

_____ moves that the Legislative Commission on Pensions and Retirement approve, under Minnesota Statutes, Section 356.215, Subdivision 18, the changes in the mortality assumptions to be used for future actuarial valuations as proposed by Gabriel, Roeder, Smith & Company on behalf of the Appleton Firefighters' Relief Association in its letter to the Commission dated February 8, 2016, including its recommendation that the mortality assumptions automatically change as necessary to remain the same as the mortality assumptions set forth in the most recent Public Employees Police and Fire Retirement Plan actuarial valuation report.

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February 8, 2016

Ms. Susan Lenczewski
Executive Director
Legislative Commission on Pensions and Retirement
100 Rev. Dr. Martin Luther King Jr. Blvd
State Office Building, Room 55
St. Paul, MN 55155

Re: Appleton Firefighters' Relief Association Pension Fund

Dear Susan:

Gabriel, Roeder, Smith, & Company serves as the consulting actuary for the Appleton Firefighters' Relief Association Pension Fund. In conjunction with the December 31, 2012 actuarial valuation, we recommended that the mortality assumption be updated for future valuation dates. Post-retirement mortality is an important component in cost calculations and should be updated from time to time to reflect current and expected future longevity improvements. The enclosed letter dated March 21, 2014 summarizes our recommendations and the impact on the financial results as of December 31, 2012. We are not recommending any other assumption changes at this time.

Our recommendation is that the mortality assumption for this plan mirror the assumptions used for the Minnesota Public Employees Police & Fire Retirement Fund (PEPFF).

Current Mortality Assumption

Healthy Pre-retirement: 1994 Group Annuity Mortality Table

Healthy Post-retirement: 1984 Uninsured Pensioner Mortality Table set forward two years for males.

Proposed Mortality Assumption

Healthy Pre-Retirement: RP-2000 employee generational mortality table, white collar adjustment, set back two years for males and females. Future mortality improvements are assumed each year using scale AA.

Healthy Post-Retirement: RP-2000 annuitant generational mortality table, white collar adjustment. Future mortality improvements are assumed each year using scale AA.

Disabled members are entitled to a lump sum payment at retirement and therefore a specific post-disability mortality assumption is not utilized in the valuation.

Ms. Susan Lenczewski
February 8, 2016
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An experience study has recently been authorized for the PEPFF, and the expectation is that updated mortality assumptions will be proposed during 2016. If the mortality assumptions are updated for the PEPFF, we would like to automatically reflect the updated assumptions in the Relief Association valuation so that the assumptions continue to be consistent.

We request that the Legislative Commission on Pensions and Retirement (LCPR) approve our recommendation that the mortality assumptions for the Relief Association mirror the assumptions for the PEPFF.

Please let me know if you have questions or if you need additional information. Thank you.

Sincerely,



Bonnie Wurst

BW:mr
Enclosure

cc: Roman Fidler, Appleton Firefighters' Relief Association



March 21, 2014

CONFIDENTIAL

City of Appleton
Fire Department Relief Association Pension Plan
Appleton, Minnesota

Subject: Updating Mortality Assumption for the Appleton Firefighters' Relief Association Actuarial Valuation

Dear Board Members:

Gabriel, Roeder, Smith & Company is proposing a change in the mortality assumption for the Appleton Firefighters' Relief Association Actuarial Valuation. This report is intended to describe the financial effect of the proposed assumption change to the plan. We recently provided a valuation of the plan as of December 31, 2012, and our recommendation is that the mortality assumption be updated for valuation dates after December 31, 2012. However, for informational purposes, the financial impact was determined as if this change in mortality was effective December 31, 2012.

MN Statutes 356.215 defines the actuarial assumptions used in the actuarial valuation, including the actuarial cost method and discount rate. Subdivision 9 defines the basis for other assumptions, including mortality. Subdivision 18 describes the statutory process for establishing and/or changing actuarial assumptions.

Our understanding is that the Relief Association would first take action on our recommendation, and then submit the requested change to the Legislative Commission on Pensions and Retirement (LCPR). If the LCPR doesn't take action within one year, the requested assumption change is automatically approved. We've observed the LCPR acting on requests for updated mortality assumptions from relief associations in Chaska, Bloomington, Hutchinson, and New Ulm in recent years.

The Actuarial Standards of Practice (ASOP) regarding the mortality assumption have recently been revised. ASOP No. 35 Disclosure Section 4.1.1 now states "The disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement. If the actuary assumes zero mortality improvement after the measurement date, the actuary should state that no provision was made for future mortality improvement." In the mortality assumption which is prescribed by the LCPR, there is currently no margin for future mortality improvement. We recommend that the mortality assumption be revised to include margin for future mortality improvements.

Mortality rates are used to project the length of time benefits will be paid to current and future retirees and beneficiaries. The selection of a mortality assumption affects plan liabilities because the value of retiree benefits depends on how long the benefit payments are expected to continue. There are clear differences in the mortality rates among males and females, healthy retired members, disabled retired members and non-retired members. As a result, each of these groups is potentially subject to a different mortality assumption.

The current post-retirement mortality assumptions are based on the 1984 Uninsured Pensioner Mortality Table, which is 30 years old. Mortality rates have improved since this table was adopted for use by the plan and are generally expected to continue to improve. This increased longevity should be reflected in the actuarial valuation through lower mortality rates than indicated by current experience. Generational mortality tables incorporate improvements in mortality each year into the future.

There is not enough plan-specific data to make a reasonable analysis of the mortality assumption. For most plans, standard mortality tables represent the best estimate of future events. We recommend that the mortality assumptions for this plan mirror the assumptions used for the Minnesota Public Employees Police & Fire Retirement Fund.

Current Mortality Assumption

Healthy Pre-retirement: 1994 Group Annuity Mortality Table.

Healthy Post-retirement: 1984 Uninsured Pensioner Mortality Table set forward two years for males.

Proposed Mortality Assumption

Healthy Pre-retirement: RP-2000 employee generational mortality table, white collar adjustment, set back two years for males and females. Future mortality improvements are assumed each year using scale AA.

Healthy Post-retirement: RP-2000 annuitant generational mortality table, white collar adjustment. Future mortality improvements are assumed each year using scale AA.

Disabled members are entitled to a lump sum payment at retirement and therefore a specific post-disability mortality assumption is not utilized in the valuation.

Below are exhibits with the liabilities as of December 31, 2012 based on the current mortality assumption and the proposed mortality assumption. All other assumptions, including the interest rate of 5.0%, can be found in the December 31, 2012 Actuarial Valuation dated February 27, 2014.

		December 31, 2012	
		Current Mortality	Proposed Mortality
Employee	Number of Active Firefighters	22	22
Data	Number of Service Retirees	8	8
	Number of Separated Deferred Firefighters	3	3
	TOTAL	33	33
Plan	Annual Normal Cost	\$ 9,409	\$ 9,371
Liabilities			
	Actuarial Accrued Liability:		
	Active Firefighters	\$ 217,814	\$ 217,680
	Retirees, Beneficiaries & Deferred Retirements	80,714	92,241
	TOTAL	\$ 298,528	\$ 309,921
	Assets (Market Value)	\$ 295,743	\$ 295,743
	Unfunded (Overfunded) Actuarial Accrued Liability	\$ 2,785	\$ 14,178
	Funded Position of Plan's Actuarial Accrued Liability*	99.1%	95.4%

* Equals the ratio of the actuarial value of assets to the total actuarial accrued liability.

Because the retirement benefit payable to current actives is a lump sum benefit instead of a lifetime annuity, the change had little impact on the active liability. As of the valuation date, there were 8 members who retired prior to January 1, 1992 who are receiving a monthly annuity from the plan. The retiree accrued liability increased since these benefits are expected to be paid for a longer period of time.

In accordance with Minnesota State Statutes (Chapters 69, 356 and 424A), the contribution level for any given year is a contribution of the Normal Cost for the year, a provision for anticipated administration expenses, and an amount to reduce the Unfunded Actuarial Liability. The minimum annual contribution requirement is shown below.

		Plan Year Beginning December 31, 2012	
		Current Mortality	Proposed Mortality
Minimum Annual Contribution Requirements	A) Net Annual Normal Cost	\$ 9,409	\$ 9,371
	B) Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability *	343	1,749
	C) Expense Allowance: (Prior Year Actual Expenses x 1.035)	<u>5,821</u>	<u>5,821</u>
	D) Total Minimum Annual Contribution Requirement (D = A + B + C)	<u>\$ 15,573</u>	<u>\$ 16,941</u>

* In accordance with Minnesota State Statutes, the unfunded liability was amortized using a 10-year level-dollar amortization.

Unless noted otherwise, actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of the City of Appleton Firefighters' Relief Association Actuarial Valuation on the valuation date as prescribed by Minnesota Statutes 356.215, the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement (LCPR) and the Board Members for the December 31, 2012 Valuation. Please see the *City of Appleton Firefighters' Relief Association Actuarial Valuation as of December 31, 2012* for a detailed description of the actuarial assumptions, methods and plan provisions that are not described in this report.

The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon plan provisions that are outlined in the December 31, 2012 valuation report. If you have reason to believe the assumptions used are unreasonable, the plan provisions are incorrectly described, important plan provisions relevant to this proposal are not described, or conditions have changed since the calculations were made, you should contact the author(s) of this report prior to relying on information in this report.

If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author(s) of the report prior to making such decision.

Actuarial assumptions, including discount rates, mortality tables and others identified in this report, are prescribed by Minnesota Statutes Section 356.215, the Legislative Commission on Pensions and Retirement (LCPR), and the Board Members. These parties are 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 the Valuation Procedures section of the December 31, 2012 valuation report. The Association is solely responsible for communicating to GRS any changes required thereto.

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.

This report should not be relied on for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

Alex Rivera and Bonita Wurst are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. In addition, Mr. Rivera meets the requirements of "approved actuary" under Minnesota Statutes Section 356.215, Subdivision 1, Paragraph (c).

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge and belief the information contained in this report is accurate and fairly presents the actuarial position of the City of Appleton Firefighters' Relief Association Pension Plan as of the valuation date and was performed in accordance with the requirements of Minnesota Statutes Section 356.215, and the requirements of the Standards for Actuarial Work established by the LCPR. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

We are available to answer any questions or provide further details.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Handwritten signature of Alex Rivera in cursive script.

Alex Rivera, FSA, EA, MAAA
Senior Consultant

Handwritten signature of Bonita J. Wurst in cursive script.

Bonita J. Wurst, ASA, EA, MAAA
Senior Consultant

AR/BJW:bd