Worcester Retirement System

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MILESTONES

1945 - **WRS created on January 1, 1945** to provide pension, death, disability and survivor benefits
- Pay as you go funding (cost of benefits)
  - Employee contributions were the only funding source
  - City made no contributions until benefits were actually paid
    - Unfunded liability accrued from the beginning

1950 – **MA** and 6 other states **opted not go into the Social Security System**
- Still not included

1987 – First actuarial valuation was performed
- Asset value $108 million
- 8.5% discount rate
- 38.8% funded ratio
- To the surprise of many the funding requirement was less than pay as you go
  - High discount rate and 30-year funding likely a couple of reasons

1991 – **Legislation was passed allowing funding based on an actuarial funding schedule**

1990's - Except for 1994 investment returns were stellar

1997 – Legislation was passed shifting the cost of COLA's from the state to local systems
- Prior to this state infrequently paid COLA's up to $9 thousand base at varying percentages
- Annual COLA of 3% of the first $12,000 of benefits ($360 per person maximum) implemented
- Legislation increased unfunded actuarial accrued liability (UAAL) of WRS by an estimated $63 million
  - Funded ratio went from 63% to 56% after legislation was accepted locally

1998 – Legislation was passed allowing the city to issue a Pension Obligation Bond (POB)
- Done to mitigate what would have been a large in increase in the pension funding requirement

1999 – January - WRS received $217 million in POB **proceeds** and city received $1.8 million accrued interest

Interest rate of 6.31% on POB

PENSION OBLIGATION BOND

Credit ratings not affected by issuance

Baa1 (Moody's) before and after issuance

Increased to A3 a couple of years later, which has now been recalibrated to an A1 rating

Debt amortization - $16.6 million a year until 1/1/2028 29-year amortization

Proceeds –

Investment portfolio grew from $312 million to $529 million

Did not dollar cost average, all proceeds invested immediately

After a good year in 1999 – Portfolio grew to $615 million and more than 100% funded after first year

2000 – 2002 – Worst recession since the depression.

Portfolio **dropped to $448 million** as of 2/03 with a funded ratio of 64.5% (MV) as of 1/1/03 using an 8.5% discount rate

2003 - 2007 - Markets rebounded for next 4 plus years and portfolio **grew to $790 million** with a funded ratio of 85% (MV) as of 1/1/08 using an 8.25% discount rate

2008 **-** Capital market systemic breakdown and a debacle for most asset classes

Portfolio **fell to $478 million** as of 2/09 with a funded ratio of 56% (MV) as of 1/1/09 using an 8.25% discount rate

2009 & 2010 – Markets recover

Portfolio **grew to $684 million** at 12/31/10 with a funded ratio of 66% (MV) using an 8% discount rate

POB deemed successful if the rate of investment return exceeds the interest rate on the bond

Scorecard – Game not over until 2028

WRS Cumulative IRR

1999 – 19%
2003 – 5.1%
2007 – 7.62%
2008 – 2.71%
2010 – 5.31%

FACTORS CONTRIBUTING TO UNFUNDED LIABILITY

Current UAAL - $300.1 million with a funded ratio of 70.7% on an actuarial basis and $343.2 million and 66.5% funded ratio on a market value basis

Difference between Actuarial and MV is deferred actuarial investment losses from 2008

POB proceeds - $9 million less than UAAL at the time

UAAL estimated several months before the bond was issued

Fire of 1999

Still paying death benefits to widows

Full salary with raises

Also paying death benefits to two firefighters who are still alive (one for 11 years, the other for 3 years)

Other fire related disabilities

Section 90 **pension increases granted for an organized group of local retirees**

Pension increases granted in 2000 and 2005

Added $7.5 to AAL

Previous increases granted in 1988 and 1994.

Cost of $1.1 million a year for the last 6 years and next 3 years

Enhanced pension via **termination allowances**

Early Retirement Incentives

2002 and 2003 incentives added $17 million to AAL

2010 incentive added $4 million to AAL

2003 incentive will paid in full next year with a final $485 thousand payment

2002 incentive will be paid in full in 2018 with payments of $1.55 million a year until then.

2010 incentive will cost $556 thousand a year for the next ten years.

FACTORS CONTRIBUTING TO UNFUNDED LIABILITY (Continued)

Legislation passed on a state-wide basis increasing benefits

- Bills filed by private group that represents state and municipal retirees
  - Many bills files annually with a high success rate
- Bills filed by legislators on behalf of their constituents

Changes in assumptions

- **Discount rate has been dropped from 8.5% to 8.0%**
  - Offset in part by reduction in salary inflation factor from 5.5% to 4.75%
  - Net increase of AAL of **$40 million**
- **Mortality table updated** assuming longer lives
  - Increased AAL by **$20 million**

Section 3(8)(c) **payments to other systems for pensions they pay to former city employees**

- Recognized liability for pensions paid by other systems for former city employees
  - Not part of AAL previous to POB
- Tried unsuccessfully to get legislation to change flawed formula that favors destination systems
  - WRS is not a destination system
  - Have received some relief reducing AAL increase from $20 million to **$16 million** by contesting assessments

COLA

- **Maximum has been paid every year since 1998**
  - UAAL would be lower if not paid when CPI is less than 3%

Investment returns

- **Have been less than the discount rate**
  - Worst decade since the depression
  - Largest contributor to current UAAL

FUNDING

Majority of funding comes from investment income

Has largest impact on the funded status

Employees and employers contribute the rest

Employees contribute varying percentages of salary depending on the start date of employment

Employer exposed to the risks and rewards of investment returns

City and Worcester Housing Authority (also a member) have been assessed about $20 million a year less than benefits paid and expenses of WRS since the POB was issued

WRS employed asset smoothing for the first time in 2002 over a 3-year period

Actuarial investment losses deferred

Done to lessen the impact of poor investment returns on the city budget

WRS extended smoothing period to 5 years in 2003 to deal with further portfolio deterioration

Funding schedule was extended to 2028 (maximum allowed)

Increasing payments of 4.5% (maximum allowed)

Back-end loaded (previous funding was level dollar)

Markets recovered from 2003 to 2007

Patience was rewarded and it showed the funding strategy to deal with market volatility was successful

Funding schedule was shortened to full funding by 2018

Smoothing was eliminated

Level dollar payments reinstituted

FUNDING (Continued)

Investment debacle of 2008

- **Employing strategy similar to what was done earlier**
- Fiscal 2010 budget - legislation was passed extending funding amortization period to 2030
- Fiscal 2011 budget - **legislation was passed extending funding amortization** to 2040
  - WRS extended funding schedule to limit allowed
  - Used 5 year smoothing
  - Used 4.0% increasing funding (new maximum)
  - **Fiscal 2011- legislation allowed WRS to assess the city and WHA $4 million less that what would have been the minimum assessment**
    - **Retirement Board implemented responsible funding schedule extending the amortization period before the legislation was passed**

Many jobs were saved in the previous decade as well as the last two years and will be in fiscal 2012 using the assessment mitigation tools available us

Current funding schedule

- **Have reduced discount rate from 8.25% last year to 8.0% presently**
  - Longtime goal of board members
  - **More in line with peers and encouraged by state**
  - Longer amortization, investment returns and salary experience gains opened door
- **Length of funding schedule has been shortened from 2040 last year to 2035**
- **Smoothing corridor has been reduced** from 20% two years ago and 10% last year to 6% presently
- Fiscal 2012 assessment will increase from prior year by $2.4 million (city share is about $1.4 million or 60% of that) not counting 2010 ERI assessment
  - **Total assessment of $32.7 million will all be received on 7/1/2011**

NORMAL COSTS

Pension funding for fiscal 2012 consists of the following:

- **Normal costs** (cost for current employees) **$9.4 million**
- **UAAL Amortization $19.6 million**
- **ERI and benefit enhancements** for a local group of retirees under section 90 **$3.7 million**

Normal costs calculated using 8% as an expectation for future returns

- Current asset allocation projects an 8.28% IRR

Employer normal costs

- **5.83% for all employees combined**
  - **4.13% for non-public safety**
  - **8.27% for public safety**
    - Higher rate of disability
    - Earlier retirement age
    - Disability and death benefits would be borne elsewhere in city budget if not for WRS
- **Social Security**
  - **Employer "normal cost" 6.2%, but at what discount rate**
  - **There is no portfolio** it consists of IOU's from federal government
    - Safe to say DB plans get a lot more of a return from investments than does the Social Security "Trust"
    - 2% reduction in employee contribution for 2011
      - Public employee DB plans did not reduce employee contributions

OUTSIDE INFLUENCES

It's not uncommon for DB Public Pension Plans to be squeezed at both ends

- **Groups looking for benefit increases**
  - Fear that system would collapse under its own weight if not restrained
    - More prevalent during market upturns
- **Others looking for a complete conversion to a defined contribution plan or worse**
  - Are more prevalent during market downturns

ERISA along with subsequent federal legislation has caused many private businesses to terminate defined benefit plans with overregulation and high administrative costs.

- Corporate pensions with funded ratios over 125% have to pay a tax
  - Some increased employee benefits as a result before market collapse
- Stringent full funding requirements imposed (7yrs now extended to 15yrs.)
- Accounting requirements
  - Created unwanted volatility in financial statements
- Imposed "risk free" discount rate (approximately 5% to 6%)
  - Impact on funding and asset allocation
    - Liability Driven Investing (LDI)
      - More conservative
      - Works better for fully funded plans but more difficult in today's low interest rate environment
      - Not the manner in which a typical investor invests
      - Benefit of volatility control not worth the cost for many

OUTSIDE INFLUENCES (Continued)

- **Currently there is pressure on public plans to lower their discount rates from an average of 8% to a “risk free” amount**
  - **Battle between actuaries and economists**
    - **Common goal of both is to inform stakeholders of true costs**
      - Good academic exercise if nothing else
  - **More appropriate for businesses than for public plans because of their potential shorter life**
    - Federal law allows private plan termination
    - Market Value of Liabilities (MVL)
      - Unit credit valuation method
      - Focuses on short term doesn’t factor in future salary increases
    - Liability rises and falls with interest rates
      - Produces its own volatility
  - **Public plans take a long-term view as their expected life is longer**
    - Better able to withstand volatility than private plans
    - Retirement boards are independent sovereign entities
    - Actuarial Accrued Liability (AAL) used, which produces higher liability than MVL
      - Entry age normal valuation method
      - Focuses on long-term and projects future salary increases
    - Expected rate of return determines discount rate for accounting and funding
    - **The funding requirement for public plans would go up dramatically if a “risk free” discount rate was used**
      - **WOULD have an adverse affect the credit ratings**
      - **WOULD have a devastating impact on the city budget**
  - **GASB has rejected this** (MVL) **as a basis of accounting for public plans in its Preliminary Views**
    - Well funded plans should continue with AAL
    - Poorly funded plans would use blended rate

LEGISLATION

Local Retirement Boards were victimized by heat of the moment legislation

Law passed requiring local boards to turn over their portfolio to the state if certain benchmarks aren't met

- Based on a report written by a professor from Salem State
  - Reported by the Boston Globe repeatedly
  - Local boards had been tagged with stigma created by a few bad actors
  - Put pressure on legislature and new governor
  - State had a good run of investment returns
    - High exposure to emerging markets and large buyout funds

Local plans said to be not aggressive enough

- Some people forgot what happened from 2000 to March 2003

Those with less aggressive portfolios that were forced into the state fund in October 2007 when the market had peaked got whipsawed

WRS has had better returns than the state for each of the last three years since other plans were forced in

- **Would have been costly if forced in**
  - **Investment income would have been about $35 million less over that period**

SHOULD NOT BE A COMPETITION BETWEEN WELL RUN PLANS, which both the state and WRS are

Law requires 65% funded ratio for local boards

- **Not changed after 2008 debacle**
- **Does not address the discount rate or smoothing**
  - Could have a major impact on the funded ratio

LEGISLATION (Continued)

Several positive changes in pension law have been implemented recently

- Many recent changes were based on abuses reported in Boston Globe articles
  - Governor and legislature familiar with issues making passage easier

Proposed legislation would increase retirement age and stop spiking

- Benchmark for retirement age was set when life expectancy was 62; it is now 78

"Municipal Relief Act" allowed boards with legislative approval to increase the COLA base with no limit

- Many boards have voted to increase base to as much as $18 thousand
  - One of those boards has a 38% funded ratio
- **Bill filed in the state legislature to raise the base to $16 thousand for state retirees**
  - $16 thousand base would increase AAL of WRS by about $20 million

Suggested legislation

- **COLA base should be increased but increases and the CPI formula should replicate the Social Security System and be uniform state-wide**
  - Should be formula based and eliminate politics from COLA granting decision

- **Prorate accidental disability pensions**
  - Time of service should be considered in the calculation
  - Severity of disability should be considered similar to military pensions

LOCAL CHANGES

Accidental disabilities have decreased since the earlier part of the last decade
- 2000 – 2007 there were anywhere from 18 to 25 a year
  - 10 of those were from prostate cancer or related side affects
- In 2008 there were 11, in 2009 there 10 and 9 in 2010

Nevertheless there have been and will continue to be accidental disabilities after short-term employment
- Some applicants should not have been hired for assigned tasks
  - **More stringent pre-employment physicals should be performed for non-public safety jobs**
    - Stringent physicals are done for public safety jobs
    - **Jobs involving heavy lifting should require physicals that simulate job conditions**
      - Expensive but the cost of disabilities much greater
      - Americans with Disabilities Act and MGL Ch 151b (anti-discrimination law) prohibit asking about disabilities when an applicant applies for a job
        - You can't ask and job applicants don't have to tell

Wellness program improvements
- **There have been past successes**
  - Legislation went into effect preventing firefighters hired after 1/1/88 from smoking
    - WRS has not had any cancer related disabilities from this group
- **More needs to be done perhaps with the help of the state legislature**
  - Would reduce disabilities and be beneficial to both workers and co-workers
    - State police would be good example

SOURCES OF DETAILED INFORMATION ABOUT WRS

www.worcesterma.gov Retirement Board
Actuarial Valuation
Retirement Comprehensive Annual Financial Report

www.worcesterma.gov City Auditor
City Comprehensive Annual Financial Report