A Unique Legacy Funding Solution: Managed Life Insurance Portfolio"

Jacksonville Police and Fire Pension Fund

Pension Reform Task Force

November 5, 2013

Presented by: A.R. "Sandy" Enos – Senior Consultant
MAF Companies, Inc.

Managed Life Insurance Portfolio Objectives:

- Create a huge financial “safety net” designed to support reserve requirements of the Jacksonville Police and Fire Pension Fund.
- Accomplish the funding using very little “seed” money…which is <u>fully recoverable.</u>
- Provide supplemental funding that will be delivered according to projected expectations.
- *<u>The probability of achievement is guaranteed via money contracts.</u> Results are not impacted by investment market reversals or adverse economic cycles as long as the premiums are paid according to the schedule.*

Protecting the Future while Salvaging the Past

- The Modified Life Insurance Portfolio is a unique leverage strategy using purpose built life insurance contracts to generate maximum value at minimal cost.
- The program design assures recapture of all expenses.
- The substantial revenue derived is assured via money contracts as opposed to investments that may be influenced by economic instability.

Coordination of Pension and Life Insurance Benefits

- Generally speaking future pension benefits are funded with larger deposits today to be drawn down in the future.
- Life insurance benefits are minimally funded today to receive large benefits in the future.
- Both rely on the same mortality results, but life insurance can actuarially "hedge" pension obligations.

Goals of Presentation

- Look at specific census and funding obligations of the Jacksonville Police and Fire Pension fund
- With some assumed short term funding, project the benefits that can supplement the fund over decades to come
- Illustrate the financial analysis and quantify risk elements.

Summary of Results to Be Discussed

For an investment of $3 million per year for fifteen years, with any excess assets invested at 7%, the pension plan will receive over the next sixty-five years a *total net benefit of approximately $2.6 billion dollars.*

Funding Assumptions

- A $3 million funding reserve per year for fifteen years will be allocated to support the program. We refer to this as the "Escrow Account".
- Premiums only start at $728,000 for the first year so extra money will be invested in the early years until needed.
- Funds in the Escrow Account in excess of the annual premium requirement will be invested at an assumed return rate of 7%.

The Census

Census Separated into Age Bands	Total Number of individuals	Percentage of total participants	Number Used in our analysis
Age under 30	160	5.54%	82
Age 30-35	382	13.22%	199
Age 35-40	450	15.57%	234
Age 40-45	652	22.56%	340
Age 45-50	653	22.60%	340
Age 50-55	395	13.67%	206
Age 55-60	162	5.61%	84
Age 60-65	30	1.04%	15
	2884		1500

The Insurance Policy Design

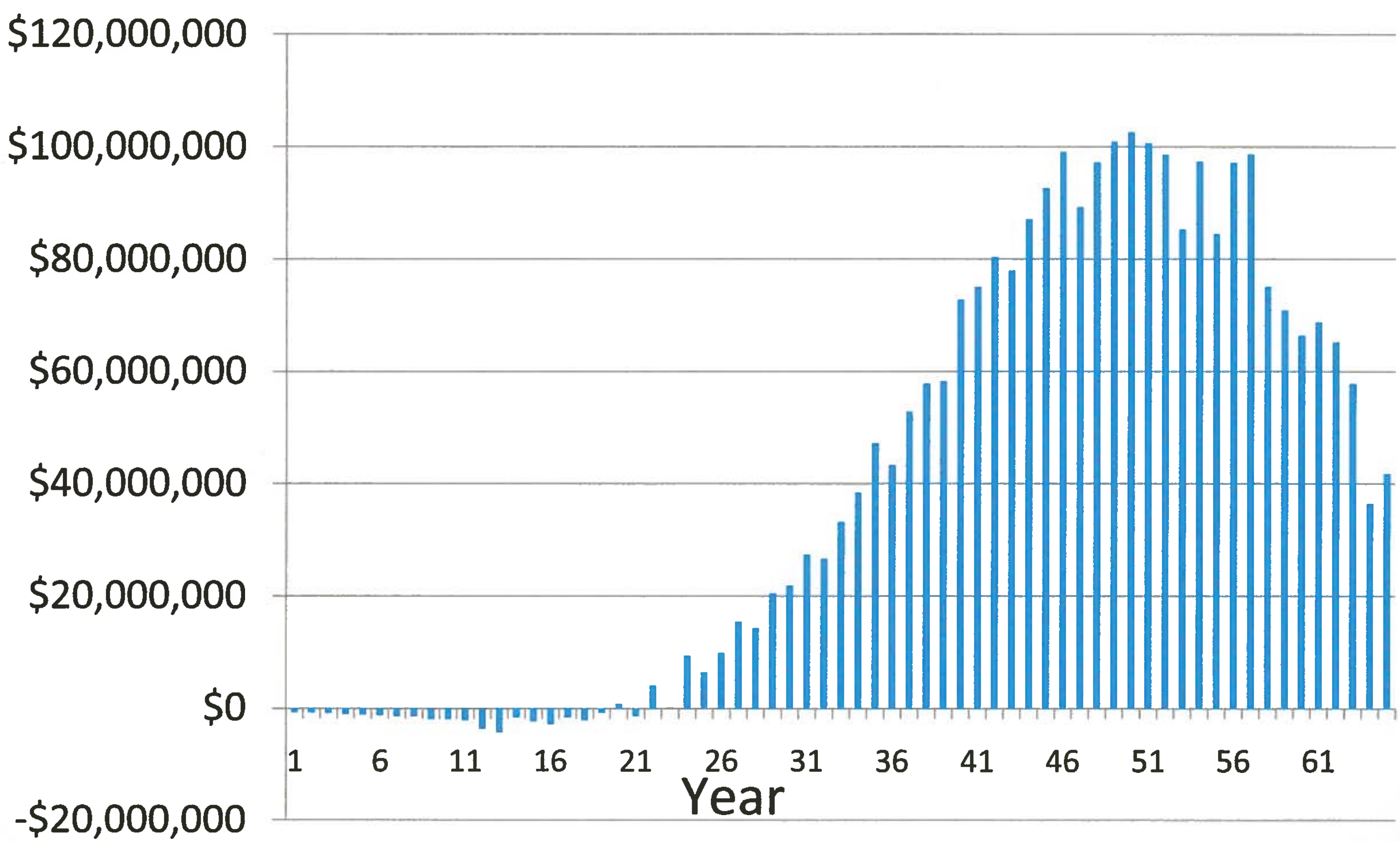
- Start with $100,000 of coverage per insured.
- Increase coverage over time to $1,000,000
- Build in a 5% COLA increase.
- Reduce costs of policy.
- Actuarially, future death benefits will exceed future premiums and the program should become “self funding” no later than year 19.

Actuarial Assumptions

- We test the results at the expected Standard mortality rates and at a very conservative Longer Mortality rate where participants live longer than expected
- At Standard Mortality Rates
  - Break-even point is year 19.
  - ***There would be an excess balance of $37 million in the Escrow Account that would <u>not</u> be needed for future premiums.***
  - ***The ratio of net out of pocket costs to net benefits would be 1.4%.***
  - **IRR on transaction is 14.3%.**
- At Longer Mortality Rates
  - Break-even point is year 24.
  - The Escrow Account balance would be fully allocated to premiums.
  - The ratio of net out of pocket costs to net benefits would be 2.7%.
  - IRR on transaction is 11.8%.

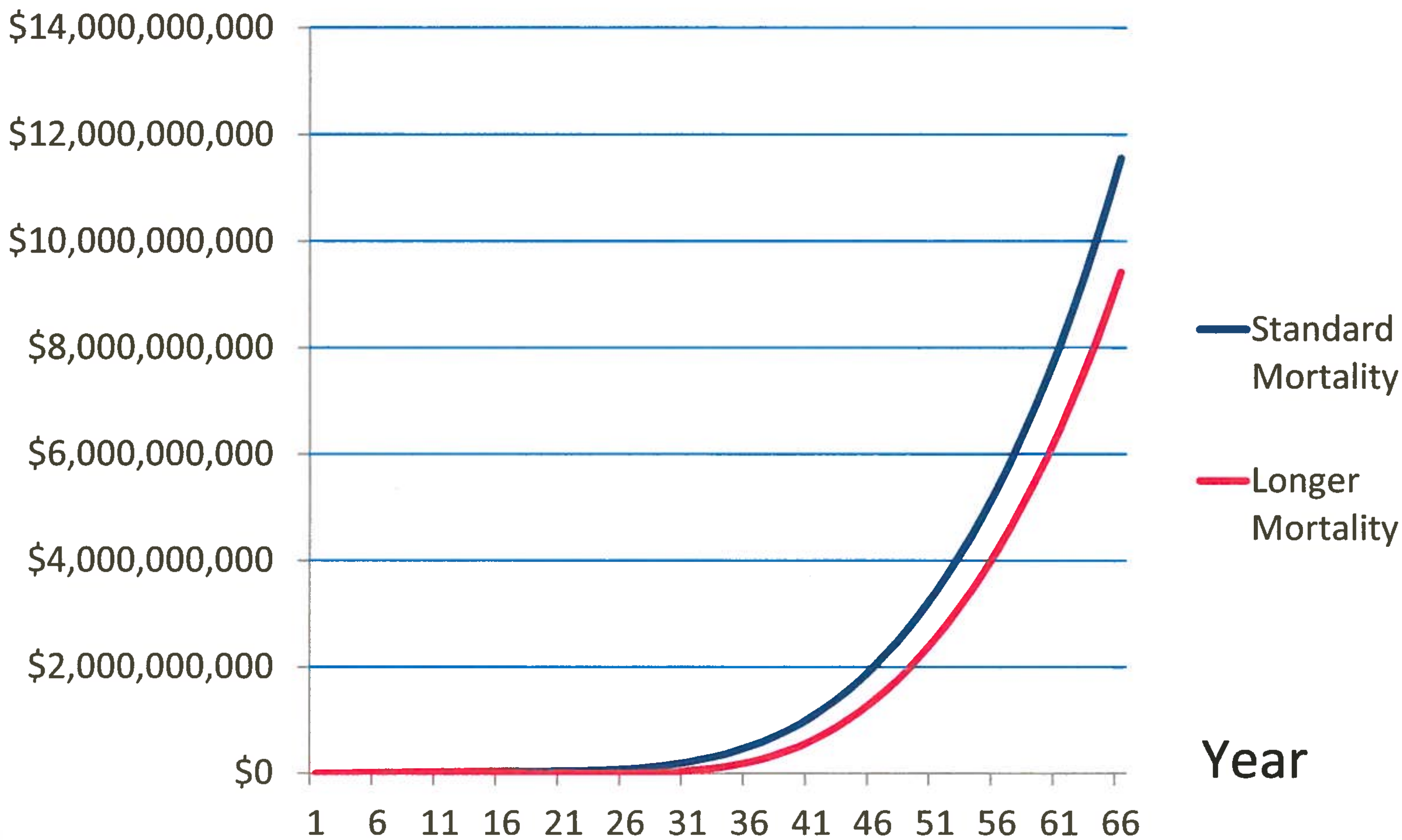
Annual Cash Flows

Assuming expected mortality (Total of $2.6 billion)



Long Term Value of Invested Cash Flows

Assuming 7% growth



Survivor Benefit

- Qualifying participants could receive a survivor life insurance benefit of $50,000 or not more than 10% of the policy face value.
- Depending on when the policy were to pay benefits the family protection could be as much as $300,000.

Possible Modifications

- Use only older ages.
- Insuring more participants but with smaller amounts of coverage.
- Have a “rolling” enrollment where new participants are added every year.

Next Steps

- Determine actual funding for the Escrow Account.
- Determine number of people covered and the coverage amounts.
- Re-do analysis to incorporate the above parameters.