

# Town of Simsbury <br> Overview of Retirement Plans Cost-Benefit Analysis 

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## Outline of Presentation

> Retirement Plan Basics
$>$ Town of Simsbury Retirement Plans
$>$ Impact of Unfunded Liabilities
> Options for Moving Forward
> Questions \& Answers

## Retirement Plan Basics

> Two basic retirement plan types: Defined Contribution and Defined Benefit.

## > Defined Contribution:

> Fixed \% of pay (employer/employee contribution) into employee account.
> Employee's account grows with investment earnings.
> The benefit received at retirement is the balance in the account.
> Employer liability is annual fixed \% of pay contributed during employment. No liability after retirement.

## Defined Benefit:

> Lifetime benefit paid at retirement, typically based on formula including:

- A \% (called a benefit multiplier);
- Years of service at retirement; and
- Average pay at retirement
- Example: 2\% times years of service times average high 5-year pay


## Retirement Plan Basics

## Defined Benefit (continued):

> Employee pays a fixed \% of salary into the plan during employment
$>$ Employer makes an "annual required contribution (ARC)" into the plan
$>$ Since the employer is providing a lifetime benefit payment based on a fixed formula, investment earnings have no impact on the benefit but instead are used to "pay for" the benefit. So investment earnings reduce the amount paid by the employer.

## Retirement Plan Basics

Defined Benefit (continued):

Example: Jane Smith
$>$ Hired at age 40
> Works for 25 years and retires at age 65
> Pay increases 3\% per year throughout her career
$>$ Average high pay at retirement is $\$ 48,000$
> Lives to age 85
$>$ Her benefit:
$2 \%$ benefit multiplier X 25 years $X \$ 48,000=\$ 24,000$ per year or $\$ 2,000$ a month

## Retirement Plan Basics

## Employer Contribution Scenarios (see graph next slide):

Pay As You Go - If the employer does not set aside money in advance of the benefit payments then there are no investment earnings to reduce the employer's cost. In this example the total employer cost would be $\$ 480,000$ ( $\$ 24,000 \times 20$ years).

Funded Over Employees' Career - If the employer funds the benefit by setting aside a level \% of pay for each year of employment then the appropriate contribution amount depends on the level of investment earnings. For example:
> If the pension fund were to earn $5 \%$ for all 45 years ( 25 employment, 20 retirement) then investment earnings would cover about $65 \%$ of the total cost and the employer would pay the other $35 \%(\sim \$ 168,000)$ or $18.5 \%$ of pay per year.
> If the investment earnings were $7.75 \%$, the \% "paid by" investment returns increases to $80 \%$ with the employer paying $20 \%(\sim \$ 96,000)$ or $10.5 \%$ of pay per year.

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## Retirement Plan Basics

Employer Contribution Scenarios


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## Town of Simsbury's Retirement Plans

> The Town sponsors three separate Defined Benefit retirement plans for General Government, Police and Board of Education (BOE) employees.
> These three plans cover over 300 active employees with approximately $\$ 16.1$ million in payroll and roughly 200 retirees receiving benefits.
> The benefit levels for the plans are competitive with comparable plans offered by other Connecticut municipalities with the exception of employee contributions that are very low for the level of benefit provided ( $2 \%$ multiplier).
> Random sample of 11 municipalities with 2\% multiplier yielded an average 4.54\% employee contribution rate for Town employees compared to $2 \%$ for comparable Simsbury employees.
> These figures exclude Police employees who typically pay a higher \% of pay (7-10\%) because their benefits are payable much sooner (i.e. 20 years of service) and often also have a higher benefit multiplier (i.e. 2.5\%).
> The Town has historically funded 100\% the Annual Required Contribution (ARC) calculated in accordance with the applicable GASB standards.

## Town of Simsbury's Retirement Plans

## What is the ARC \& how is it calculated?

> The Annual Required Contribution or ARC is an actuarial calculation used to estimate for budget purposes the amount that should be paid into the pension funds for each plan for a fiscal year.
$>$ The ARC is calculated in advance of the budget year. So the 2011 Actuarial Valuation determines the ARC for the 2012-2013 budget.
> The ARC calculation includes two pieces:

- A payment for current benefit accruals (referred to as the "normal cost") plus
- An amortization payment of the unfunded actuarial accrued liability. This is the payment for any unfunded prior benefit accruals ("normal costs").

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## Town of Simsbury's Retirement Plans

## What do the Simsbury's plans "cost"?

$>$ Recently published July 1, 2011 Actuarial Valuations calculated combined ARCs of about $\$ 2.2$ million for 2012-2013 or roughly $13.6 \%$ of the estimated $\$ 16.1$ million payroll.
$>$ Those valuations calculated the combined unfunded liability to be $\$ 13.4$ million.
$>$ The portion of the ARC that is the payment on unfunded liability is $\$ 860,000$.
$>$ The sum of the current benefit accruals (normal costs) is $\$ 1.34$ million or about $8.1 \%$ of payroll - assuming a $7.75 \%$ investment return.
$>$ The "cost" of benefit accruals depends on what will be earned in investment returns.
$>$ The approximate \% of payroll cost of the benefit accruals under two different return on investment assumptions are shown below:

|  | Assuming 7.75\% Investment Returns |  |  | Assuming 7.25\% Investment Returns |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Employee \% | Town \% | Total | Employee \% | Town \% |
| Police - | 18.50\% | 6.36\% | 12.14\% | 20.50\% | 6.36\% | 14.14\% |
| All Others - | 9.75\% | 2.25\% | 7.50\% | 10.75\% | 2.25\% | 8.50\% |

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## Impact of Unfunded Liabilities

$>$ There are significant risks inherent in an asset portfolio designed to achieve an average return of $7.75 \%$ over the long term.
$>$ Those risks involve the possibility of returns both significantly above $7.75 \%$ ( $20 \%$ \& higher) and returns significantly below (-4\% \& lower).
> Actual investment return less than assumed investment return can create unfunded liabilities that will increase future contributions, if there are not offsetting excess returns in later years.
> Graph on following page shows the potential outcomes with the current asset allocation of future combined ARCs.
> Probable results for the 2031 Valuation Year (ARC for 2032-2033 budget year) range from $\$ 600,000$ to $\$ 5.6$ million with a expected value of $\$ 3.4$ million.
> Change in methods and/or assumptions that increase contributions will lower the range of future ARCs (see Exhibits 3 \& 4 of report).

## Impact of Unfunded Liabilities

Combined Plan - Baseline Scenario 1 -w/ New Entrants (5a + 6a + 7a)
Employer Contribution (thousands)


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## Impact of Unfunded Liabilities

> Combined unfunded liability is estimated to increase to $\$ 15$ million as of July 1, 2012, based on the assumptions in the study.

Estimated ARC for 2013-2014 (as shown on graph) is $\$ 2.59$ million - increase of $\$ 300,000+$ from current budget (2012-2013). Includes a $\$ 1.59$ million "normal cost" and a $\$ 1.0$ million payment on the unfunded liability.
> Total "normal cost" before employee contribution is about $\$ 2.06$ million and employees are expected to pay about $\$ 0.47$ million or $22.8 \%$ of the total normal cost (current accruals) and about $15.4 \%$ of the total ARC.
$>$ Current ARC calculation method uses a payment of the unfunded liabilities that does not cover the interest on the unfunded liabilities ( $7.75 \% \times \$ 15$ million = $\$ 1.16$ million vs. $\$ 1.0$ million payment in ARC calculation described above)
>2013-2014 ARCs increase to $\mathbf{\$ 2 . 7 5}$ million if the interest on unfunded liability was paid.
> If the Town adopted a policy to pay off unfunded liabilities over 20 years the combined 2013-2014 ARCs increase to $\$ 2.98$ million and $\$ 3.64$ million if the period is 10 years.

## Options for Moving Forward

> Due to the sizable volatility in future contributions shown in the study, a plan of action is needed to address both the unfunded accrued liability and the cost of current benefit accruals.
$>$ The Town should determine an acceptable time frame for paying down the unfunded liability. The payment should be set with the 2012 valuation and paid down on a level dollar basis over a fixed time period (15, 20, 25 years, etc.).
> Budget concerns may require a phase-in to the final amortization period (i.e. 20 down to 15).
> Town should also consider an actuarial experience study to ensure actuarial assumptions reflect recent experience, particularly with regard to salary increases and rates of retirement.
> Investment return assumption should also be reviewed in conjunction with the plan's investment advisors.
> Updated assumptions will assist in providing the best estimate of the cost of current benefit accruals.

## Options for Moving Forward

>There is no easy answer to reducing the cost of benefit accruals. Benefits must either be reduced or the share of benefits paid by employee must be increased.
> Since the town pays $100 \%$ of payment on the unfunded liability, many towns target a 50/50 cost-share for the cost of prospective benefit accruals (normal cost) as an equitable plan design goal. Town pays $70 \%$ to $80 \%$ of total cost depending on size of unfunded liability.
> For example, the total cost of accruals for the "All Other" group of Simsbury employees is roughly $10 \%$ of pay (recall actual cost depends on investment returns) so employees would need to pay $5 \%$ of pay (vs. $2 \%$ ) to achieve a $50 / 50$ cost share of prospective accruals.
>The increases could be phased-in over several years to smooth the impact.
$>$ The 50/50 result could also be achieved through a combination of reductions in the benefit multiplier for prospective service ( $1.5 \%$ vs. $2.0 \%$ for service after $7 / 1 / 2012$ ) with smaller increase in employee contributions.

All Defined Benefit design solutions include the possibility of future unfunded liability for the Town. Only a move to a Defined Contribution design eventually eliminates future investment risk for the Town.


## and answers ...


[^0]:    H\&Y HOOKER \& HOLCOMBE, INC.

[^1]:    H\&I HOOKER \& HOLCOMBE, INC.

[^2]:    H\&H HOOKER \& HOLCOMBE, INC.

