Plan Design Study

City of Rockville Defined Benefit Pension Plan (Police)
4-45822

For Additional Information

If you have any questions about the material covered in this report, please contact your Pension Actuarial Analyst, Matt Sampogna, by:

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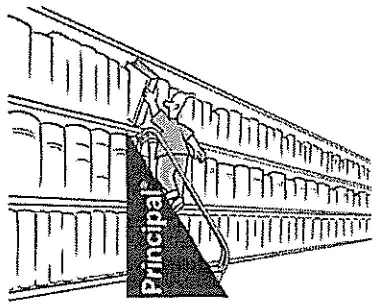

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This actuarial valuation report is for the defined benefit retirement plan named on the cover of this report. It may only be provided to other parties in its entirety. The purpose of this report is to provide you with information to fund the benefits of the plan as described in your plan document. It is based on employee data and other information you provide.

Executive Summary

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Executive Summary

Objective

The purpose of this plan design study is to estimate the impact of potential changes to the plan formula on the future liabilities of the City of Rockville pension plan for Police employees.

Overview

The City of Rockville has retained Principal to analyze the potential future savings of a proposed change to the retirement rules for Police employees under the pension plan. The following table summarizes the current retirement rules and one alternative.

	Current Provisions	**30 Years of Service Alternative**
Normal Retirement	Earlier of Age 60 or 25 Years of Service	Earlier of Age 60 or 30 Years of Service

The Public Pension Promise

State laws generally consider public pensions to be protected as a contract right. Court rulings have held that the benefit promise to employees can not be reduced during their period of employment without voluntary consent. This poses a challenge for governments seeking to reduce their pension liabilities as plan design changes can only be made applicable to employees hired after the date of the change.

The alternative retirement scenarios on the previous page represent benefit reductions. Therefore, we have modeled the projected impact of the proposed changes on the expected new Police employees hired over the next twenty years. We have not considered any voluntary acceptance of such reductions by current employees at this time.

Methodology

The study presumes a one-to-one correspondence between members leaving the current population and entering the plan as new hires. That is, as one employee retires or terminates employment, one new employee is hired to take their place.

Since the proposed change would only be applicable to new employees, their implementation will have no immediate impact on the liabilities of the pension plan. Therefore, the results contained within this report will focus on the impact of the proposed changes to the actuarial accrued liability (AAL) of the new hire group projected twenty years to 2030, when a significant number of new employees have been hired.

In projecting future liabilities, we have made assumptions regarding the pattern of retirement, termination and salary growth. We have also made assumptions regarding the age and starting salary of new hires. Except where specified, all other plan provisions and assumptions used in this projection are the same as those used in the most recent valuation.

Please note that these are estimates. The actual results will depend on many demographic and economic factors that could vary significantly from those assumed here. However, the general relationship of the costs compared to one another under the various scenarios would continue to hold.

Retirement Age and Employee Behavior

In estimating future liabilities under the scenario studied it is important to take into account the impact that the retirement rules of the plan would have on the retirement behavior of employees. In general, the later full retirement benefits are available, the longer employees can be expected to defer retirement and earn additional benefits.

For the Police plan, all participants are currently eligible to retire at the earlier of age 60 or 25 years of service. In our pension plan valuation, Police employees are assumed to retire immediately upon the attaintment of this provision. In other words, we do not assume that any percentage of the Police workforce retires earlier than age 60 or 25 years of service.

Since the average Police employee is hired around the age of 27, the retirement age condition has almost no impact on plan liabilities based on our actuarial assumptions. This is because Police participants would be assumed to reach the service requirement for retirement before they would arrive at an age constraint. Given the average hire age, a member of the Police force would retire at age 52, once they had reached 25 years of service.

Given these demographics and employee behavior, we elected to model the current retirement provisions (60/25) relative to a design that changes the service requirement to 30 years, but maintains age 60.

The City may wish to consider increasing the retirement age to 62 or 65. Such a change would have no impact on our projected results due to the assumed entry age of new Police employees. However, a later retirement age would slightly reduce cost for Police employees hired at older ages.

We did not model a Rule of 85 scenario as we have done for the Union and Administrative groups due to the similarity between this Rule and the current Police 60/25 retirement rule. Adding a Rule of 85 with other retirement rule changes would effectively neutralize any savings to the City.

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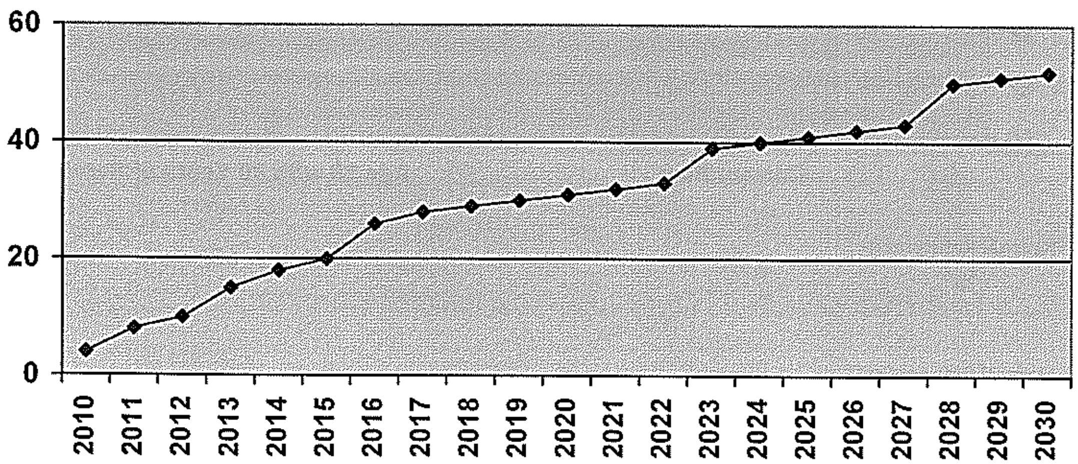
Projection Results

Demographics

The ultimate cost of retirement benefits for Police employees hired in the future will depend on the number of new employees hired. This in turn will depend on the behavior of the current employees who will need to be replaced. The following table illustrates the expected active headcount additions as current employees leave the workforce and are replaced by new participants in the pension plan. Within twenty years, we project that approximately 90% of the current workforce will be replaced.

Police Employees Hired After Proposed Benefit Changes



This chart illustrates the expected new hires assuming current employees exit under under the Current Plan provisions.

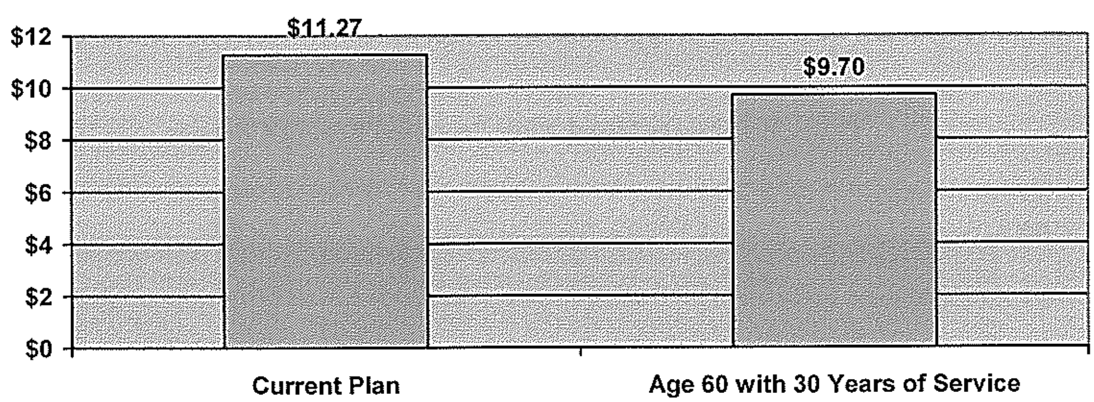
Projected Costs and Savings

The statistic we have chosen to determine the cost savings of the proposed retirement plan change is the actuarial accrued liability (AAL) of pensions for Police employees hired after 2010. The AAL is measured as of 2030, at which time the number of expected new employees exceeds 50.

To determine the AAL we calculate the age, service and salary of the new employees hired since 2010 as of 2030. We then apply our retirement, withdrawal, salary and mortalilty assumptions to determine the expected benefit payments for the group for all future years until death. These expected benefit payments are then discounted back to the 2030 valuation date using the plan's funding interest rate of 7.75%.

Under the Current Plan provisions the 2030 AAL is projected to be $11.27 million. Adoption of the Age 60 with 30 Years of Service Alternative is projected to reduce the AAL by $1.57 million to $9.70 million (14% reduction).

Actuarial Accrued Liability ($ in millions)
Employees Hired after 2010 measured at 2030



	Current Plan	Age 60 with 30 Years of Service
Normal Retirement Age	60	60
Normal Retirement Service	25	30

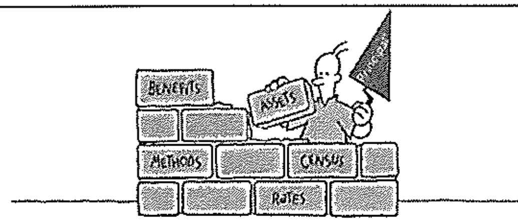
Age 60 with 30 Years of Service Alternative Design

The Age 60 with 30 Years of Service Alternative assumes that the normal retirement age is changed from the earlier of attained age 60 or 25 years of service to the earlier of attained age 60 or 30 years of service. As noted above, the service requirement for full retirement is the true driver of employee behavior as most employees will reach the service provision before they reach their age requirement.

This option is projected to save $1.57 million on the 2030 AAL.

Reconciliation of AAL for New Entrants at 2030 ($ in millions)

Current Provisions	$ 11.27
Changing Service Requirement to 30 Years	(1.57)
Age 60 with 30 Years of Service Retirement	$ 9.70



Data and Assumptions

Census Characteristics

Police Employees as of 04/01/2009		
	DB Plan Option	Thrift Plan Option
	Number of Covered Participants	
Actives	57	N/A
Terminated Vested	10	N/A
Retirees	6	N/A
Total	73	

	Average Age
Actives	38.1
Terminated Vested	37.9
Retirees	57.8

	Average Years of Service
Actives	10.8

Plan Provisions

This report reflects the maximum benefit limits under Internal Revenue Code (IRC) Section 415 and maximum compensation limits under IRC Section 401 in effect on the first day of each plan year.

The plan provisions used in this report are as stated in the most recent actuarial valuation report and summarized as follows:

Normal Retirement Benefit	
Form	All employees will receive a monthly annuity guaranteed for ten years and life thereafter. Optional forms may be elected in advance of retirement.
Amount (accrued benefit)	The lesser of (i) and (ii): i) 2.0% of average earnings times credited service up to 04/01/2004, plus 2.25% of average earnings times credited service on and after 04/01/2004. ii) 67.5% of average earnings.

	Current Provisions	**30 Years of Service Alternative**
Normal Retirement	Earlier of Age 60 or 25 Years of Service	Earlier of Age 60 or 30 Years of Service

Assumptions and Methods

Assumptions Selected for Current Plan	
Interest	During Benefit Payment Period: 7.75% Before Benefit Payment Period : 7.75%
Mortality	During Benefit Payment Period RP-2000 Combined Mortality Table, male and female, projected to 2005 with scale AA. Before Benefit Payment Period RP-2000 Combined Mortality Table, male and female, projected to 2005 with scale AA.

Assumptions Selected by Actuary	
Retirement Age	Dependent upon design alternative
	Current Provisions: The earlier of attained age 60 or 25 years of service **30 Years of Service Alternative:** The earlier of attained age 60 or 30 years of service
Upcoming Year Salary Increase	The preceding year's salary is increased using the S-5 Table from The Actuary's Pension Handbook, increased by 3.00% at each age for Thrift Plan members, 2.50% at each age for Police members, and 2.00% at each age for Defined Benefit Plan members. This table provides a rate of increase that declines as participants age.

	Upcoming Increase
Age	Police Plan
20	7.60%
25	6.68%
30	6.07%
35	5.61%
40	5.22%
45	4.89%
50	4.62%
55	4.38%

Disability	1987 Commissioner's Group Disability Table, six month elimination period, male and female.
Marriage	75% married; husbands are 3 years older than wives.

Actuarial Cost Method	Entry age normal.
Cost of Living Increase	No explicit increase is assumed for future years.
New Employees	New employees are assumed to be 27 years of age with a 2010 starting salary of $50,000 adjusted for future years. 100% of new employees are assumed to be male.
Withdrawal	The illustrative rates below were used.

For employees with less than six years of service:

Service	Police
0	.0800
1	.0720
2	.0640
3	.0480
4	.0400
5	.0320

For employees with six or more years of service:

V Table from August 1992 Pension Forum published by the Society of Actuaries, multiplied by 0.25 for Police members.

Sample rates of withdrawal are shown here:

Age	Police
20	.0465
25	.0340
30	.0253
35	.0198
40	.0163
45	.0138
50	.0113
55	.0000

Actuary Statement

To the best of my knowledge, this report is complete and accurate. It complies with all relevant pension actuarial standards and legal requirements.

In preparing this report, I have relied on:

- reports of participants, salary, and service provided by the plan sponsor as of the last day of the 2008 plan year.
- information for any participants being paid by Principal Life Insurance Co, as of the last day of the 2008 plan year, as reported by Principal Life Insurance Company.
- plan documents on file with Principal Life Insurance Company, including changes as noted on the Summary of Plan Provisions page of this report.

Appropriate tests of reasonableness and accuracy have been made and reviewed. The information provided is adequate to support the results in this report.

I confirm that as the enrolled actuary for this pension plan, I am completely independent of the plan sponsor and any of its officers or key personnel. Neither I nor anyone closely associated with me has any relationship known to me which would impair my independence.

In my opinion, each assumption and method chosen is reasonable (taking into account the experience of the plan and reasonable expectations), and which, in combination, offer my best estimate of anticipated experience under the plan.

I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, this report is complete and accurate. It complies with all relevant pension actuarial standards and legal requirements.

Michael E. Clark

11/17/2010

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