

September 15, 2011

Mr. Mark Grady
Principal Assistant Corporation Counsel
Employees' Retirement System of the
County of Milwaukee
901 N. 9th St.
Milwaukee, WI 53233

RE: Actuary's Review of the Financial Impact of Closing the Defined Benefit Plan

Dear Mark:

The Employee Benefits Workgroup has requested that Buck estimate the cost of closing the Employees' Retirement System under two scenarios: (1) a scenario that closes the plan for all new employees hired on or after January 1, 2012 and (2) a scenario where the plan is closed completely for all employees as of December 31, 2011 (i.e., no further accrual of benefits after that date for anyone). This letter includes our analysis.

Actuarial Analysis

There are two components to this analysis. The first is component is the change in benefits and eligibilities. Under Scenario (1), benefits for those hired before January 1, 2012 remain unchanged. Those that are hired on or after January 1, 2012 received no benefits from the Retirement System. Under Scenario (2), no future benefits are accrued under the Retirement system on or after January 1, 2012. This not only impacts those that are hired on or after January 1, 2012, but also those already in the Retirement system. For those in the Retirement System as of January 1, 2012, benefits are frozen as of January 1, 2012. This means that benefits will not increase due to pay or service on or after January 1, 2012. Members will be allowed to accrue eligibility service in this analysis.

The second component is the recommendation that the funding policy be changed to reflect the closing of the retirement system. The current funding policy of the Retirement System includes amortizing unfunded actuarial accrued liability based on the source of the unfunded liability: contribution variances are amortized over 5 years, administrative expenses over 10 years and all other unfunded liability over 30 years. While the Retirement System is open to new hires, funding these liabilities over up to thirty years is reasonable because contributions will continue to be made to the Retirement System based on the payroll of future active members of the plan. When a retirement system is closed to new hires, recommended actuarial practice is that the funding policy be revised so that the unfunded liability is paid off at the moment the Retirement System is projected to no longer have active members. More specifically, for pay related plans such as the Employees' Retirement System, unfunded liability is paid off over the future projected salary of covered members.

The following exhibit details the impact of closing the Employees Retirement System under Scenarios (1) and (2).

As of January 1, 2011	Scenario (1) No New Employees	Scenario (2) No Future Accruals
Valuation Results		
1. Present Value of Future Benefits	\$ 2,199,829,706	\$ 1,929,427,864
2. Market Value of Assets	\$ 1,895,166,843	\$ 1,895,166,843
3. Liabilities remaining to be funded: (1 - 2)	\$ 304,662,863	\$ 34,261,021
4. Present Value of Future Payroll of Members remaining in the Fund	\$ 1,509,565,199	\$ 1,509,565,199
5. Contribution Rate	20.1821599 %	2.2695953 %
6. Actual Funding Contribution Calculated by Actuary	\$ 46,488,148	\$ 5,227,849

Item 1, the present value of future benefits (PVFB) is the total amount of projected benefits to be funded under the respective scenario. For comparison purposes, the actuarial accrued liability (AAL) of the Retirement System is just under \$2.1 billion as of January 1, 2011. The PVFB is larger than the AAL under Scenario (1) because Scenario (1) incorporates all projected service. The PVFB is smaller than the AAL under Scenario (2) because Scenario (2) does not include future salary increases, and similar to the AAL, does not include future service. Subtracting the market value of liabilities under Item 2, we are left with the remaining amount of liabilities to be funded in Item 3. Because the Retirement system is closed under both scenarios, we finance the liabilities remaining to be funded over the present value of future payroll in 4, to arrive at the contribution rate. The contribution rate is as a percent of pay of members in the retirement system. While the rate is designed to remain level if the assumptions are met, as payroll shrinks, the dollar amount will eventually reduce to zero. The Dollar contributions under Item 6 are for year one. It represents the projected payroll for the group multiplied by the contribution rate.

The following is a similar exhibit for OBRA. The concept is similar to that outlined for ERS in the prior paragraph.

Impact of Closing the OBRA Retirement System

As of January 1, 2011	Scenario (1) No New Employees	Scenario (2) No Future Accruals
Valuation Results		
1. Present Value of Future Benefits	\$ 7,519,731	\$ 5,519,524
2. Market Value of Assets	\$ 1,402,225	\$ 1,402,225
3. Liabilities remaining to be funded: (1 - 2)	\$ 6,117,506	\$ 4,117,299
4. Present Value of Future Payroll of Members remaining in the Fund	\$ 71,643,208	\$ 71,643,208
5. Contribution Rate	8.5388499 %	5.7469495 %
6. Actual Funding Contribution Calculated by Actuary	\$ 792,979	\$ 533,703

Exhibit I contains a projection of the contributions under the current plan and the two scenarios for ERS. Note that the Current Plan contributions are for an open group. For a reasonable comparison, the two scenarios should be added to the plan, if any, for new hires. Exhibit II contains a projection of contributions under the current plan and the scenario for ERS with the 1%-4% replacement plan based on service. The current ERS plan is valued at 8.457% of payroll. This amount is based on the composite rate of the entire group. The normal cost for members of ERS for those in the most recently enacted provisions of the groups is much lower at 7.166%.

Effective with the January 1, 2011 valuation report, the valuation reflected the multiplier reduction from 2.0% to 1.6% for current members' future service and future hires total service and the normal retirement age was increased to age 64 for future hires only for non-represented employees, excluding Elected Official and Deputy Sheriffs. For Scenario 3, we have applied these provisions for all current actives of the retirement system.

Exhibit III contains a projection of the contributions under the current plan and the two scenarios for OBRA. This exhibit is similar to Exhibit I for ERS. Note that the Current Plan contributions are for an open group. For a reasonable comparison, the two scenarios should be added to the plan, if any, for new hires. Exhibit II contains a projection of contributions under the current plan and the one scenario for ERS with 1%-4% replacement plan based on service. The current OBRA plan is valued at 2.04% of payroll. This amount is based on the composite rate of the entire group. One item to note is that the OBRA plan replacement plans do not include a component for expenses. Expenses are a fairly significant part of the current OBRA plan.

Basis for the Analysis

Unless otherwise noted in this analysis, we have based this analysis on the data, assumptions and methods used for the preliminary results of the January 1, 2011 actuarial valuation. We understand that Scenario (1) would impact all future employees of the County and that Scenario (2) would impact all current and future employees of the County. We made use of the market value of assets instead of the actuarial value of assets that would be used in the valuation. We made use of the market value of assets to give a better sense of the long term contribution rate. Use of the actuarial value of assets as of January 1, 2011 of \$1.93 billion would result in lower contribution rates in early years and higher contributions later than that shown in Item 6. We assumed that the retirement system would be closed as of January 1, 2011 instead of 2012 to simplify the analysis. One additional year of benefit accruals would increase the amount of contributions, but does not materially impact the illustration.

The undersigned is a Member of the American Academy of Actuaries and meets the Academy's Qualification Standards to issue this Statement of Actuarial Opinion.

Please call if you have any questions.

Sincerely,



Larry Langer, ASA, EA, MAAA
Principal, Consulting Actuary

LL:pl
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cc: Marco Ruffini

Exhibit I
Employees' Retirement System of the County of Milwaukee
Projection of Contributions under Current Provisions and Alternate Scenarios 1 and 2
Scenario 1: Plan is closed to new hires
Scenario 2: Plan is closed to future accruals
(Amounts in Millions)

Year	Projected Salary for Current actives	Projected Contributions			Savings/(Cost Increase)	
		Current Provisions	Scenario 1	Scenario 2	Current Plan less Scenario 1	Current Plan less Scenario 2
2011	221.6	26.8	46.5	5.2	(19.7)	21.6
2012	202.6	31.5	42.5	4.8	(11.0)	26.7
2013	186.8	35.7	39.2	4.4	(3.5)	31.3
2014	173.1	33.7	36.3	4.1	(2.6)	29.6
2015	160.9	42.9	33.7	3.8	9.2	39.1
2016	149.6	45.8	31.4	3.5	14.4	42.3
2017	138.8	47.4	29.1	3.3	18.3	44.1
2018	128.4	49.0	26.9	3.0	22.1	46.0
2019	119.1	50.7	25.0	2.8	25.7	47.9
2020	110.6	52.4	23.2	2.6	29.2	49.8
2021	102.9	54.2	21.6	2.4	32.6	51.8
2022	96.1	56.0	20.2	2.3	35.8	53.7
2023	89.4	57.9	18.8	2.1	39.1	55.8
2024	83.1	59.9	17.4	2.0	42.5	57.9
2025	76.9	61.9	16.1	1.8	45.8	60.1
2026	70.7	64.0	14.8	1.7	49.2	62.3
2027	64.3	66.2	13.5	1.5	52.7	64.7
2028	58.0	68.4	12.2	1.4	56.2	67.0
2029	51.9	70.8	10.9	1.2	59.9	69.6
2030	46.4	73.2	9.7	1.1	63.5	72.1
2031	41.3	75.7	8.7	1.0	67.0	74.7
2032	36.4	78.2	7.6	0.9	70.6	77.3
2033	31.7	80.9	6.7	0.7	74.2	80.2
2034	27.6	36.6	5.8	0.7	30.8	35.9
2035	23.6	21.9	5.0	0.6	16.9	21.3
2036	19.9	7.9	4.2	0.5	3.7	7.4
2037	16.7	22.4	3.5	0.4	18.9	22.0
2038	13.9	25.5	2.9	0.3	22.6	25.2
2039	11.5	77.8	2.4	0.3	75.4	77.5
2040	9.5	65.8	2.0	0.2	63.8	65.6
2041	7.7	64.3	1.6	0.2	62.7	64.1
2042	6.2	57.0	1.3	0.1	55.7	56.9
2043	4.9	51.0	1.0	0.1	50.0	50.9
2044	3.8	62.6	0.8	0.1	61.8	62.5
2045	2.9	64.7	0.6	0.1	64.1	64.6
2046	2.2	66.9	0.5	0.1	66.4	66.8
2047	1.6	66.6	0.3	0.0	66.3	66.6
2048	1.2	68.9	0.3	0.0	68.6	68.9
2049	0.9	71.2	0.2	0.0	71.0	71.2
2050	0.6	73.7	0.1	0.0	73.6	73.7
2051	0.4	76.2	0.1	0.0	76.1	76.2
2052	0.3	78.8	0.1	0.0	78.7	78.8
2053	0.2	81.5	0.0	0.0	81.5	81.5
2054	0.1	84.2	0.0	0.0	84.2	84.2
2055	0.1	87.1	0.0	0.0	87.1	87.1
2056	0.0	90.1	0.0	0.0	90.1	90.1
2057	0.0	93.2	0.0	0.0	93.2	93.2
2058	0.0	96.4	0.0	0.0	96.4	96.4
2059	0.0	99.7	0.0	0.0	99.7	99.7
2060	0.0	103.1	0.0	0.0	103.1	103.1
2061	0.0	106.6	0.0	0.0	106.6	106.6
TOTAL	2,596.4	3,184.9	544.7	61.3	2,640.2	3,123.6
NET PRESENT VALUE		628.3	305.4	34.3	322.9	594.0

Exhibit II
Employees' Retirement System of the County of Milwaukee
Projection of Contributions under Current Provisions and Alternate Scenarios 1 and 2 with 1% -4% Replacement Plan Based on Service
Scenario 1: Plan is closed to new hires
Scenario 2: Plan is closed to future accruals
(Amounts in Millions)

Year	Projected Salary for		Current Provisions	With 1%-4% Replacement Plan Based on Service				
			Projected Contributions	Projected Contributions		Savings/(Cost Increase)		
	Current Actives	Current and Future Actives	Current Provisions	Scenario 1	Scenario 2	Current Plan less Scenario 1	Current Plan less Scenario 2	
2011	221.6	221.6	26.8	46.5	10.9	(19.7)	15.9	
2012	202.6	229.4	31.5	42.8	11.2	(11.3)	20.3	
2013	186.8	237.4	35.7	39.7	11.5	(4.0)	24.2	
2014	173.1	245.7	33.7	37.0	11.8	(3.3)	21.9	
2015	160.9	254.3	42.9	34.7	12.3	8.2	30.6	
2016	149.6	263.2	45.8	33.7	13.0	12.1	32.8	
2017	138.8	272.5	47.4	31.8	13.0	15.6	34.4	
2018	128.4	282.0	49.0	30.0	12.9	19.0	36.1	
2019	119.1	291.9	50.7	28.4	13.0	22.3	37.7	
2020	110.6	302.1	52.4	27.0	13.1	25.4	39.3	
2021	102.9	312.7	54.2	27.9	13.3	26.3	40.9	
2022	96.1	323.6	56.0	27.0	13.3	29.0	42.7	
2023	89.4	334.9	57.9	26.1	13.2	31.8	44.7	
2024	83.1	346.6	59.9	25.3	13.4	34.6	46.5	
2025	76.9	358.8	61.9	24.6	13.5	37.3	48.4	
2026	70.7	371.3	64.0	25.4	13.7	38.6	50.3	
2027	64.3	384.3	66.2	24.7	13.8	41.5	52.4	
2028	58.0	397.8	68.4	24.1	13.9	44.3	54.5	
2029	51.9	411.7	70.8	23.5	14.1	47.3	56.7	
2030	46.4	426.1	73.2	23.0	14.1	50.2	59.1	
2031	41.3	441.0	75.7	24.6	14.1	51.1	61.6	
2032	36.4	456.5	78.2	24.4	14.0	53.8	64.2	
2033	31.7	472.4	80.9	24.3	14.0	56.6	66.9	
2034	27.6	489.0	36.6	24.2	14.1	12.4	22.5	
2035	23.6	506.1	21.9	24.3	14.2	(2.4)	7.7	
2036	19.9	523.8	7.9	24.3	14.0	(16.4)	(6.1)	
2037	16.7	542.1	22.4	24.5	14.0	(2.1)	8.4	
2038	13.9	561.1	25.5	24.8	13.9	0.7	11.6	
2039	11.5	580.8	77.8	25.2	13.6	52.6	64.2	
2040	9.5	601.1	65.8	25.7	13.2	40.1	52.6	
2041	7.7	622.1	64.3	13.9	12.8	50.4	51.5	
2042	6.2	643.9	57.0	14.0	13.2	43.0	43.8	
2043	4.9	666.4	51.0	14.3	13.6	36.7	37.4	
2044	3.8	689.8	62.6	14.5	14.0	48.1	48.6	
2045	2.9	713.9	64.7	14.8	14.5	49.9	50.2	
2046	2.2	738.9	66.9	15.2	14.9	51.7	52.0	
2047	1.6	764.7	66.6	15.6	15.4	51.0	51.2	
2048	1.2	791.5	68.9	16.1	15.9	52.8	53.0	
2049	0.9	819.2	71.2	16.6	16.5	54.6	54.7	
2050	0.6	847.9	73.7	17.1	17.0	56.6	56.7	
2051	0.4	877.6	76.2	17.6	17.6	58.6	58.6	
2052	0.3	908.3	78.8	18.2	18.2	60.6	60.6	
2053	0.2	940.1	81.5	18.8	18.8	62.7	62.7	
2054	0.1	973.0	84.2	19.5	19.5	64.7	64.7	
2055	0.1	1,007.0	87.1	20.2	20.2	66.9	66.9	
2056	0.0	1,042.3	90.1	20.9	20.9	69.2	69.2	
2057	0.0	1,078.7	93.2	21.6	21.6	71.6	71.6	
2058	0.0	1,116.5	96.4	22.3	22.3	74.1	74.1	
2059	0.0	1,155.6	99.7	23.1	23.1	76.6	76.6	
2060	0.0	1,196.0	103.1	23.9	23.9	79.2	79.2	
2061	0.0	1,237.9	106.6	24.8	24.8	81.8	81.8	
TOTAL	2,596.4	30,273.1	3,184.9	1,232.5	776.8	1,952.4	2,408.1	
NET PRESENT VALUE			628.3	390.8	166.1	237.5	462.2	

Exhibit III
OBRA 1990 Retirement System of the County of Milwaukee
Projection of Contributions under Current Provisions and Alternate Scenarios 1 and 2
Scenario 1: Plan is closed to new hires
Scenario 2: Plan is closed to future accruals
(Amounts in Millions)

Year	Projected Salary for Current actives	Projected Contributions			Savings/(Cost Increase)	
		Current Provisions	Scenario 1	Scenario 2	Current Plan less Scenario 1	Current Plan less Scenario 2
2011	8.9	0.8	0.8	0.5	0.0	0.3
2012	7.8	0.8	0.7	0.5	0.1	0.3
2013	7.0	0.8	0.6	0.4	0.2	0.4
2014	6.4	0.8	0.6	0.4	0.2	0.4
2015	6.0	0.9	0.5	0.4	0.4	0.5
2016	5.8	1.0	0.5	0.3	0.5	0.7
2017	5.6	1.0	0.5	0.3	0.5	0.7
2018	5.4	1.0	0.5	0.3	0.5	0.7
2019	5.2	1.0	0.5	0.3	0.5	0.7
2020	5.0	1.0	0.4	0.3	0.6	0.7
2021	4.9	1.0	0.4	0.3	0.6	0.7
2022	4.8	1.1	0.4	0.3	0.7	0.8
2023	4.8	1.2	0.4	0.3	0.8	0.9
2024	4.8	1.2	0.4	0.3	0.8	0.9
2025	4.8	1.2	0.4	0.3	0.8	0.9
2026	4.7	1.3	0.4	0.3	0.9	1.0
2027	4.7	1.3	0.4	0.3	0.9	1.0
2028	4.7	1.3	0.4	0.3	0.9	1.0
2029	4.5	1.3	0.4	0.3	0.9	1.0
2030	4.5	1.3	0.4	0.3	0.9	1.0
2031	4.5	1.3	0.4	0.3	0.9	1.0
2032	4.4	1.3	0.4	0.3	0.9	1.0
2033	4.5	1.4	0.4	0.3	1.0	1.1
2034	4.4	1.2	0.4	0.3	0.8	0.9
2035	4.3	1.2	0.4	0.3	0.8	0.9
2036	4.3	1.2	0.4	0.3	0.8	0.9
2037	4.2	1.2	0.4	0.3	0.8	0.9
2038	4.3	1.2	0.4	0.3	0.8	0.9
2039	4.3	1.2	0.4	0.3	0.8	0.9
2040	4.2	1.2	0.4	0.2	0.8	1.0
2041	4.1	1.2	0.4	0.2	0.8	1.0
2042	3.9	1.2	0.3	0.2	0.9	1.0
2043	3.9	1.2	0.3	0.2	0.9	1.0
2044	4.0	1.3	0.4	0.2	0.9	1.1
2045	3.8	1.3	0.3	0.2	1.0	1.1
2046	3.6	1.3	0.3	0.2	1.0	1.1
2047	3.5	1.3	0.3	0.2	1.0	1.1
2048	3.1	1.3	0.3	0.2	1.0	1.1
2049	2.9	1.3	0.3	0.2	1.0	1.1
2050	2.6	1.4	0.2	0.2	1.2	1.2
2051	2.5	1.4	0.2	0.1	1.2	1.3
2052	2.2	1.4	0.2	0.1	1.2	1.3
2053	1.9	1.4	0.2	0.1	1.2	1.3
2054	1.6	1.4	0.1	0.1	1.3	1.3
2055	1.3	1.5	0.1	0.1	1.4	1.4
2056	0.9	1.5	0.1	0.1	1.4	1.4
2057	0.6	1.5	0.1	0.0	1.4	1.5
2058	0.3	1.5	0.0	0.0	1.5	1.5
2059	0.1	1.5	0.0	0.0	1.5	1.5
2060	0.0	1.6	0.0	0.0	1.6	1.6
2061	0.0	1.6	0.0	0.0	1.6	1.6
TOTAL	200.5	62.8	17.7	12.2	45.1	50.6
NET PRESENT VALUE		13.3	6.2	4.3	7.1	9.0

Exhibit IV
OBRA 1990 Retirement System of the County of Milwaukee
Projection of Contributions under Current Provisions and Alternate Scenarios 1 and 2 with 1% -4% Replacement Plan Based on Service
Scenario 1: Plan is closed to new hires
Scenario 2: Plan is closed to future accruals
(Amounts in Millions)

Year	Projected Salary for		Current Provisions	With 1%-4% Replacement Plan Based on Service			
			Projected Contributions	Projected Contributions		Savings/(Cost Increase)	
	Current Actives	Current and Future Actives	Current Provisions	Scenario 1	Scenario 2	Current Plan less Scenario 1	Current Plan less Scenario 2
2011	8.9	8.9	0.8	0.8	0.8	0.0	0.0
2012	7.8	9.2	0.8	0.7	0.7	0.1	0.1
2013	7.0	9.5	0.8	0.6	0.7	0.2	0.1
2014	6.4	9.8	0.8	0.6	0.7	0.2	0.1
2015	6.0	10.1	0.9	0.6	0.7	0.3	0.2
2016	5.8	10.4	1.0	0.6	0.7	0.4	0.3
2017	5.6	10.7	1.0	0.6	0.7	0.4	0.3
2018	5.4	11.0	1.0	0.6	0.7	0.4	0.3
2019	5.2	11.3	1.0	0.6	0.7	0.4	0.3
2020	5.0	11.7	1.0	0.6	0.7	0.4	0.3
2021	4.9	12.0	1.0	0.6	0.7	0.4	0.3
2022	4.8	12.4	1.1	0.7	0.7	0.4	0.4
2023	4.8	12.7	1.2	0.7	0.7	0.5	0.5
2024	4.8	13.1	1.2	0.7	0.7	0.5	0.5
2025	4.8	13.5	1.2	0.7	0.7	0.5	0.5
2026	4.7	13.9	1.3	0.7	0.7	0.6	0.6
2027	4.7	14.3	1.3	0.8	0.7	0.5	0.6
2028	4.7	14.8	1.3	0.8	0.7	0.5	0.6
2029	4.5	15.2	1.3	0.8	0.7	0.5	0.6
2030	4.5	15.7	1.3	0.8	0.8	0.5	0.5
2031	4.5	16.1	1.3	0.9	0.7	0.4	0.6
2032	4.4	16.6	1.3	0.9	0.7	0.4	0.6
2033	4.5	17.1	1.4	0.9	0.7	0.5	0.7
2034	4.4	17.6	1.2	0.9	0.7	0.3	0.5
2035	4.3	18.2	1.2	0.9	0.7	0.3	0.5
2036	4.3	18.7	1.2	1.0	0.7	0.2	0.5
2037	4.2	19.3	1.2	1.0	0.7	0.2	0.5
2038	4.3	19.8	1.2	1.0	0.7	0.2	0.5
2039	4.3	20.4	1.2	1.0	0.7	0.2	0.5
2040	4.2	21.1	1.2	1.0	0.7	0.2	0.5
2041	4.1	21.7	1.2	0.7	0.7	0.5	0.5
2042	3.9	22.3	1.2	0.7	0.7	0.5	0.5
2043	3.9	23.0	1.2	0.7	0.7	0.5	0.5
2044	4.0	23.7	1.3	0.7	0.7	0.6	0.6
2045	3.8	24.4	1.3	0.7	0.7	0.6	0.6
2046	3.6	25.1	1.3	0.8	0.7	0.5	0.6
2047	3.5	25.9	1.3	0.8	0.7	0.5	0.6
2048	3.1	26.7	1.3	0.7	0.7	0.6	0.6
2049	2.9	27.5	1.3	0.7	0.7	0.6	0.6
2050	2.6	28.3	1.4	0.7	0.7	0.7	0.7
2051	2.5	29.2	1.4	0.8	0.7	0.6	0.7
2052	2.2	30.0	1.4	0.8	0.7	0.6	0.7
2053	1.9	30.9	1.4	0.7	0.7	0.7	0.7
2054	1.6	31.9	1.4	0.7	0.7	0.7	0.7
2055	1.3	32.8	1.5	0.7	0.7	0.8	0.8
2056	0.9	33.8	1.5	0.7	0.7	0.8	0.8
2057	0.6	34.8	1.5	0.7	0.7	0.8	0.8
2058	0.3	35.9	1.5	0.7	0.7	0.8	0.8
2059	0.1	36.9	1.5	0.7	0.7	0.8	0.8
2060	0.0	38.0	1.6	0.8	0.8	0.8	0.8
2061	0.0	39.2	1.6	0.8	0.8	0.8	0.8
TOTAL	200.5	1,047.1	62.8	38.4	36.1	24.4	26.7
NET PRESENT VALUE			13.3	8.9	9.0	4.4	4.3