

The City's contribution rate to the retirement system has increased from 14% of payroll in the 2004 valuation to 19% of payroll in the 2013 valuation, in spite of changes to benefits for certain classes of membership that were designed to lower the contributions. This is mainly due to returns below expected levels on investments in recent years. Furthermore, while accounting statements covering public pension plans were written to strongly encourage the use of closed group actuarial valuation methods for funding, new statements have been promulgated under which funding from accounting. When the system begins to use the new statements for its accounting, it will be free to use new methods for funding. Accordingly, we have introduced a new funding method that considers an open-group forecast and City of Burlington (the City) has asked us to estimate the effects of adopting the open-group funding method on the City's projected future contributions to its retirement system as well as the projected future funded status of the system.

The City's current contribution method consists of two components: (1) the employer portion of the normal cost under the projected unit credit method and (2) the amortization payment of the system's unfunded accrued liability.<sup>1</sup> Under the open-group method, the City's next 75<sup>2</sup> years' future contributions and payrolls are projected with a "level workforce" assumption<sup>3</sup> at each valuation. Then, the present values of these 75 year contribution projections are averaged based on the present values of the corresponding payroll and the City contributes this average with one adjustment. The adjustment is a 30 year amortization payment of the accumulated unfunded liability that is generated from the differences between the current and open-group contribution amounts. 30 year is the period used to amortize the unfunded liability in the City's current valuation.

Our analysis is based on the census report, assumptions, and methods used in the June 30, 2013 actuarial valuation of the Burlington Employees' Retirement System and assumes that the new funding method is adopted as of July 1, 2014. The characteristic of future hires in our projections were developed based on the characteristics of the new employees hired for the past 3 years.

---

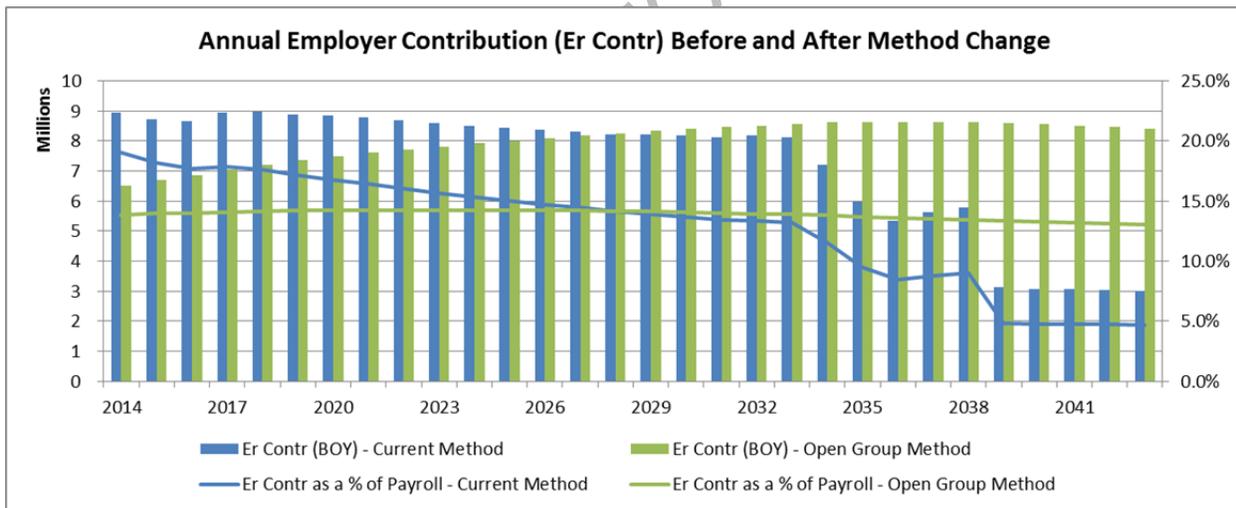
<sup>1</sup> Each year's actuarial gains and losses are amortized over 30 years.

<sup>2</sup> 75 years is a period of the same length that the Social Security Administration uses to study the long-range balance of its programs

<sup>3</sup> The number of new hires is assumed to be the same as the number of active decrements.

The chart 1 below compares the City's expected future contributions under the current and the open-group methods. The blue bars represent the expected future contributions under the traditional projected unit credit method in dollar amounts while the blue line represents the expected future contributions as a percent of total payroll. The City's contribution rate is 19% for 2014 and rapidly decreases to 5% by 2039. The City's contribution rates decrease (1) as the outstanding balances of past actuarial losses are paid off, and (2) as the current tier of employees is replaced with the new tier. The green bars and line represent the expected future contributions under the open-group method also as in dollar amounts and as a percent of total payroll. The City's contribution rate under the open-group method is 14% of the total payroll for 2014 and exhibits a fairly stable pattern over the next 30 years ranging from 13% of payroll to 14% of payroll. Although the new funding method produces lower contribution rates for the first 14 years, they are expected to be higher after 2027. Thus, over the long run, the system will receive the same value from contributions shown on the green line as it would from the declining pattern of contributions indicated by the blue line.

**Chart 1**

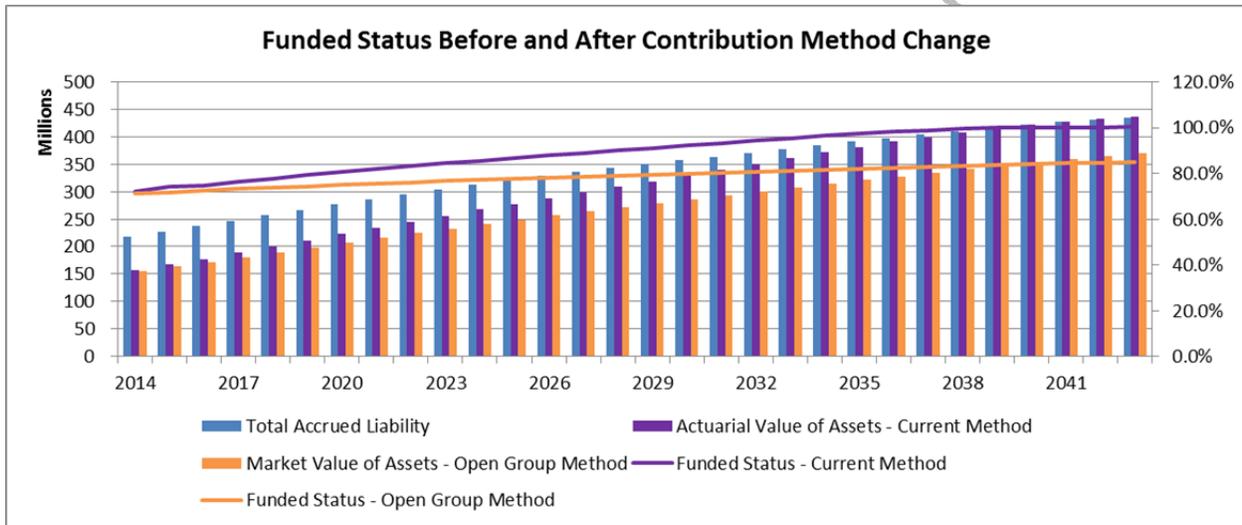


Projection Year	2018	2024	2030	2036	2042
Er Contr (BOY) - Current Method	8,963,992	8,497,829	8,173,483	5,356,086	3,039,997
Er Contr (BOY) - Open Group Method	7,200,731	7,916,633	8,396,376	8,640,376	8,453,549
Er Contr as a % of Payroll - Current Method	18%	15%	14%	8%	5%
Er Contr as a % of Payroll - Open Group Method	14%	14%	14%	14%	13%

The chart 2 projects the system's funded status under the current and the open-group funding methods. The purple bars and line represent the system's asset values and funded status

under the current funding method while the orange bars and line represent the system's asset values and funded status under the open-group method. The projected funded status as of June 30, 2043, the end of the projection period, is 100% under the current contribution method and it is 85% under the new contribution method. Since the new method reduces City's contribution rates in the first few years, it reduces the funded status of the system in the near future. However, it is important to note that the new funding method does not save the City anything in terms of the long-range cost of the system. It merely reallocates the cost to different time period. There is always a trade-off between the objectives of contribution rate stability and the rapid restoration of the system to 100% funded status.

**Chart 2**



Projection Year	2018	2024	2030	2036	2042
Total Accrued Liability	257,222,307	312,419,527	356,998,188	397,690,495	431,182,495
Actuarial Value of Assets - Current Method	199,880,639	267,277,586	328,872,824	390,738,074	432,106,442
Actuarial Value of Assets - Open Group Method	189,881,145	241,092,290	285,351,052	328,033,113	365,243,111
Funded Status - Current Method	78%	86%	92%	98%	100%
Funded Status - Open Group Method	74%	77%	80%	82%	85%

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as: plan experience different from that anticipated by the economic and demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

The report was prepared under the supervision of Charlie Chittenden, an Enrolled Actuary, a Fellow of the Society of Actuaries, and a Member of the American Academy of Actuaries, who met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. I am available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Sincerely,

Charles E. Chittenden, FSA, EA, MAAA  
Principal and Consulting Actuary

David L. Driscoll, FSA, EA, MAAA  
Principal and Consulting Actuary

DRAFT SUBJECT TO PEER REVIEW