# City of Knoxville Pension System 

## What Now?

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Today's presentation will review other governmental response and review some possible responses by the Pension Board.

BPS\&M

## City of Knoxville Pension System

## Possible Next Steps:

1. Accept $7 / 1 / 2009$ valuation results
2. See further projections regarding asset smoothing method and/or amortization periods
3. Review plan objectives/benefits
4. Study bond issue more closely
5. Consider further how to manage inactive liability/ LDI
6. Review Investment Policy
7. Consider proposal for expense study/fiduciary review
8. Experience Study 2010

## City of Knoxville Pension System

2009 Funding Requirement (\$) Effective 7/1/2010

| Required Contribution | $\$$ |  | \% Pay |
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| Board of Education | $\$$ | 0.26 M | $\mathrm{n} / \mathrm{a}$ |
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| Uniformed Bodies | $\$$ | 5.49 M | $18.57 \%$ |

## City of Knoxville Pension System

How can we manage the pension cost?
By changing:

- Timing of contributions
- Benefit structure
- Employee contributions
- Investment Strategy


## City of Knoxville Pension System

Define long-term goals for retirement program

- Benefit Structure/ Target Costs
- Impact of Inactive versus Active Liability
- Investment Policy
- Employee Contributions

Develop and implement a plan methodically over next 10 to 20 years

## City of Knoxville Pension System

## Presentation Overview

> What are other governmental plans doing?
> What are biggest current issues?
> Current benefit structure
> Managing cash flow through asset smoothing and amortization periods
> Other options to consider (bond issue, annuity purchase, fiduciary review)

## What are Others Doing?

New York State

Facing an unprecedented increase in pension costs.
Costs could triple within six years.

It's alarming, eye-popping and unthinkable.

- NY Times July 8, 2009


## What are Other Systems Doing?

Washington State

Some plans are at risk of exhausting their assets.

- State Actuary, NASRA October 7, 2009


## What are Other Systems Doing?

New Mexico

Implemented 1.5\% Employee Contribution.
Now 57,000 Employees are suing the state.

- Washington Post, October 11, 2009


## What are Other Systems Doing?

Boston, MA

Revised disability benefit and definition of average earnings.
Police and Firefighters are suing the city.

- NASRA July 8, 2009


## What are Other Systems Doing?

Rhode Island

Proposed benefit cutbacks for new and existing employees.
Unions are fighting the proposals.

- Providence Journal, March 16, 2009


## What are Other Systems Doing?

Colorado PERS

Recommended Changes to Vesting, COLAs, funding, etc. Includes:
Cap COLAs at 2\%
Cap is increased when funding over $110 \%$
Cap is decreased when funding under $90 \%$
Increasing funding by 2\% by decreasing raises

- www.copera.org, October 16, 2009


## What are Other Systems Doing?

## Philadelphia, PA

Taking two year funding holiday.
Alternative was to lay off 3,000 employees.

- Washington Post, October 11, 2009


## What are Other Systems Doing?

Ohio

State Employees Union agrees to furloughs and no pay raises for three years.

- NASRA, April 1, 2009


## What are Other Systems Doing?

Tennessee Consolidated Retirement System

Adjusting asset smoothing assumptions and amortization periods to manage cash flow.
May lower COLA assumption to $2.5 \%$.
No benefit changes currently being considered.

- BPSM


## What are Other Systems Doing?

Torrence, CT

Implementing DC plan for new hires.

- NASRA, October 7, 2009


## What are Other Systems Doing?

City of Murfreesboro, TN

Implementing DC plan for new hires effective 7/1/2010.

- BPSM


## What are Other Systems Doing?

Orange County, CA

To offer choice of DB or DB/DC hybrid.

- Orange County Register, October 12, 2009


## What are Other Systems Doing?

States and DC plans

Alaska to move back to DB (DC in 2006)
Michigan is only state with $D C$ for new hires
Oregon and Indiana have hybrid DB/DC plans
Eight states have a choice of DB or DC
(Florida, Washington, Ohio, Montana, North
Dakota, Colorado, South Carolina and Vermont )

- NASRA, April 1, 2009


## What are Other Systems Doing?

State of Louisiana

To study DC option for the state retirement system

- The Advocate (Baton Rouge), October 16, 2009


## What are Other Systems Doing?

North Carolina

Created retirement commission to study and make recommendations for retirement benefits of new state and local government employees

- NASRA, October 16, 2009


## What are Other Systems Doing?

Pension Bond Issues
\$3.46B State of Illinois
\$402.8M City of Houston
\$400M Milwaukee County

- Pensions and Investments, July 27, 2009


## What can the Pension Board Do?

Recognize the Issues
Issue 1 - Smoothed Assets Exceed Market Value by \$150M

|  | $7 / 1 / 2009$ | $7 / 1 / 2008$ |
| :--- | :---: | :---: |
| Smoothed Asset Value | $\$ 523 \mathrm{M}$ | $\$ 525 \mathrm{M}$ |
| Market Value of Assets | $\$ 373 \mathrm{M}$ | $\$ 492 \mathrm{M}$ |
| Shortfall <br> (unrecognized losses) | $\$ 150 \mathrm{M}$ | $\$ 33 \mathrm{M}$ |

## What can the Pension Board Do?

Recognize the Issues
Issue 2 - Liabilities Exceed Assets by \$189M

|  | $7 / 1 / 2009$ | $7 / 1 / 2008$ |
| :--- | :---: | :---: |
| Accrued Liability | $\$ 562 \mathrm{M}$ | $\$ 545 \mathrm{M}$ |
| Market Value of Assets | $\$ 373 \mathrm{M}$ | $\$ 492 \mathrm{M}$ |
| Shortfall <br> (unfunded liability) | $\$ 189 \mathrm{M}$ | $\$ 53 \mathrm{M}$ |

## What can the Pension Board Do?

## Recognize the Issues

Issue 3 - How much will it take to pay off shortfall?
How much is the short fall?
Is it $\$ 189 \mathrm{M}$ or $\$ 150 \mathrm{M}$ ?

How much (if any) will future asset gains cover shortfall?
A 1-year return of $50 \%$ or a 5 -year average of $14 \%$ would produce about $\$ 150 \mathrm{M}$ in gains.

## What can the Pension Board Do?

## Recognize the Issues

Issue 3 - How much will it take to pay off shortfall?
Assume unfunded liability of $\$ 189 \mathrm{M}$ and $\$ 89 \mathrm{M}$ in excess asset gains in the next 5 years For a net shortfall of $\$ 100 \mathrm{M}$.

## What can the Pension Board Do?

## Recognize the Issues

Issue 3 - How much will it take to pay off shortfall?

| 30 Year Amortization of \$100M (level \% Pay) | $\$ 6.3 \mathrm{M}$ |
| :--- | :---: |
| General Govt Annual Benefit Cost | $\$ 1.6 \mathrm{M}$ |
| Uniformed Bodies Annual Benefit Cost | $\$ 3.9 \mathrm{M}$ |
| Total Annual Contribution | $\$ 11.8 \mathrm{M}$ |

## What can the Pension Board Do?

## Recognize the Issues

Issue 3 - How much will it take to pay off shortfall?

| Projected 2009/2010 Payroll | $\$ 60 \mathrm{M}$ |
| :--- | :---: |
| Total Annual Contribution | $\$ 11.8 \mathrm{M}$ |
| Level Contribution as \%Payroll | $19.7 \%$ |

## What can the Pension Board Do?

Recognize the Issues
Issue 4 - Inactive Liability is $71 \%$ of total plan liability

| Active Liability 7/1/2009 | $\$ 160 \mathrm{M}$ |
| :--- | :---: |
| Inactive Liability 7/1/2009 | $\$ 401 \mathrm{M}$ |
| Total Plan Liability | $\$ 561 \mathrm{M}$ |
| Inactive as a \% of Total | $71.4 \%$ |

## What can the Pension Board Do?

Recognize the Issues
Issue 4 - Inactive Liability is $71 \%$ of total plan liability
Consider Liability Driven Investing (LDI)

## What can the Pension Board Do?

## Review Benefit Structures

It is not the function of the Pension Board to change the benefits in the Pension System.

However, benefits ultimately drive costs.
With costs predicted to increase dramatically, it might be prudent to review current benefit structures to tweak some provisions and (as many other groups are doing), consider totally new benefits for new hires.

## What can the Pension Board Do?

## Review Benefit Structures

Some general issues to consider:

- What are the objectives of the pension system?
- Are those objectives being met by the current structure?
- What are the target costs for the system?
- Can those costs support the current benefit structure?
- Does the current structure allocate benefits to most effectively meet the Board's objectives?


## What can the Pension Board Do?

## Review Benefit Structures

Specific issues the Board may wish to consider:

- How to (or if it would be desirable) to eliminate the onetime decision after 10 years in G1 (to stay or go to G2)
- Revising the DROP to be cost neutral/extend DROP period


## What can the Pension Board Do?

Manage Future Cash flow

Asset smoothing and amortization periods can both be used to smooth out the long-term contribution.

These techniques do not change the ultimate cost but only reallocate when those costs are paid.

## What can the Pension Board Do?

## Asset Smoothing and Amortization Periods

When used to obtain a long-term level contribution, these methods can be very effective.

However, if they are used primarily to defer costs, they can create funding issues tomorrow which are much worse than those we face today.

## Manage Cash Flow

What is asset smoothing?

Asset smoothing will use a period of typically 5 to 10 years to recognize asset gains and losses in order to produce a more stable asset value and therefore a more stable contribution.

## Gains and Losses

Asset Returns : Historical Values


## Manage Cash Flow

Is it ever appropriate to accelerate recognition of gains and losses?

Only when those gains/losses are not reasonably expected to be offset in future years.

## Uniformed Bodies

Accelerate Recognition of Asset Losses


## Manage Cash Flow

How are amortization periods used to smooth contributions?

Unfunded liabilities may be paid for over a period of usually 10 to 30 years either as a flat dollar amount or a level percent of pay.

## Manage Cash Flow

What is the advantage of level \% of pay amortization?

The annual benefit increases with payroll and so produces a level percent of pay contribution.

## Manage Cash Flow

What are disadvantages of level \% of pay amortization?

For periods more than 20 years, the annual payment is less than the interest owed on the liability.
In addition, this method assumes the goal is to pay off all unfunded liability. In most cases, once most liability is paid down, it makes sense to switch to a flat dollar amortization.

## General Government

Change from 15-Year Level to 28-Year \%Pay


## General Government

Accelerate Recognition of Asset Losses


# Other Options 

Bond Issue

For Example,
\$100M 30-year bond issue 4.5\%
Asset return averages 7.5\%
Net gain of $3 \%=\$ 3 \mathrm{M}$ per year for 30 years

## Other Options

Bond Issue

Or
\$100M 30-year bond issue 4.5\%
Asset return averages 6\% (invest in bonds)
Net gain of $1.5 \%=\$ 1.5 \mathrm{M}$ per year for 30 years

## Other Options

When does bond issue make sense?

Generally when interest rates are low and markets have had one or more rough years.

## Historical Market Returns

Dow Jones Average (for years ending 6/30)


## Other Options

Engage third party for Fiduciary/Expense Review

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