

Presentation

Agenda Item #	2
Meeting Date	January 20, 2016
Prepared By	Suzanne R. Ludlow City Manager

Discussion Item	Police Employees' Retirement Plan Actuarial Valuation as of June 30, 2015
Background	<p>In 2001, the City of Takoma Park established a pension plan (Police Employees' Retirement Plan) for its sworn police officers. Prior to that time, police officers were covered by the State of Maryland pension plan along with other City employees, which provides for retirement after 30 years of service.</p> <p>The Police Employees' Retirement Plan (the Plan) allows for full retirement after 25 years of service or at age 62 with five years of service. The earlier retirement is more typical for public safety employees and enables the City to be more competitive in attracting and retaining officers. Before establishing the Plan, the City explored other alternatives that would allow for earlier retirement for police officers in a cost effective manner. Establishment of a City plan was deemed to be the best option.</p> <p>Bolton Partners, Inc. provides actuarial services for the Plan and prepares an annual valuation based on participant data and asset information. The June 30, 2015 valuation is setting the employer contribution for the fiscal year ending on June 30, 2017.</p> <p>Thomas Lowman, FSA, will present the actuarial report. Following the presentation, he will be available to respond to questions from Council.</p>
Policy	<p>Takoma Park Charter, Section 907, Retirement System: <i>The Council shall establish and maintain a general system of pensions and retirement benefits for the City, and shall have the power to do all things necessary to include the City's officers and employees, or any of them, within any retirement system or pension system under the terms of which they are admissible, or to pay the employer's share of the cost of any such retirement or pension system out of the general funds of the City.</i></p> <p>Takoma Park Code, Ch. 4.24, Police Employees' Retirement Plan</p>
Fiscal Impact	For information only
Attachments	Actuarial Valuation as of June 30, 2015 Presentation
Recommendation	Hear the report.
Special Consideration	

**CITY OF TAKOMA PARK
POLICE EMPLOYEES'
RETIREMENT PLAN**



**ACTUARIAL VALUATION
AS OF
JULY 1, 2015**

TABLE OF CONTENTS

	<u>Page</u>
Introductory Letter	1 – 2
Asset Information	3 – 4
Actuarial Costs	5
Amortization Schedule	6
Participant Summary	7 – 8
Assumptions and Methods	9 – 10
Plan Provisions	11 – 14
Schedule of Funding Progress	15
Actuarial Certification	16 – 19



September 11, 2015

PERSONAL & CONFIDENTIAL

Ms. Suzanne Ludlow
City Manager
City of Takoma Park
7500 Maple Avenue
Takoma Park, MD 20912

***Re: City of Takoma Park Police Employees'
Retirement Plan Valuation***

Dear Suzanne:

The following report sets forth the actuarial valuation of the City of Takoma Park Police Employees' Retirement Plan. The valuation is as of July 1, 2015 and is based on participant data as submitted by the City of Takoma Park and asset information submitted by PNC Institutional Investments.

PLAN ASSETS

The market value of plan assets as of June 30, 2015 was \$11,311,412. The actuarial asset value as of June 30, 2015 was \$11,141,355. The difference between the market and actuarial value of \$170,057 represents gains that will be recognized in future valuations.

PRINCIPAL RESULTS

The principal purpose of the valuation is to set forth the City's contributions for the fiscal year ending June 30, 2017. The required information for financial reporting under GASB 67 is issued in a separate report.

The total recommended employer contribution for the plan year and fiscal year ending June 30, 2017 is 41.59% of covered payroll. This is in addition to employee contributions of 7% of pay. It is anticipated that the contribution will be paid in December 2016 and will equal 41.59% of the rate of pay for covered employees at that time. Details of the contribution calculation are provided later in this report.

Bolton Partners, Inc.

100 Light Street • 9th Floor • Baltimore, Maryland 21202 • (410) 547-0500 • (800) 394-0263 • Fax (410) 685-1924
Actuarial, Benefit and Investment Consultants

Ms. Suzanne Ludlow
September 11, 2015
Page Two

The contribution rate decreased slightly as a percentage of participant payroll from the prior year's results. This was primarily due to a significant increase in the covered payroll. This decrease was partially offset by the addition of a load to the City's normal cost to cover the plan's annual administrative expenses.

I, Thomas Lowman, am a Fellow of the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The Actuarial Certification at the end of this report contains other important points to understand about this valuation.

Sincerely,
BOLTON PARTNERS, INC.



Thomas B. Lowman, FSA, EA



Mark Kelbaugh, ASA



Kristopher Seets, FSA, EA

Asset Information

ASSET STATEMENT FOR THE
PLAN YEAR ENDED JUNE 30, 2015

Market Value as of July 1, 2014	\$10,436,237
 <i>Receipts:</i>	
Employer Contributions	\$1,101,564
Employee Contributions	178,132
Other Receipts	0
Investment Income	217,683
Realized Gain/(Loss)	66,133
Unrealized Gain/(Loss)	<u>156,918</u>
	\$1,720,430
 <i>Disbursements:</i>	
Benefit Payments	\$ 785,604
Administrative Expenses	<u>59,651</u>
	\$ 845,255
 Net Increase in Assets	 \$ 875,175
Market Value as of June 30, 2015	\$11,311,412

DEVELOPMENT OF ACTUARIAL ASSET VALUE

Market Value as of July 1, 2015 \$11,311,412

<u>Fiscal Year</u> <u>Ending</u>	<u>Investment</u> <u>(Gain)/Loss</u>	<u>Percent</u> <u>Deferred</u>	<u>Amount</u> <u>Deferred</u>
06/30/2015	\$358,275	80%	286,620
06/30/2014	(688,289)	60%	(412,973)
06/30/2013	(346,979)	40%	138,792
06/30/2012	475,442	20%	95,088

Total Deferred: \$(170,057)

Actuarial Value as of July 1, 2015 \$11,141,355

Actuarial Costs

ACTUARIAL COSTS

	<u>7/1/2014</u>	<u>7/1/2015</u>
Valuation Discount Rate	7.50%	7.50%
Number of Participants		
Active	37	41
Retired	22 ¹	24 ¹
Terminated Vested	<u>3²</u>	<u>1²</u>
Total	62	66
Active Payroll	\$ 2,570,207	\$ 2,843,149
1. Actuarial Accrued Liability		
Active	\$ 9,309,387	\$ 9,249,070
Retired	5,931,858	5,581,575
Disabled	5,163,966	6,321,339
Terminated Vested	<u>82,525</u>	<u>9,371</u>
Total	\$ 20,487,736	\$ 21,161,355
2. Actuarial Value of Assets	\$ 9,867,595	\$ 11,141,355
3. Unfunded Liability (1) – (2)	\$ 10,620,141	\$ 10,020,000
4. Amortization of Unfunded Liability	\$ 692,801	\$ 679,477
5. Amortization of Unfunded as a Percentage of Payroll	26.96%	23.90%
6. Employer Normal Cost	\$ 403,175	\$ 503,064
7. Employer Normal Cost as a Percentage of Payroll	15.69%	17.69%
8. Total Employer Contribution (4) + (6)	\$ 1,095,976	\$ 1,182,541
9. Total Employer Contribution as a Percentage of Payroll (5) + (7)	42.65%	41.59%

¹ Includes 9 disabilities, 1 alternate payee and 3 beneficiaries (9, 1, and 1 respectively for 7/1/14)

² Includes 1 terminated non-vested who is owed a refund of contributions with interest (2 for 7/1/14)

**SCHEDULE OF AMORTIZATION BASES
AS OF JULY 1, 2015**

Type	Date Established	Original Balance	Outstanding Balance	Amortization Amount	Years Remaining
Original	7/1/2013	\$11,808,355	\$11,956,015	\$803,967	20
Actuarial Loss/(Gain)	7/1/2014	(\$1,274,779)	(\$1,284,124)	(\$83,455)	21
Actuarial Loss/(Gain)	7/1/2015	(\$651,891)	(\$651,891)	(\$41,035)	22
Total			\$10,020,000	\$679,477	

Since the July 1, 2015 amortization payment of \$679,477 is not sufficient to cover the interest on the plan's unfunded liability, the unfunded liability is scheduled to increase for an initial period of time. Over time, amortization payments will increase and exceed the interest only payments, at which time the plan's unfunded liability will decrease in the absence of actuarial losses, improvements to benefits, or assumption changes.

Participant Summary

SCHEDULE OF ACTIVE PARTICIPANTS

Shown below is the distribution of active participants based on age and service. The compensation shown is the average of expected compensation for the 12 months following the valuation date.

Age	Years of Service as of 07/01/2015									Total
	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +		
Under 25	3	0	0	0	0	0	0	0	0	3
	53,916	0	0	0	0	0	0	0	0	53,916
25 - 29	3	4	0	0	0	0	0	0	0	7
	53,916	59,514	0	0	0	0	0	0	0	57,115
30 - 34	0	2	2	0	0	0	0	0	0	4
	0	60,856	62,452	0	0	0	0	0	0	61,654
35 - 39	0	0	6	1	0	0	0	0	0	7
	0	0	66,927	63,500	0	0	0	0	0	66,438
40 - 44	0	0	2	3	2	1	1	0	0	9
	0	0	64,490	68,687	75,052	72,529	78,613	0	0	70,698
45 - 49	0	1	0	1	1	3	2	0	0	8
	0	60,659	0	63,358	92,679	87,518	98,149	0	0	84,444
50 - 54	0	1	0	1	0	0	0	0	0	2
	0	62,919	0	77,080	0	0	0	0	0	69,999
55 - 59	0	1	0	0	0	0	0	0	0	1
	0	118,078	0	0	0	0	0	0	0	118,078
60 - 64	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
65 - 69	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
70 & Up	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
Totals	6	9	10	6	3	4	3	0	0	41
	53,916	66,825	65,545	68,333	80,927	83,771	91,637	0	0	69,345

Averages	
Age:	38.57
Service:	10.12

PARTICIPANT RECONCILIATION

	<u>Active</u>	<u>Terminated Vested</u>	<u>Retired/ Disabled</u>	<u>Total</u>
Participants as of July 1, 2014	37	3 ¹	22	62
New Participants	6	N/A	N/A	6
Terminated Vested	0	0	0	0
Terminated Non-Vested	0	0	N/A	0
Terminated Paid Out	0	(2)	N/A	(2)
Retired	(2)	0	2	0
Deceased	0	0	(2)	(2)
Beneficiaries	0	0	2	2
Data Adjustments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Participants as of July 1, 2015	41	1 ²	24	66

¹ Includes 2 terminated non-vested who is owed a refund of contributions with interest.

² Includes 1 terminated non-vested who is owed a refund of contributions with interest.

Assumptions and Methods

ASSUMPTIONS AND METHODS

<u>Funding Method:</u>	Projected Unit Credit. Costs are determined as a percentage of payroll based on the assets and liabilities on the valuation date. The liability for disability benefits is fully accrued for participants hired before July 1, 2003. Disability attribution method for those hired on or after July 1, 2003 is linear to decrement. The Unfunded Actuarial Accrued Liability as of July 1, 2013 was amortized as a level percent of payroll over a fixed period of 22 years (closed amortization). Actuarial gains or losses after June 30, 2013 are also amortized over a fixed period of 22 years.
<u>Asset Method:</u> (Adopted 2012)	Five year smoothed asset value. Investment returns above or below the assumed rate of return are recognized at a rate of 20% per year over five years.
<u>Interest:</u> (Adopted 2012)	7.50% net of investment related expenses, compounded annually.
<u>Payroll Growth:</u>	4% compounded annually.
<u>Post Retirement COLA Increases:</u>	3% compounded annually, no limit.
<u>Salary Increases:</u>	5.5% compounded annually.
<u>Pay Limit:</u>	None.
<u>Mortality:</u>	RP-2000 Combined Healthy Table with blue collar adjustment, projected to 2022 by scale AA. For disabled participants, the table is set forward 3 years. The RP-2000 Table projected to 2015 is assumed to be current experience and the projection seven years beyond the valuation date is to account for future mortality improvements.
<u>Retirement:</u>	Probabilities of retirement are: 70% at 25 years, 10% at 26-29 years, and 100% at 30 years or age 62.

ASSUMPTIONS AND METHODS

(continued)

Disability:

Sample rates are:

<u>Age</u>	<u>Rate</u>
25	0.55%
35	1.02%
45	2.64%

Half the disability benefits are assumed to be line-of-duty. One-third of the line-of-duty disabilities are assumed to be catastrophic and two-thirds are considered non-catastrophic.

Turnover:

80% of the Table T-5 rates of the Actuaries Pension Handbook adjusted for service. Sample T-5 rates are:

<u>Age</u>	<u>Rates by Service</u>		
	<u>0 - 9</u>	<u>10 - 14</u>	<u>15 and over</u>
25	7.724%	5.793%	1.545%
35	6.276%	4.707%	1.255%
45	3.975%	2.981%	0.795%

Rates are 75% of the initial rates between 10 and 15 years of service and 20% of the initial rates after 15 years. Employees that quit before age 50 are assumed to withdraw their contributions.

Sick Leave:

Accrued benefit loaded 3.4% for unused sick leave credit.

Pre-Employment Military Service:

Actual service credit as provided in census.

Marriage Assumption:

80% of participants are assumed to be married. Husbands 3 years older.

Compensation:

Compensation provided to us was assumed to be base pay for the 12 months ending on the valuation date.

Administrative Expenses:

Employer normal cost includes assumed administrative expenses equal to the average of the actual expenses of the two fiscal years preceding the date of the valuation.

Changes Since Prior Valuation:

The load for the assumed administrative expenses was added to the employer's normal cost.

Plan Provisions

PLAN PROVISIONS

<u>Normal Retirement Age:</u>	25 years of service, or age 62 with 5 years of service, if earlier.
<u>Normal Form of Benefit:</u>	Single Life Annuity with death benefit of undistributed employee contributions plus accumulated interest at retirement. Other forms are the actuarial equivalent.
<u>Post Retirement Cost of Living Increases:</u>	CPI index, but no more than would cause the participant's benefit to exceed an amount equal to the original benefit compounded at 3% per year.
<u>Employee Contributions:</u>	7% of base pay.
<u>Average Compensation:</u>	Average of base pay for 36 highest consecutive months.
<u>Benefit Formula:</u>	<p>2% of average compensation for each year of service earned. Total service is limited to 30 years.</p> <p>The above amount will be increased by 2% of average compensation for each year of service attributable to unused sick leave (limited to 2 years.)</p> <p>Note: prior to the latest plan amendment effective 7/1/2009, each year of service earned prior to 7/1/2000 was credited with 1.5% of average compensation. Total service was limited to 25 years.</p>
<u>Service:</u>	<p>Service includes:</p> <ol style="list-style-type: none">1. Time as an active member contributing to the plan.2. Unused sick leave (22 days = 1 month).3. Service prior to July 1, 2001 under the State plan that was transferred to this plan at its inception.

PLAN PROVISIONS

(continued)

Service (cont.):

4. For employees hired before July 1, 2001, up to five years of pre-employment military service if eligible under the State plan. If not eligible under the State plan, up to five years of pre-employment military service may be credited after 10 years of credited service with the plan.

Early Retirement:

Age 55 with at least 15 years of service. Benefit is reduced actuarially from normal retirement date.

Termination Prior to Retirement:

Return of employee contributions with 5% interest or if vested (after five years of service) an annuity beginning age 62 (or at the early retirement date, actuarially reduced.)

Line of Duty Disability:

Catastrophic disability:

The greater of:

- (a) the benefit due to employee contributions or
- (b) 66 2/3% of base pay.

Non-Catastrophic disability:

The greater of:

- (a) the benefit due to employee contributions or
- (b) 50% of base pay.

Note: prior to the latest plan amendment effective 7/1/2009, those hired before 7/1/2001 received the greater of (a) and 66 2/3% of base pay.

Ordinary (Non-Line of Duty)

Disability:

5 Years of Service is required for this benefit.

The benefit is equal to the accrued benefit, without actuarial reduction.

If a participant is under age 62, or has earned less than 25 years of credited service as of the disability date, the years of credited service are projected. They include both the actual years of credited service, plus any credited service which would have otherwise been earned as of the earlier

PLAN PROVISIONS

(continued)

Ordinary (Non-Line of Duty)

Disability (cont.):

of the participant's 62nd birthday or the date the participant would have earned 25 years of credited service.

Line of Duty Pre-Retirement

Death Benefit:

If the participant is unmarried at his date of death, his beneficiary is entitled to receive a refund of the participant's contributions with interest, plus a single lump sum equal to the participant's compensation as of the date of death.

If the participant is married or has a registered domestic partner at the date of death and is eligible for normal or early retirement, his surviving spouse or partner may receive the benefit described above, or an annuity for the spouse's or partner's lifetime or earlier remarriage/re-registration, equal to a 66 2/3% of base pay. Upon the death or remarriage/re-registration of the surviving spouse or domestic partner, a benefit equal to 50% of base pay will be paid to the surviving children.

If the participant is not married and has designated one or more child as the primary beneficiary, the surviving children will receive an aggregate annuity equal to 50% of base pay. This benefit ceases upon the attainment of age 18, or 23 if a full-time student.

Ordinary (Non-Line of Duty)

Pre-Retirement Death Benefit:

If the participant is unmarried at his date of death, his beneficiary is entitled to receive a refund of the participant's contributions with interest, plus a single lump sum equal to the participant's compensation as of the date of death.

PLAN PROVISIONS

(continued)

Ordinary (Non-Line of Duty)

Pre-Retirement Death Benefit (cont.):

If the participant is married or has a registered domestic partner at the date of death and is eligible for normal or early retirement, his surviving spouse or partner may receive the benefit described above, or an annuity for the spouse's or partner's lifetime, equal to the Joint and 100% Survivor benefit that would have been payable upon the participant's death.

Changes Since Prior Valuation:

None.

Schedule of Funding Progress

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - PUC (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a)/c)
7/1/2004	\$2,388,059	\$ 8,309,009	\$5,920,950	28.7%	\$1,876,807	315.5%
7/1/2005	\$2,849,268	\$ 8,910,824	\$6,061,556	32.0%	\$1,919,819	315.7%
7/1/2006	\$3,371,139	\$ 9,609,655	\$6,238,516	35.1%	\$1,961,026	318.1%
7/1/2007	\$4,287,464	\$10,772,448	\$6,484,984	39.8%	\$2,204,862	294.1%
7/1/2008	\$4,500,963	\$13,402,672	\$8,901,709	33.6%	\$2,383,190	373.5%
7/1/2009	\$4,035,510	\$14,355,855	\$10,320,345	28.1%	\$2,671,071	386.4%
7/1/2010	\$5,058,336	\$15,094,744	\$10,036,408	33.5%	\$2,713,518	369.9%
7/1/2011	\$6,795,093	\$16,397,138	\$9,602,045	41.4%	\$2,774,501	346.1%
7/1/2012	\$7,808,944	\$19,146,415	\$11,337,471	40.8%	\$2,673,827	424.0%
7/1/2013	\$8,700,353	\$20,508,708	\$11,808,355	42.4%	\$2,849,563	414.4%
7/1/2014	\$9,867,595	\$20,487,736	\$10,620,141	48.2%	\$2,570,207	413.2%
7/1/2015	\$11,141,355	\$21,161,355	\$10,020,000	52.6%	\$2,843,149	352.4%

The above schedule provides historic information on plan funding levels. This information differs from the financial reporting under GASB 67 because GASB 67 requires methods that are not consistent with those used for plan funding.

Actuarial Certification

This actuarial valuation sets forth our calculation of an estimate of the liabilities of the City of Takoma Park Police Employees' Retirement Plan, together with a comparison of these liabilities with the value of the plan assets, as submitted by the City of Takoma Park (the City). This calculation and comparison with assets is applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. Other assumptions may be equally valid. The future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material because these results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward looking projection over a very long period of time, no one projection is uniquely "correct" and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future. A "sensitivity analysis" shows the degree to which results would be different if you substitute alternative assumptions within the range of possibilities for those utilized in this report. We have not been engaged to perform such a sensitivity analysis and thus the results of such an analysis are not included in this report. At the City's request, Bolton Partners, Inc. is available to perform such a sensitivity analysis.

The City is responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in this report. The City is solely responsible for communicating to Bolton Partners, Inc. any changes required thereto.

The City could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. This type of analysis would be a separate assignment.

In addition, decisions regarding benefit improvements, benefit changes, the trust's investment policy, and similar issues should not be based on this valuation. These are complex issues and other factors should be considered when making such decisions. These other factors might include the anticipated vitality of the local economy and future growth expectations, as well as other economic and financial factors.

Actuarial Certification

(Continuation)

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the City. It does not affect the cost of the plan. Different funding methods provide for different timing of contributions to the plan. As the experience of the plan evolves, it is normal for the level of contributions to the plan to change. If a contribution is not made for a particular year, either by deliberate choice or because of an error in a calculation, that contribution can be made in later years. We will not be responsible for contributions that are made at a future time rather than an earlier time. The plan sponsor is responsible for funding the cost of the plan.

We make every effort to ensure that our calculations are accurately performed. These calculations are complex. Despite our best efforts, we may make a mistake. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

This report is based on plan provisions, census data, and asset data submitted by the City. We have relied on this information for purposes of preparing this report, but have not performed an audit. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The plan sponsor is solely responsible for the validity and completeness of this information.

The City is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Bolton Partners, Inc.'s actuaries have not provided any investment advice to the City.

The information in this report was prepared for the internal use of the City and its auditors in connection with our actuarial valuations of the pension plan. It is neither intended nor necessarily suitable for other purposes. Bolton Partners, Inc. is not responsible for the consequences of any other use or the reliance on this report by any other party.

The only purpose of this report is to:

- Provide the recommended employer contribution for fiscal year ending June 30, 2017.

Actuarial Certification

(Continuation)

This report may not be used for any other purpose; Bolton Partners, Inc. is not responsible for the consequences of any unauthorized use.

The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the “present value” of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be. For purposes of estimating the liabilities (future and accrued) in this report, you selected an assumption based on the expected long-term rate of return on plan investments. Using a lower discount rate assumption, such as a rate based on long-term bond yields, could substantially increase the estimated present value of future and accrued liabilities.

Because valuations are a snapshot in time and are based on estimates and assumptions that are not precise and will differ from actual experience, contribution calculations are inherently imprecise. There is no uniquely “correct” level of contributions for the coming plan year.

This report provides certain financial calculations for use by the auditor. These values have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the Plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

The report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the Plan in the case of Plan termination. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan’s funded status), and changes in plan provisions or applicable law.

The City should notify Bolton Partners, Inc. promptly after receipt of this report if the City disagrees with anything contained in the report or is aware of any information that would affect the results of the report that has not been communicated to Bolton Partners, Inc. or incorporated therein. The report will be deemed final and acceptable to the City unless the City promptly provides such notice to Bolton Partners, Inc.

Actuarial Certification
(Continuation)

The undersigned credentialed actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. He is currently compliant with the Continuing Professional Development Requirement of the Society of Actuaries. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest that would impair the objectivity of our work.

I am available to answer any questions on the material in this report to provide explanations or further details as appropriate.

Bolton Partners, Inc.



Thomas B. Lowman, FSA, EA

City of Takoma Park Police Employees Retirement Plan

Presented by:

Thomas Lowman, FSA, MAAA, EA

BOLTON  PARTNERS

January 20, 2016

 @BoltonPartners



Agenda

2

- Background (p. 3 - 4)
- 2015 Valuation Results (p. 5 – 6)
- GASB Results for FY15 (p. 7 – 8)
- Changes in the Pension World (p. 9)

Background

3

- Police employees were originally in State of Maryland plan (pool) and provided same benefits as all other employees
- In 2001 decided to give Police employees separate plan with earlier retirement ages, higher benefits and higher employee contributions
- Decided not to join State's LEOPS plan
- Three years ago (i.e. the 7/1/12 valuation) we lowered the investment return assumption from 8% to 7.5%. Could lower further.
- This year we added "load" for administrative expense to match GASB treatment.

Background

4

- Current provisions:
 - Can retire after 25 years with 50% of pay
 - Can retire early with reduced benefits at age 55 if have 15 years but not 25
 - Retirees get COLAs capped at 3%/year
 - Disability benefits provided which vary by when hired and severity/type
 - Employees contribute 7% of pay

2015 Valuation Results

5

- Valuation Results
 - July 1, 2015 valuation for FY17 contributions
 - Contribution expressed as a percentage of payroll
 - Contribution rate decreasing from 42.6% to 41.6% of covered payroll
 - Main reason for the decrease was an increase in payroll over which to spread the legacy cost (dollar cost could be more). This is the opposite of what happened in 2014.

Actuarial Costs

6

	<u>7/1/2014</u>	<u>7/1/2015</u>
Valuation Discount Rate	7.50%	7.50%
Number of Participants		
Active	37	41
Retired	22	24
Terminated Vested	<u>3</u>	<u>1</u>
Total	62	66
Active Payroll	\$ 2,570,207	\$ 2,843,149
1. Actuarial Accrued Liability		
Active	\$ 9,309,387	\$ 9,249,070
Retired	5,931,858	5,581,575
Disabled	5,163,966	6,321,339
Terminated Vested	<u>82,525</u>	<u>9,371</u>
Total	\$ 20,487,736	\$ 21,161,355
2. Actuarial Value of Assets	\$ 9,867,595	\$ 11,141,355
3. Unfunded Liability (1) – (2)	\$ 10,620,141	\$ 10,020,000
4. Amortization of Unfunded Liability	\$ 692,801	\$ 679,477
5. Amortization of Unfunded as a Percentage of Payroll	26.96%	23.90%
6. Employer Normal Cost	\$ 403,175	\$ 503,064
7. Employer Normal Cost as a Percentage of Payroll	15.69%	17.69%
8. Total Employer Contribution (4) + (6)	\$ 1,095,976	\$ 1,182,541
9. Total Employer Contribution as a Percentage of Payroll (5) + (7)	42.65%	41.59%

GASB 67/68

7

- GASB67 information provided for FY2014 and FY2015

- GASB68 applies for the first time in FY2015
 - GASB 68 defines pension expense (which is not the same as the cash contribution)
 - GASB 68 defines the balance sheet liability

GASB 68 Information as of 6/30/2015

8

- Provided to City 9/1/2015
- Based on GASB 7.5% “net” discount rate
- Key Results:
 - Total Pension Liability \$ 20.95 million
 - Plan fiduciary net position (assets) (11.31) million
 - City net pension liability \$ 9.64 million
- For FY15 the GASB 68 balance sheet liability is \$10.45 million (reflects Deferred Outflows & Inflows)
- For FY15 the GASB 68 Expense is \$970,311.

Changes in the Pension World

9

- Slow adoption of more conservative assumptions
- Major discussion of best funding practices:
 - Actuarial Standards Board will likely define more parameters around what is an Actuarially Determined Contribution (ADC)
 - Much debate over requiring additional disclosure information. Key issues include:
 - Disclosing liabilities based on bond interest rates
 - More disclosure of risks
 - Conference of Consulting Actuaries White Paper
- Benefit Design Changes/Litigation

Assumptions and Methods

- In preparing this presentation, we relied without audit, on information supplied by the City of Takoma Park Government.
- The actuarial assumptions, data and methods (except where specified as being changed) are those used in the preparation of the latest actuarial valuation report prepared for this plan as of July 1, 2015.
- The assumptions reflect our understanding of the likely future experience of the Plan and the assumptions as a whole represent our best estimate for the future experience of the Plan. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the plan could vary from our results.
- We certify that, to the best of our knowledge, this report and its contents, which are work products of Bolton Partners, Inc., are complete and accurate and have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.
- Bolton Partners' report was prepared exclusively for the City of Takoma Park Government for a specific and limited purpose. It is not for the use or benefit of any third party for any purpose. The term third party does not include the Client's auditor, attorney, third party administrator or other professional, when providing professional services to the Client, or any governmental agency to which this certification is required to be submitted by law or regulation. Any third party recipient of Bolton Partners' work product who desires professional guidance should not rely upon Bolton Partners' work product, but should engage qualified professionals for advice appropriate to its own specific needs.