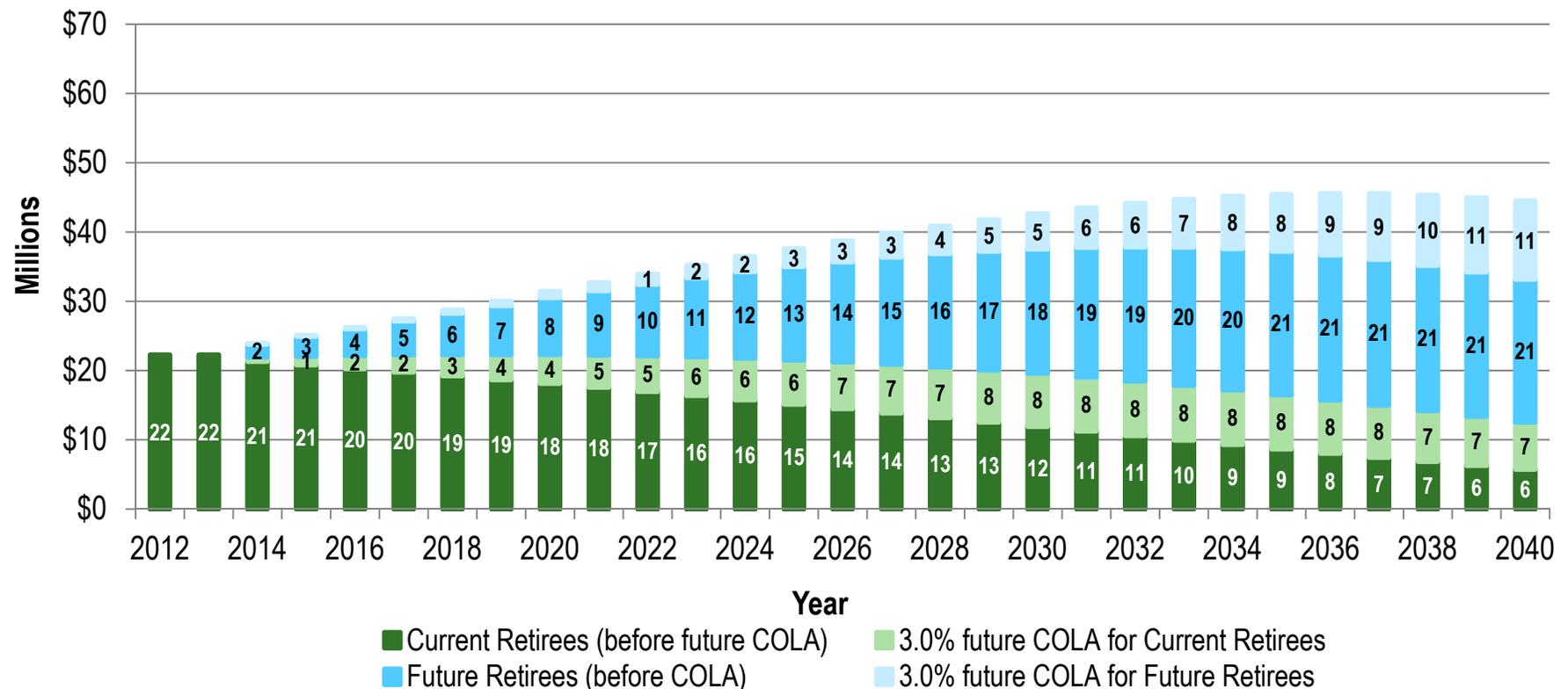
## Option 1: Do Nothing—Continue to Underpay ARC

- If the Town does not increase its contributions above the \$9.4M budgeted for FY '13, nor reduce benefits, the Plan will become insolvent (i.e., run out of money) within five years.
  - If the Plan becomes insolvent then the Town will have to pay monthly payments to retirees out of general cash flows, or default.
  - Thus the Town's contributions will increase sharply in about five years and continue to grow.
  - If the assets do not earn the assumed investment return of 7% or more each year, insolvency will occur sooner.



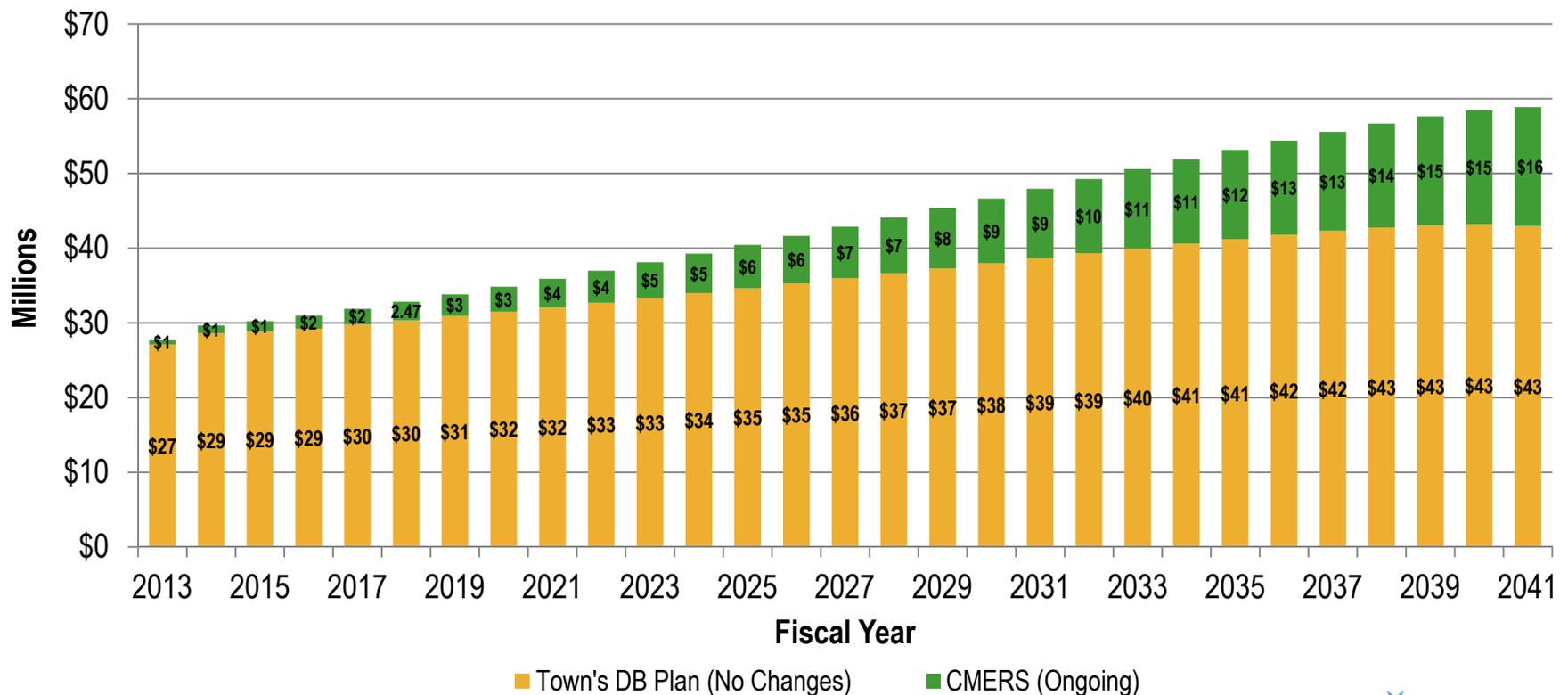
# Breakdown of Future Benefit Payments for Current Plan

- The following is a breakdown by current and future retirees of the projected benefit payments from the current Town's DB plan:
  - The future 3.0% COLA for current retirees accounts for over half of their projected benefit payments in about 20 years
  - The 3.0% COLA for future retirees accounts for about a third of their projected benefit payments in about 25 years



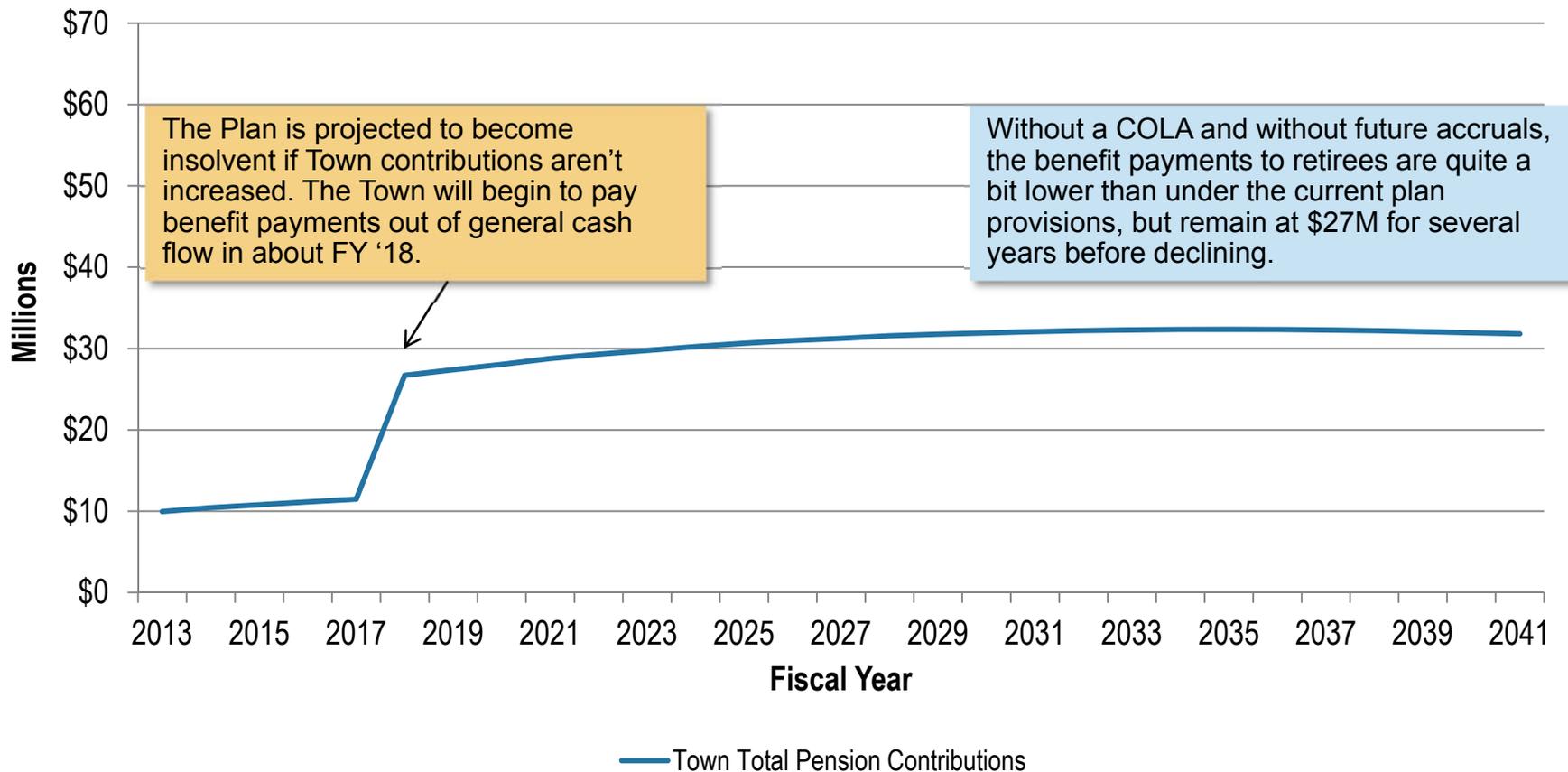
# Option 1: Do Nothing—Pay ARC Annually

- The following are the projected annual required contributions over the next 30 years for the Town’s DB plan and the Connecticut Municipal Employees’ Retirement System (CMERS):
  - The CMERS contribution increases as new employees are hired and enter the Plan.
  - While the DB Plan contribution increases as the Unfunded Accrued Liability (UAAL) is paid (i.e., “amortized”) over the next 30 years. The payment on the UAAL is currently about 80% of the ARC and is calculated to increase 2% annually.



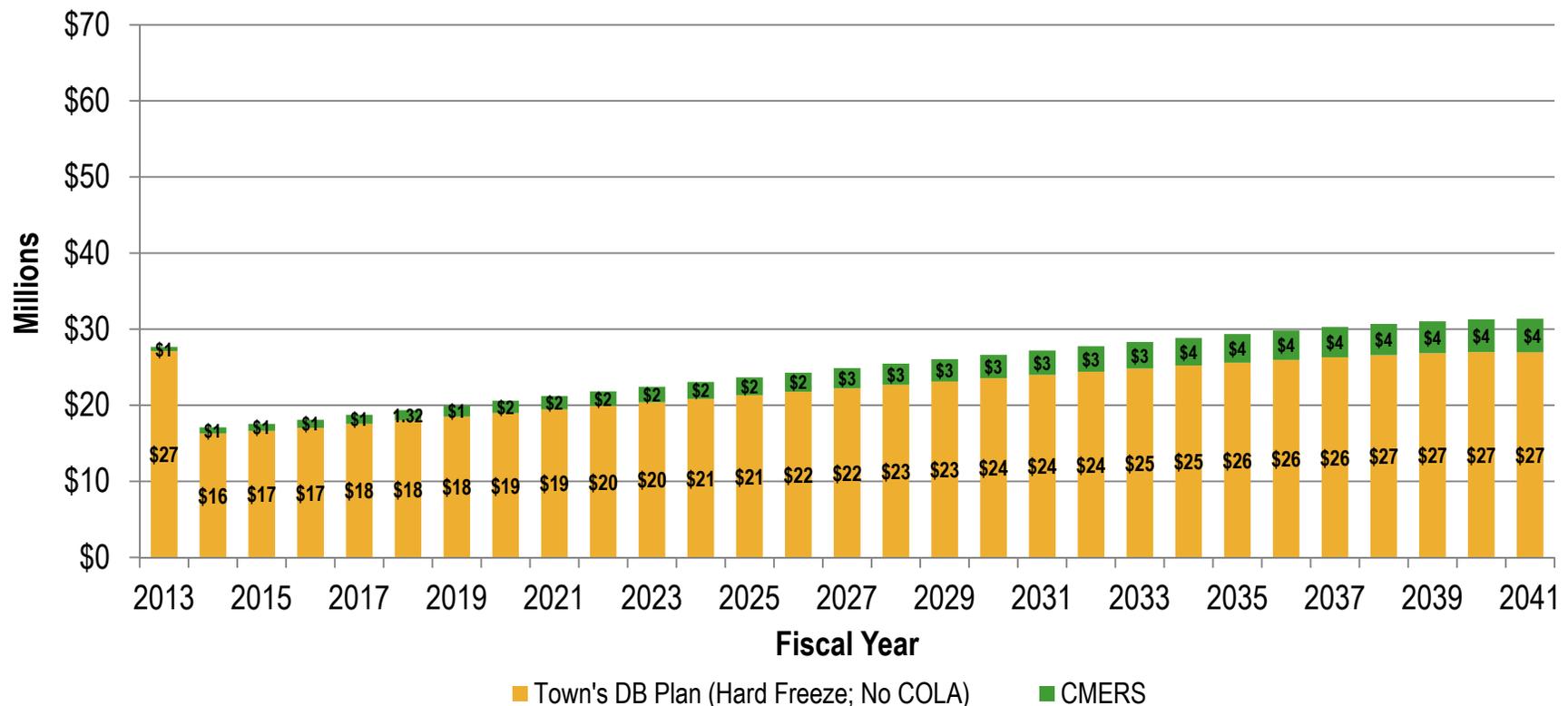
## Option 2: Reduce Benefits Only—Underpay ARC

- Even if the DB Plan is frozen (i.e., no future benefits earned/no future accruals) and the cost-of-living adjustment (COLA) is completely eliminated for all participants, the Plan will become insolvent within five years if contributions are not increased above the \$9.4M contribution budgeted for 2013.



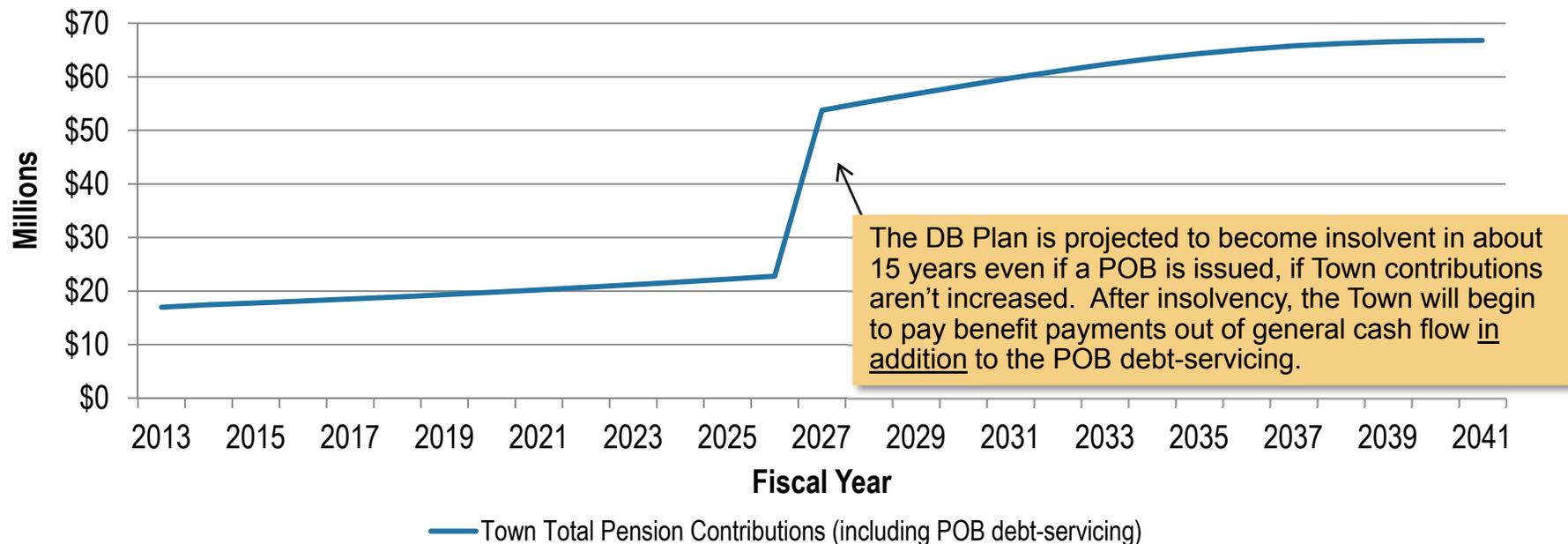
## Option 2: Reduce Benefits Only—Pay ARC

- If the DB Plan is frozen (i.e., no future benefits are earned) and the COLA is eliminated for all participants, the total required Town DB contribution will still average around \$25M:
  - Thus, even under the most extreme cutbacks, the total Town's required contributions remain well above the levels contributed in recent years.
  - Note that the amounts below assume that the Town provides no future retirement benefits at all to future hires.



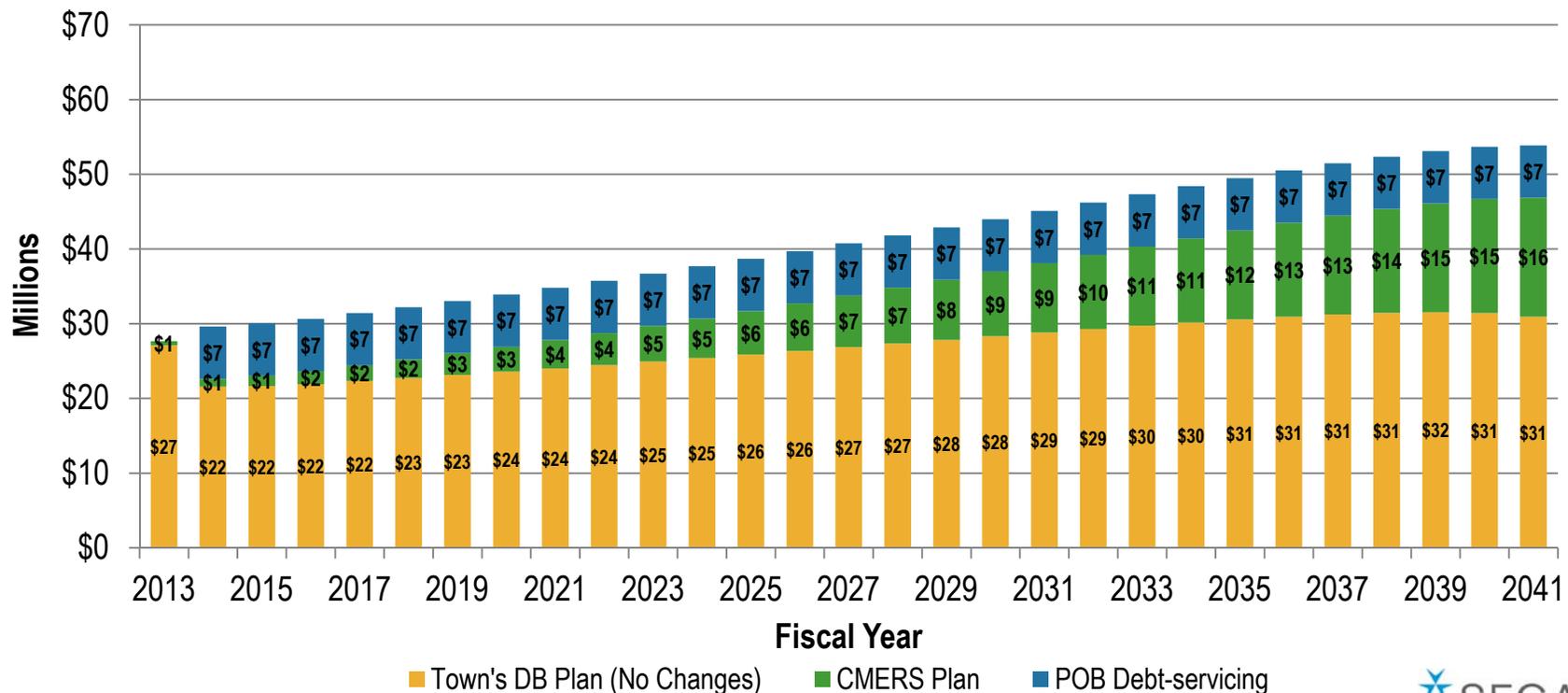
## Option 3: Immediate Cash Injection—Underpay ARC

- Issuing a POB of about \$115M, without an increase in annual contributions or a reduction in benefits, will delay insolvency about an additional ten years:
  - Once the Plan is insolvent (in about 15 years with the POB), the Town will be forced to pay future benefit payments out of general fund cash flows in addition to the debt servicing on the POB (~\$7M annually).
  - The Plan would still become insolvent even if the Town's contributions doubled and the Town issues a POB of the maximum amount and there is no change in benefits.
  - Note the State of Connecticut requires funding of the pension plan for any POB issuance, and may take action if the Town doesn't pay the ARC.



## Option 3: Immediate Cash Injection—Pay ARC

- The following are the projected contributions required to fund the Town's DB plan and the Connecticut Municipal Employees' Retirement System (CMERS) over the next 30 years assuming the Town issues a \$115M Pension Obligation Bond (POB) and does not make any other changes:
  - The funded percentage increases from 14% to approximately 40% with the addition of the POB funds, and the DB Plan contributions are reduced due to a lower UAAL.
  - Thus, the total Town contributions (including the POB debt-servicing) are lower than without the POB if the DB Plan earns at least 7% annually.



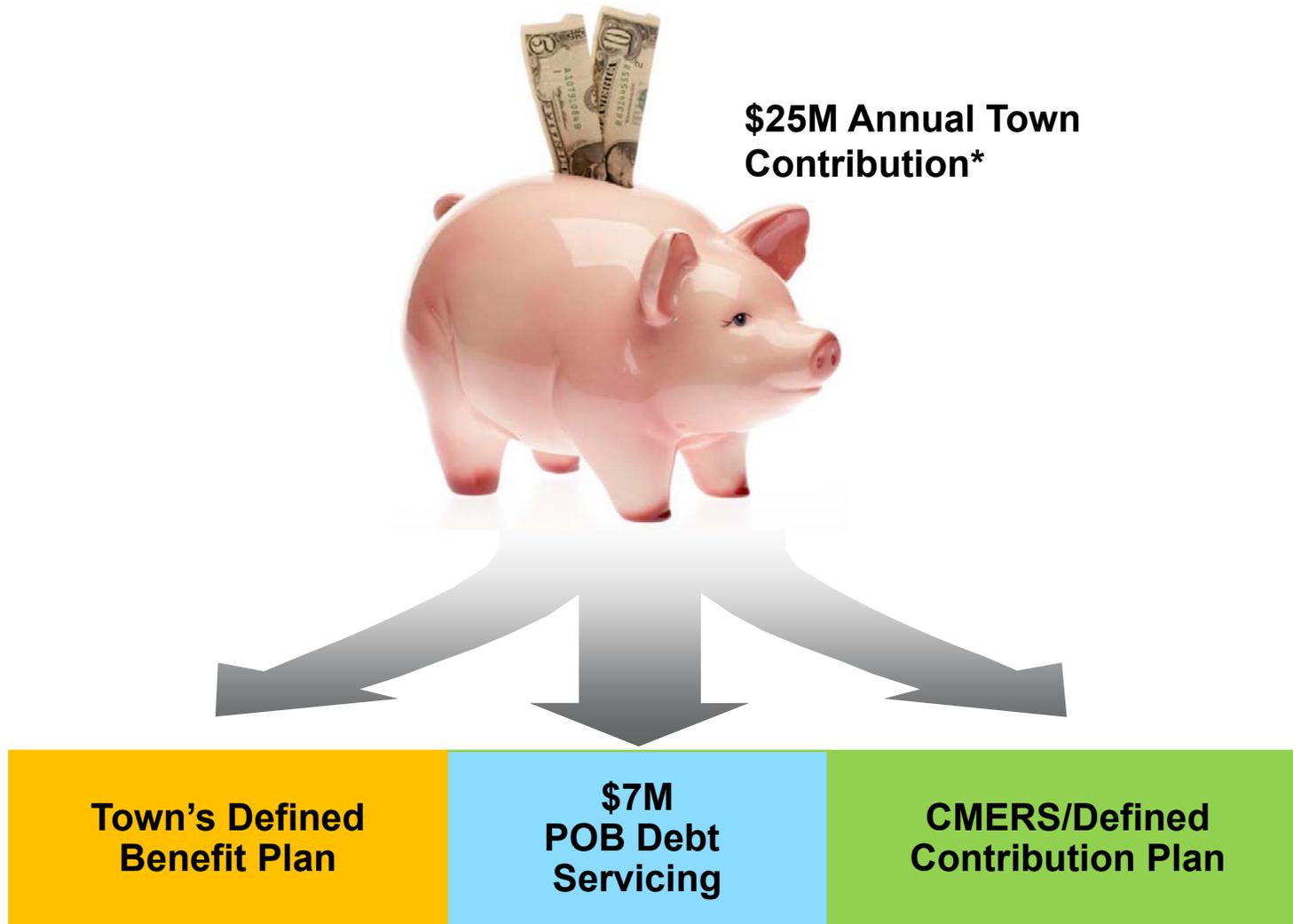
## Option 4: Inject Cash and Reduce Benefits

- The Plan will become insolvent under all options if the ARC continues to be underpaid:
  - Reducing benefits alone won't delay insolvency but will result in lower future payments;
  - Issuing a POB alone will only delay insolvency if the ARC is underpaid.
- Funding the ARC will require increased contributions:
  - Town's contribution will average about \$35M – \$40M if the Plan is not changed; or
  - About \$25M even if the Town eliminates retirement benefits for current and future employees.
- The combination of the following can achieve long-term solvency without requiring dramatic and sustained increases in Town's contributions or extreme benefit cut backs:
  - Immediate injection of cash (i.e., POB);
  - Maintain funding discipline;
  - Increase Town contributions; and
  - Reduce benefits



## Option 4: Inject Cash and Reduce Benefits

### Increase Town Contribution



\* Represents average annual contribution over 30 years; average may be higher if Town delays increase in contributions

## Option 4: Inject Cash and Reduce Benefits

### Options for Reducing Benefits

**A**

#### 1.5% Defined Benefit Plan

- Lower future DB plan accruals to 1.5%
- Lower DB Plan COLA to 1.0% for all participants
- Place all future hires into Town's DB Plan

**B**

#### Hybrid Plan (1.0% DB Plan + 3.0% DC Plan)

- Lower future DB plan accruals to 1.0%
- Establish 3.0% DC plan for all participants
- Lower DB Plan COLA to 1.0% for all participants
- Place all future hires into Hybrid Plan

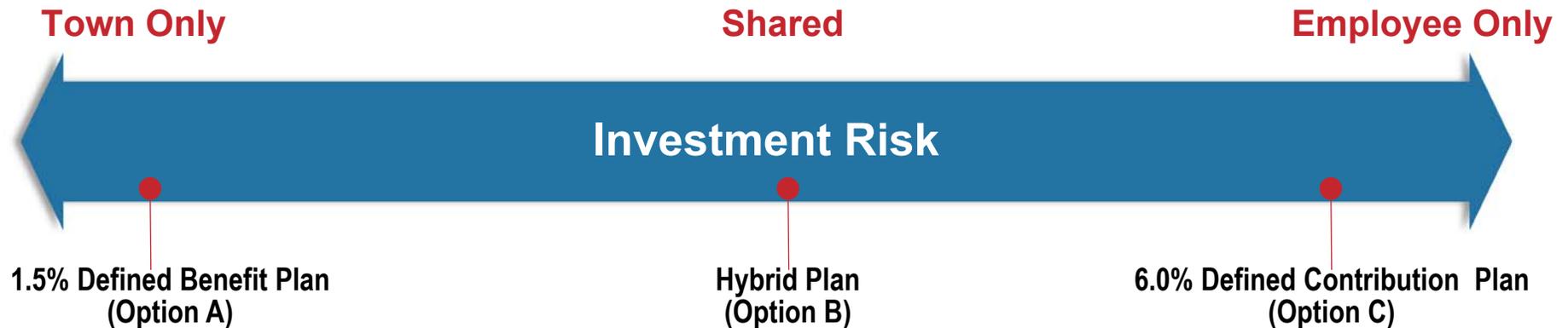
**C**

#### 6.0% DC-Only Plan (Hard Freeze DB Plan)

- Eliminate future DB plan accruals (i.e., Hard Freeze)
- Establish 6.0% DC plan for all participants
- Lower DB Plan COLA to 1.0% for all participants
- Place all future hires into DC Plan

**NOTE:** Current participants in CMERS are assumed to remain in CMERS under all options.

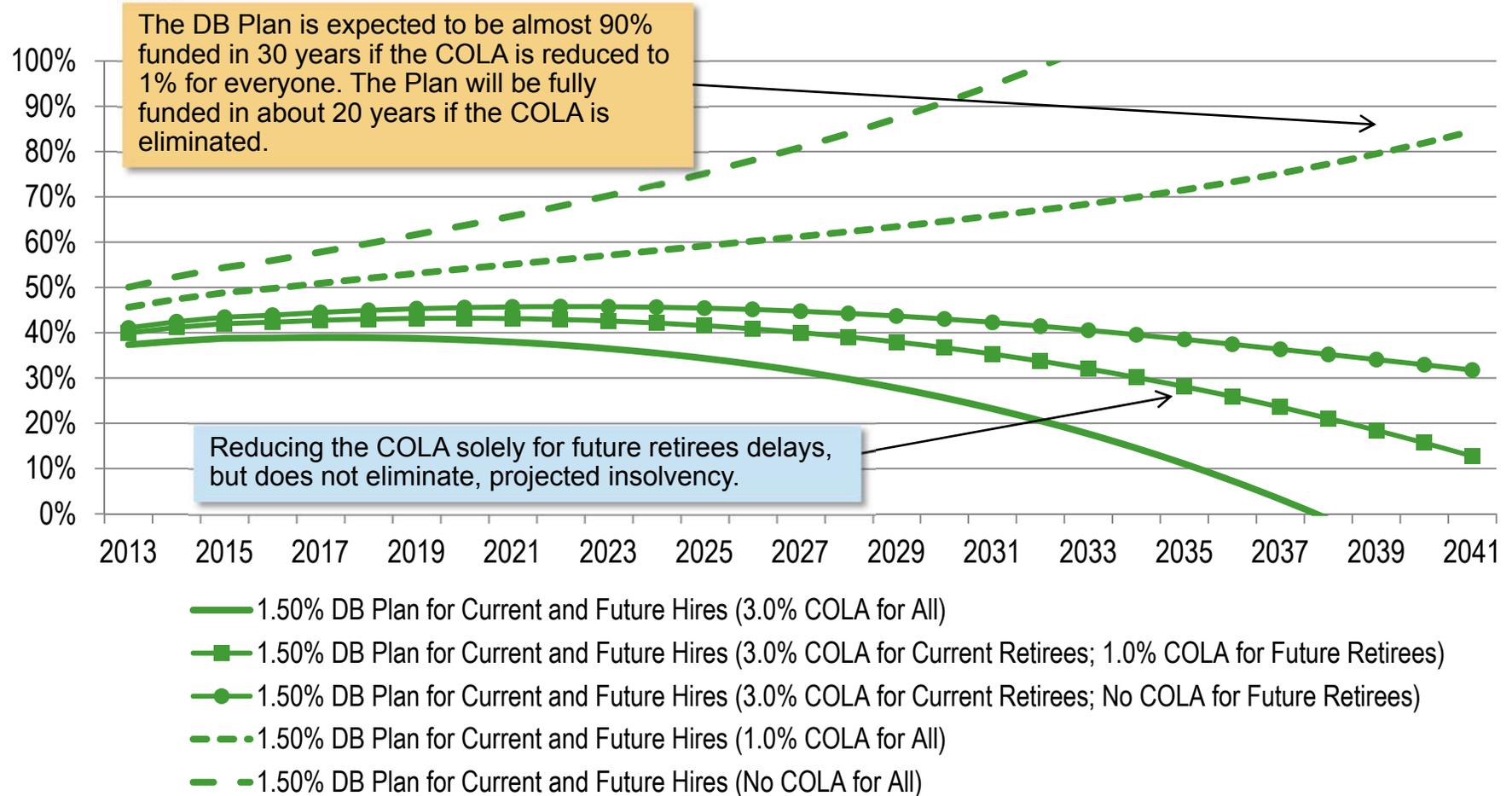
# Investment Risk of Options for Reducing Benefits



- **Under the Defined Benefit only plan (Option A) approach the investment risk traditionally lies solely with the Town:**
  - However, there are techniques the Town may use to share some of the investment risk with employees such as having variable employee contributions, capping the Town's contribution at a certain percentage of payroll or dollar amount and altering benefits if it reaches a certain level
- **Under the Hybrid plan (Option B) approach the investment risk is shared between the employee and Town:**
  - The Hybrid approach allows the Town to reward those who save more for retirement while providing floors against poor investment returns.
- **The employee has all of the risk under a Defined Contribution (DC) only approach:**
  - The DC plan is funded annually and allows the Town flexibility to increase contributions during good times or to assist employees during periods of poor investment returns.

# 1.50% Defined Benefit (DB) Plan—Funded Percentage

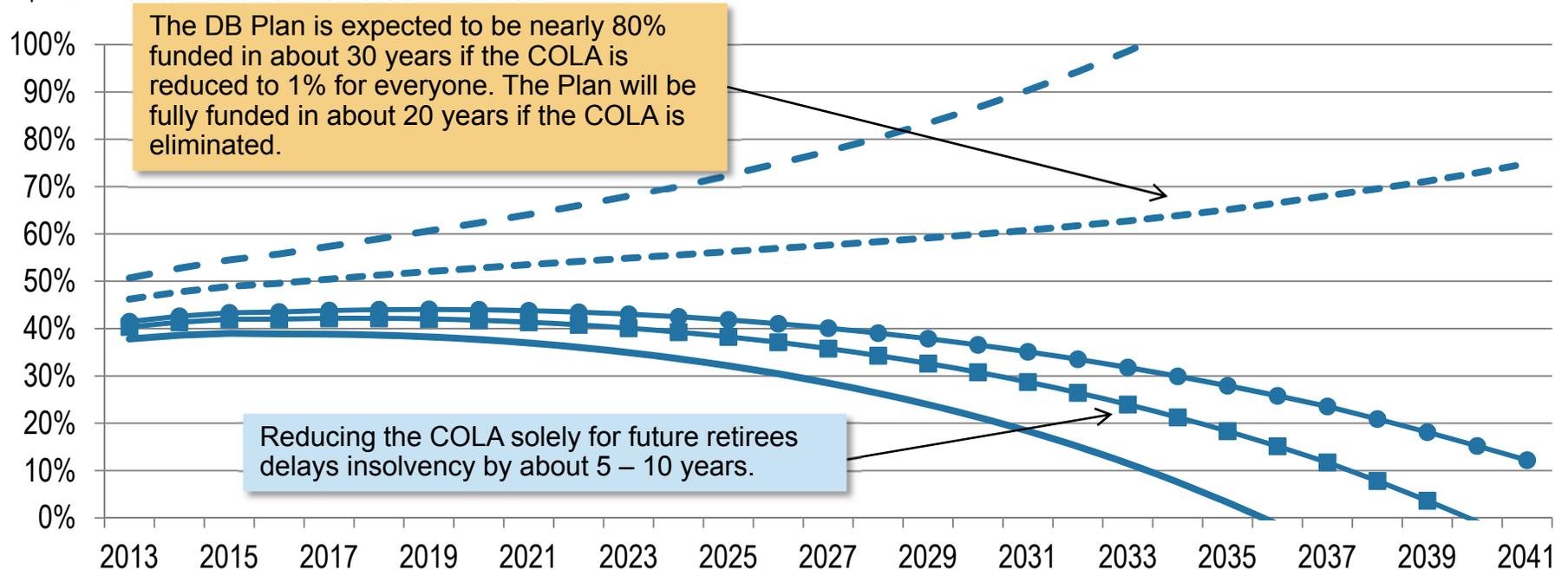
- The following graph shows the Funded Percentage under various scenarios if a Defined Benefit Plan with a multiplier of 1.50% is adopted, with an annual \$25M total retirement contribution.\*



\* Includes ~\$7M annual debt servicing for \$115M POB; also includes CMERS and DC Plan (where applicable).

# Hybrid Plan (DB + DC)—Funded Percentage

- The following graph shows the Funded Percentage under various scenarios if Hybrid Plan (1.0% Defined Benefit Plan + 3.0% Defined Contribution Plan) is adopted, with an annual \$25M total retirement contribution.\*

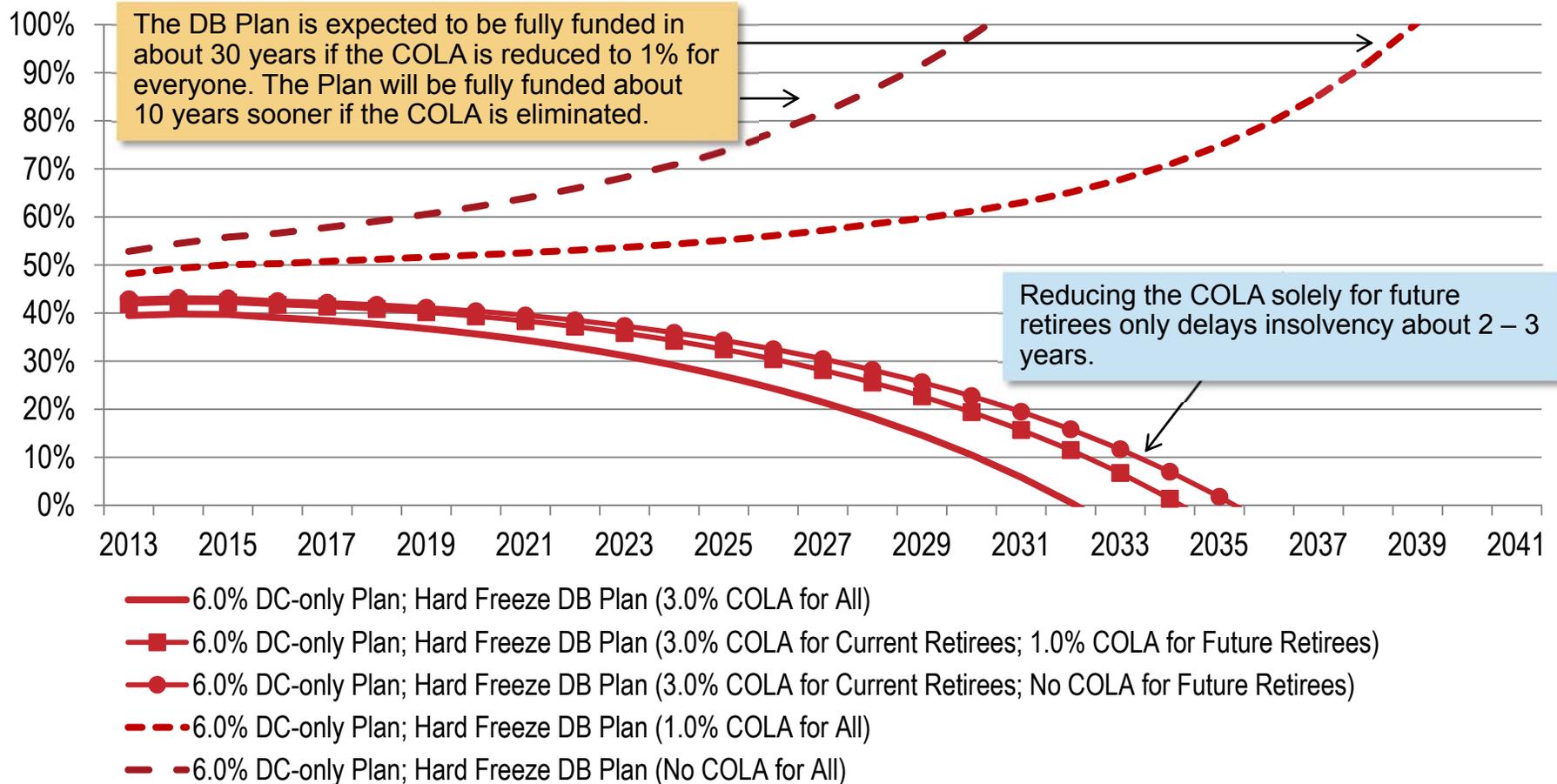


- Hybrid Plan (1.0% DB Plan + 3.0% DC Plan) for Current and Future Hires (3.0% COLA for All)
- Hybrid Plan (1.0% DB Plan + 3.0% DC Plan) for Current and Future Hires (3.0% COLA for Current Retirees; 1.0% COLA for Future Retirees)
- Hybrid Plan (1.0% DB Plan + 3.0% DC Plan) for Current and Future Hires (3.0% COLA for Current Retirees; No COLA for Future Retirees)
- - -● Hybrid Plan (1.0% DB Plan + 3.0% DC Plan) for Current and Future Hires (1.0% COLA for All)
- - -■ Hybrid Plan (1.0% DB Plan + 3.0% DC Plan) for Current and Future Hires 0.0% COLA for All)

\* Includes ~\$7M annual debt servicing for \$115M POB; also includes CMERS and DC Plan (where applicable).

## 6.0% Defined Contribution (DC) Plan—Funded Percentage

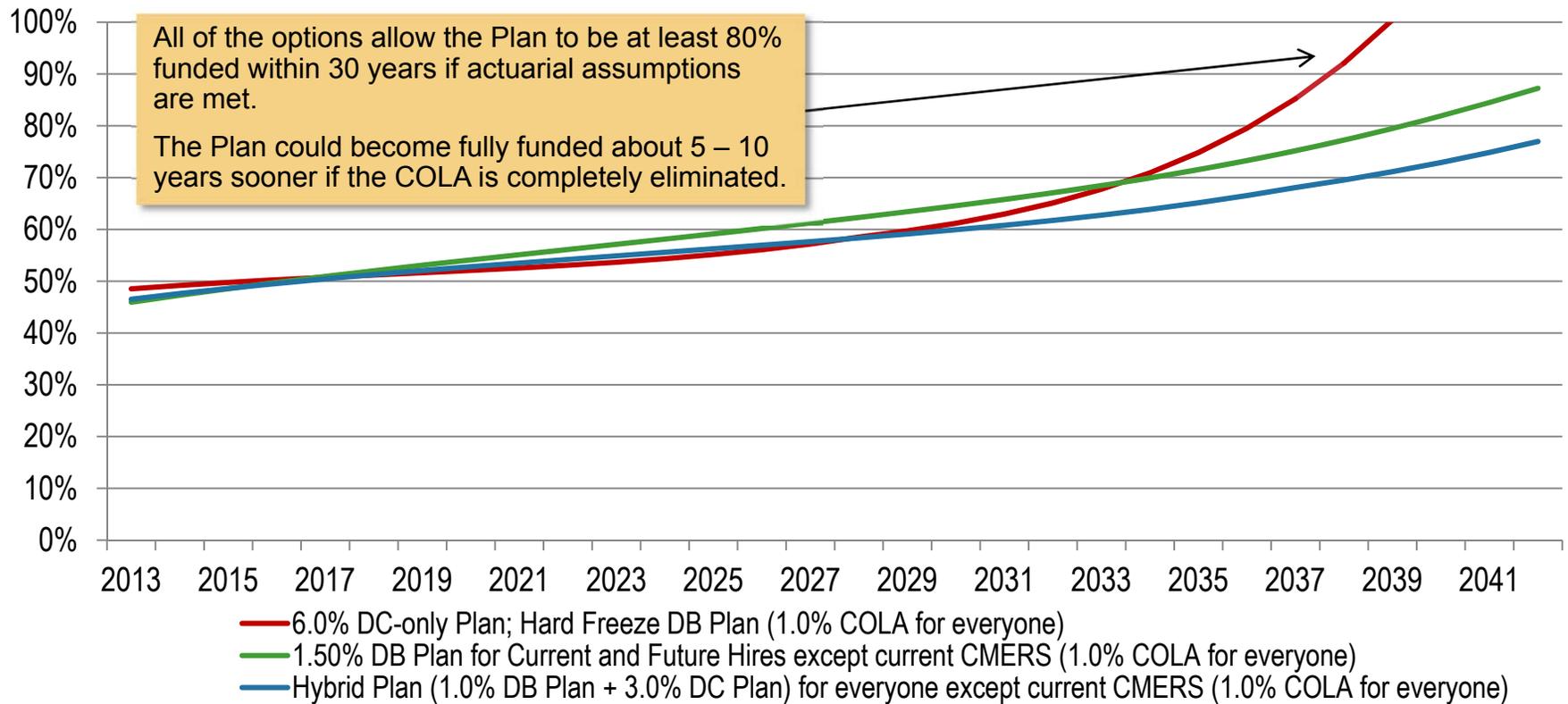
- The following graph shows the Funded Percentage under various scenarios if the Defined Benefit Plan is closed, a 6.0% Defined Contribution (DC) Plan is adopted, with an annual \$25M total retirement contribution.\*



\* Includes ~\$7M annual debt servicing for \$115M POB; also includes CMERS and DC Plan (where applicable).

## Options with 1.0% COLA—Funded Percentage

- The following graphs show the Funded Percentage under various Options if the COLA is capped at 1.0% for everyone and an annual \$25M total retirement contribution\*:
  - Reducing the COLA for future retirees only will lead to insolvency if the Town's contributions average about \$25 million annually;
  - The Town would need to increase the average annual contribution about \$5 million to get to the same funded percentages in 30 years if the COLA is only reduced for future retirees



\* Includes ~\$7M annual debt servicing for \$115M POB; also includes CMERS and DC Plan (where applicable).

# Town Funding Strategy

- The following, as provided by the Town’s Administration, details the additional resources needed over the next 6 years to achieve the average \$25M retirement contribution annually:

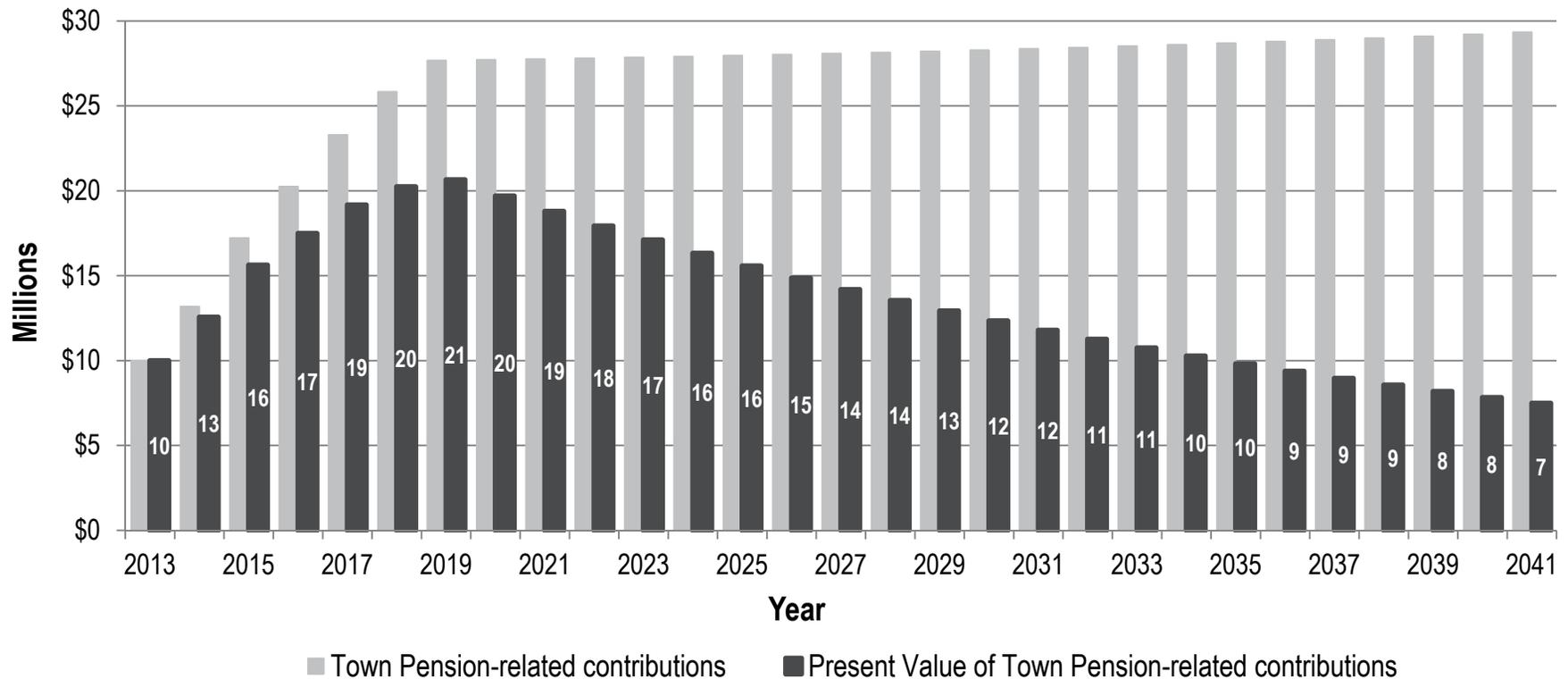
2014	<p>☐ <b>Total increase in resources from FY ‘13 = ~\$3.0M</b></p> <ul style="list-style-type: none"> <li>• Increase Town Pension contribution about \$3.0M<sup>1</sup> (from ~\$9.5M to ~\$12.5M)</li> </ul>
2015	<p>☐ <b>Total increase in resources from FY ‘14 = ~\$4.0M</b></p> <ul style="list-style-type: none"> <li>• Increase Town Pension contribution about \$1.0M<sup>1</sup> (from ~\$12.5M to ~\$13.5M)</li> <li>• Increase due to debt-servicing of POB = \$7.0M</li> <li>• Decrease due to savings from debt restructuring = \$4.0M<sup>2</sup></li> </ul>
2016	<p>☐ <b>Total increase in resources from FY ‘15 = ~\$3.0M</b></p> <ul style="list-style-type: none"> <li>• Increase Town Pension contribution about \$1.0M<sup>1</sup> (from ~\$13.5M to ~\$14.5M)</li> <li>• Increase due to <u>less</u> savings from debt restructuring = \$2.0M<sup>2</sup></li> </ul>
2017	<p>☐ <b>Total increase in resources from FY ‘16 = ~\$3.0M</b></p> <ul style="list-style-type: none"> <li>• Increase Town Pension contribution about \$1.0M<sup>1</sup> (from ~\$14.5M to ~\$15.5M)</li> <li>• Increase due to <u>end_of</u> savings from debt restructuring = \$2.0M<sup>2</sup></li> </ul>
2018	<p>☐ <b>Total increase in resources from FY ‘17 = ~\$2.5M</b></p> <ul style="list-style-type: none"> <li>• Increase Town Pension contribution about \$2.5M<sup>1</sup> (from ~\$15.5M to ~\$18.0M)</li> </ul>
2019	<p>☐ <b>Total increase in resources from FY ‘18 = ~\$2.0M</b></p> <ul style="list-style-type: none"> <li>• Increase Town Pension contribution about \$2.0M<sup>1</sup> (from ~\$18.0M to ~\$20.0M)</li> </ul>

<sup>1</sup> Defined Benefit/Defined Contribution Plan only; does not include CMERS or debt servicing.

<sup>2</sup> As provided by Town’s Financial Consultant.

# Value in Today's Dollars of Future Pension Contributions

- The following shows the nominal value, and value in today's dollar (i.e., Present Value), of future Town pension contributions.\*
  - Value of today's dollars (i.e., Present Value) based on 5.0% cost of capital or borrowing rate.
  - Total Town payments over the next 30 years total about \$800M on a nominal basis but about \$400M on a present value basis (assuming 5.0% cost of capital)



\* Includes ~\$7M annual debt servicing for \$115M POB; also includes CMERS and DC Plan (where applicable).

# Plan Design Consideration

## Specific questions to be answered

- **What long-term cost is desired/affordable to the Town?**
  - Level or increasing (i.e., level percentage of payroll or budget) payment pattern?
  - How much volatility can the Town withstand?
- **Where do the risks (mainly investment) lie?**
  - Town assumes majority of risk?
  - Shared risk between Town and employees?
  - Employees assume majority of risk?
- **Who will be impacted by changes and to what degree?**
  - Future hires only?
  - Future service for current employees?
  - Current retirees?
- **What are the legal constraints?**
  - Consider only plan changes that will not result in litigation?
  - What's the Town's appetite regarding litigation?
- **What's the desired level of retirement benefits?**
  - Percentage of pre-retirement income targeted to career employees?
  - What level of benefits will attract new employees and retain current employees?





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# Questions



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## Glossary of Terms

<b>Actuarial Accrued Liability (AAL)</b>	The portion of the Present Value of Projected Benefits (PVB) that has been accrued (or earned) to date. AAL is also expressed as difference between PVB and actuarial present value of future normal costs, or the accumulated normal costs attributable to the years before the valuation date.
<b>Annual Required Contribution (ARC)</b>	Sum of Normal Cost (NC) and amortization of Unfunded Actuarial Accrued Liability (UAAL). This is the amount actuarially determined to ensure that, if paid on an ongoing basis, there will be sufficient resources available for future benefit payments.
<b>Normal Cost (NC)</b>	Represents portion of PVB allocated to the current year by the funding method.
<b>Present Value of Projected Benefits (PVB)</b>	Present value of all future benefit payments for current retirees and active employees, taking into account actuarial assumptions including discount rate, salary increases, turnover, mortality, disability, retirement and other experience.
<b>Unfunded Actuarial Accrued Liability (UAAL)</b>	The difference between the Actuarial Accrued Liability and the Actuarial Value of Assets.

# Overview of Retirement Plans Risk

## ➤ **Investment Risk: Rate of return on assets**

- In DB plans, the employer bears most of the investment risk
- In DC plans, the employee bears most of the investment risk

## ➤ **Inflation Risk: Cost of living before and after retirement**

- In DB plans, benefit based on final average salary resulting in limited cost-of-living risk
- In public sector DB plans, typically some form of post-retirement benefit increase is provided, so retirees have protection against inflation
- In DC plans, inflation protection is not provided

## ➤ **Contribution Risk: Level and volatility of annual contributions**

- In DB plans, employer bears most of this risk
  - If investment returns are poor, employers may need to make additional contributions
- In DC plans, contributions are a percentage of salary
  - If investment returns are poor, employees may need to make additional contributions

## ➤ **Longevity Risk: Outliving retirement assets**

- In DB plans, benefits paid as life annuity, so employer bears the risk
- In DC plans, benefits based on account balance, so employee bears the risk

# Risk of Various Retirement Plans

	Defined Benefit								Defined Contribution	
	Final Average		Career Average		Flat Dollar		Hybrid		401(a), 401(k), 403(b)	
	Employer	Employee	Employer	Employee	Employer	Employee	Employer	Employee	Employer	Employee
<b>Economic Risks</b>										
Investment Risk	4	1	4	1	4	1	3	2	0	4
Inflation Risk	3	2	1	3	0	4	2	2	1	3
Contribution Risk	4	1	4	1	3	1	3	1	1	1
Longevity Risk	4	0	4	0	4	0	3	2	0	4
<b>Non-Economic Risks</b>										
Accounting Risk	3	0	3	0	3	0	3	0	0	0
<b>Features</b>										
Rewards older/longer service employees	3		3		4		2		1	
Planning Tool	2		2		2		1		1	
Hiring Attractiveness	2		2		2		3		3	

Risks	Features
0 None	Not applicable
1 Low	Minor importance
2 Somewhat low	Somewhat minor importance
3 Somewhat high	Relatively important
4 High	Very Important

## Projection Disclosure

**These projections are to be used solely for the purpose of comparing alternative designs. These projections and are not applicable for other purposes.**

- Note that projections, by their nature, are not a guarantee of future results.
- The modeling of alternatives are intended to serve as estimates of future financial outcomes that are based on the information available at the time the modeling is undertaken, and the agreed-upon assumptions and methodologies described herein.
- Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used.
- Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

# Projection Assumptions and Methods

<b>Projection Methodology</b>	Based on July 1, 2012 census data and market value of assets, projected forward assuming all economic and demographic assumptions met
<b>Participant Data</b>	As of July 1, 2012 for DB Plan; Estimated from September 2011 for CMERS
<b>Discount Rate</b>	7.00% (unless specifically stated)
<b>Annual Investment Return</b>	7.00% (unless specifically stated)
<b>Salary Increases</b>	2.50% (unless specifically stated)
<b>Market Value of Assets</b>	\$57.9M as of July 1, 2012, before \$115M POB
<b>Actuarial Value of Assets</b>	5-year smoothing of investment gains/losses
<b>Demographic Assumptions</b>	Per July 1, 2012 valuation
<b>Funding Method</b>	Entry Age Normal
<b>Employee Contribution</b>	8.00% of pay for Guardians, increasing to 8.50% on 7/1/2013; 6.50% of pay for Service, increasing to 7.00% on 7/1/2013, 7.50% on 7/1/2014, 7.75% on 7/1/2015 and 8.00% on 7/1/2016
<b>Employer Contribution</b>	Residual amount to meet annual required contribution unless specifically stated; based on closed 30-year, 2% level-percent amortization of the UAL
<b>Administrative Expenses</b>	\$0.1M for 2012 – 2013 year; increasing 3.0% annually

\* See *Appendices* for detailed assumptions.

## Overview of Pension Obligation Bonds

- From a purely financial perspective, issuing pension obligation bonds can produce savings if the interest rate paid on the bonds (i.e., 5.35%) is less than the rate of return (i.e., 7.00% assumed) earned on proceeds placed in the pension plan.
- However, the Town must be aware of the risks involved with these instruments and have the ability to manage these risks.
- Even if the analysis indicates that financial benefits appear to outweigh the risks, the Town should evaluate other issues that may arise if the bonds are issued, such as:
  - The loss of flexibility in difficult economic times because of the need to make timely payments of principal and interest in order not to default on the bonds,
  - Potential misunderstanding by policy makers regarding the possibility that an unfunded liability may reappear in the future, and
  - Potential pressures for additional benefits by government employees if plans are fully funded and the Town's contribution has declined relative to neighboring jurisdictions.



# Pension Obligation Bond Considerations

- According to the Government Finance Officers Association (GFOA), the Town should consider the following before issuing the bonds:
  - **Disclosure:** Adequate disclosure of the fact that even if bonds are sold, the Town will still face an unfunded liability in the future.
  - Issuing POBs converts a liability that may not be fully reported on the face of the financial statements (i.e., the unfunded actuarial accrued liability) into a liability that is reported on the face of the financial statements (i.e., bonds payable).
  - **Debt Servicing:** POBs should be structured in a manner that does not defer principal payments or does not have a maturity that is in excess of the current unfunded actuarial accrued liability amortization period.
  - **Asset Allocation:** The Plan's ability to adequately incorporate a much larger contribution into the system without adversely affecting the system's asset allocation should be considered.
  - **Opportunity Cost:** Issuance of debt to fund pension liability increases debt burden and may use up debt capacity that could be used for other purposes.



# Trends—Plan Changes

		State	Change	
<b>Contribution Rate Changes</b>	Employer New Hires	CA, HI, IA, KS, LA, MN, ND, NJ, NM	<ul style="list-style-type: none"> <li>• Raise all contribution rates</li> <li>• Reinstate higher contributions based on funding levels or investment returns</li> </ul>	<ul style="list-style-type: none"> <li>• Lower employer contribution rates</li> <li>• Mandate employee contributions</li> <li>• Prohibit “pick-up” of employee contributions</li> </ul>
	Employee New Hires	FL, DE, HI, IA, LA, MN, MO, MS, MT, VT, WY		
	ALL EE	AL, AZ, CO, DE, FL, KS, MD, NE, NH, NJ, ND, NM, OH, TX, VA, VT, WI		
	ALL ER (+)	HI, NE		
	ALL ER (-)	AL, AR, CO, FL, NM, ND, OH, TX, VT		
<b>COLA</b>	New Hires	CT, HI, FL, IL, MD, MI, MS, KS, OK, UT	<ul style="list-style-type: none"> <li>• Suspension tied to funding or CPI</li> <li>• Suspension tied to funding percentage or investment returns</li> <li>• Elimination tied to benefit amount</li> </ul>	<ul style="list-style-type: none"> <li>• Freeze based on service accrual date</li> <li>• Delay start</li> <li>• Retirement after a date certain</li> <li>• Apply to non-vested</li> </ul>
	Actives	AZ, CT, FL, KS, MD, MS, VA		
	Retirees	CO, ME, MN, NJ, RI, SD		
<b>Sponsor Contribution Rules</b>		IA, LA, MD, NJ, VA, VT	<ul style="list-style-type: none"> <li>• Additional contributions to ARC</li> <li>• Require ARC</li> </ul>	<ul style="list-style-type: none"> <li>• Earmark pension savings to pay down unfunded liability</li> <li>• Require payment of the ARC</li> </ul>
<b>Anti-Spiking</b>	New Hires	AZ, DE, FL, CO, CT, IA, IL, LA, MT,	<ul style="list-style-type: none"> <li>• Limits pensionable compensation</li> <li>• Longer FAS period</li> </ul>	<ul style="list-style-type: none"> <li>• Longer vesting period</li> <li>• Cap compensation growth in FAS period</li> <li>• Cap on benefit percent or dollar amount</li> </ul>
	Actives	NH, NJ, NC, MD, VA, WV		
<b>Multiplier</b>	New Hires	GA, HI, MD, MS, MT, NH, NJ, KS	<ul style="list-style-type: none"> <li>• Lower multiplier</li> <li>• Rolling rate based on service</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce longevity multiplier or period</li> <li>• Apply to non-vested</li> </ul>
	Actives	KS, VA, VT		
<b>Retirement Eligibility</b>	New Hires	AZ, CT, DE, FL, HI, IL, MN, MO, MS, MT, NH, NJ, NC, ND, OK, WV, WI	<ul style="list-style-type: none"> <li>• Raise service requirements</li> <li>• Longer vesting period</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate combined age/service rule</li> <li>• Increase combined age/service rule</li> </ul>
	Actives	AZ, CO, CT, TX		
<b>Retirement Age</b>	New Hires	DE, HI, ME, MO, NH, ND, OK	<ul style="list-style-type: none"> <li>• Raise normal retirement age</li> <li>• Apply to non-vested</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate with social security normal retirement age</li> </ul>
	Actives	AZ, CO, ME, VA, VT		
<b>Re-employment</b>		AZ, AK, CO, GA, IL, MD, ME, MI, MS, NM, SD, UT	<ul style="list-style-type: none"> <li>• Eliminate service accrual after rehire</li> <li>• Limit compensation</li> </ul>	<ul style="list-style-type: none"> <li>• Suspend pension and health benefits based on earnings after rehire</li> <li>• Require full contribution</li> </ul>
<b>Hybrid</b>	New Hires	GA, IN, KS, LA, MI, UT, VA	<ul style="list-style-type: none"> <li>• Combine a lower multiplier DB plan with a DC account</li> </ul>	<ul style="list-style-type: none"> <li>• Choice of Defined Benefit, Hybrid or Defined Contribution</li> </ul>
	Actives	LA, RI,		
<b>Defined Contribution</b>	New Hires	NJ, UT	<ul style="list-style-type: none"> <li>• Part-time workers</li> </ul>	<ul style="list-style-type: none"> <li>• Optional</li> </ul>

Sources: National Media Reports, National Conference of State Legislatures, May 2011 and September 2011