

City of North Miami Beach
Retirement Plan for Police Officers & Firefighters

Reporting Information Required Under
Section 112.664, Florida Statutes

as of September 30, 2015

December 2016



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December 1, 2016

Retirement Committee
Retirement Plan for Police Officers & Firefighters of the
City of North Miami Beach
17011 NE 19th Ave., Room #428
North Miami Beach, FL 33162

Ladies and Gentlemen:

Buck Consultants has been engaged by the Retirement Committee of the City of North Miami Beach Retirement Plan for Police Officers & Firefighters ("Retirement Plan") to prepare a report to satisfy the reporting requirements under Section 112.664, Florida Statutes.

The Committee may use this report for meeting the disclosure requirements under Section 112.664, Florida Statutes. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without prior review.

The schedules of changes in net pension liability are developed in accordance with Governmental Accounting Standards Board's Statements 67 and 68. More specifically, the plan fiduciary net position is shown on a market value of assets basis and the total pension liability was developed under the entry age normal cost method. The total pension liability at the beginning of the period and ending of the period reflect the existing funding assumptions as well as the prescribed mortality assumption under Section 112.664(1)(a) and the prescribed mortality and assumed rate of return on investments under Section 112.664(1)(b).

The projection of market value of assets, investment return, and projected benefit payments is required by the above-referenced statute to exclude future contributions that the City, State, or members of the Retirement Plan are legally required to make. As such, these projections are not an appropriate measurement of the period of time that the Retirement Plan's assets will sustain the payment of expected retirement benefits. The expected benefit payments used in the projection have been determined using accrued benefits as of the valuation date and based on a closed group of current members. When future contributions are taken into account, the Retirement Plan is projected to accumulate enough assets to sustain projected benefit payments indefinitely. Thus, the projections for the closed group of members ignoring future contributions are of limited value in assessing the viability of the plan.

In preparing the actuarial results, we have relied upon information provided by the Plan Administrator regarding plan provisions, plan participants, plan assets, contribution rates and other matters used in the actuarial valuation. Although we did not audit the data, we reviewed the data for reasonableness and consistency with the prior year's information. The accuracy of the results presented herein is dependent on the accuracy of the data.

Section 112.664(1)(a), Florida Statutes prescribes the use of the RP-2000 Combined Healthy Participant Mortality Tables, by gender, with generational projection by Scale AA. Section 112.664(1)(b), Florida Statutes prescribes the use of an assumed rate of return on investments and an assumed discount rate that are equal to 200 basis points less than the plan's assumed rate of return. With the exception of the prescribed mortality and investment rate of return assumptions, all methods, assumptions, plan provisions, and member data are the same as those used in the October 1, 2015 Actuarial Valuation Report. While we have performed the calculations in accordance with the methods and assumptions mandated by the Florida statutes, we express no opinion as to whether the assumptions are reasonable.

The Committee reviewed the investment rate of return assumption in September of 2010 based on the Committee's established investment policy and the long term expected returns of the various asset classes in which the Retirement Plan is invested. The Committee concluded that an investment rate of return of 8.00%, gross of investment related expenses, was appropriate for the purpose of funding the Retirement Plan. The annual required contribution for the Retirement Plan includes 50 basis points on the market value of assets to account of investment related expenses. The use of an investment return assumption of 6.00% under Section 112.663(1)(b) would not be appropriate in evaluating the ongoing funding requirements of the Retirement Plan.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing 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. An analysis of the potential range of such future differences is beyond the scope of this valuation.

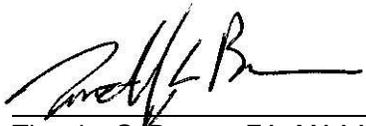
This report was prepared under the supervision of Joseph L. Griffin, an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice and I am available to answer questions about it.

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664(1), F.S., and Section 60T-1.0035, F.A.C.

Buck Consultants, LLC



Joseph L. Griffin, ASA, EA, MAAA, FCA
Principal, Consulting Actuary



Timothy G. Bowen, EA, MAAA, FCA
Principal, Consulting Actuary

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City of North Miami Beach
Retirement Plan for Police Officers & Firefighters

Section 1

Schedule of Changes in Net Pension Liability

Fiscal Year Ending September 30, 2015	GASB No. 67/68 Assumptions	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions
1. Total pension liability			
a. Service cost	\$ 1,839,411	\$ 1,895,290	\$ 2,920,411
b. Interest	10,348,159	10,535,327	10,063,382
c. Benefit changes	(1,980,070)	(2,007,302)	(2,748,194)
d. Differences between actual & expected experience	1,287,412	967,188	1,654,511
e. Change in assumptions	0	0	0
f. Benefit payments	(7,085,847)	(7,085,847)	(7,085,847)
g. Contribution refunds	(43,464)	(43,464)	(43,464)
h. Net change in pension liability	\$ 4,365,601	\$ 4,261,192	\$ 4,760,799
i. Total pension liability - beginning of year	\$ 131,008,656	\$ 133,292,376	\$ 168,315,356
j. Total pension liability - ending of year	<u>\$ 135,374,257</u>	<u>\$ 137,553,568</u>	<u>\$ 173,076,155</u>
2. Plan Fiduciary Net Position			
a. Contributions - Employer	\$ 6,498,316	\$ 6,498,316	\$ 6,498,316
b. Contributions - State	690,234	690,234	690,234
c. Contributions - Member*	720,789	720,789	720,789
d. Net Investment Income	(2,917,644)	(2,917,644)	(2,917,644)
e. Benefit payments	(7,085,847)	(7,085,847)	(7,085,847)
f. Contribution refunds	(43,464)	(43,464)	(43,464)
g. Administrative expenses	(227,726)	(227,726)	(227,726)
h. Other**	188,083	188,083	188,083
i. Net change in plan fiduciary net position	\$ (2,177,259)	\$ (2,177,259)	\$ (2,177,259)
j. Plan fiduciary net position - beginning of year	\$ 93,355,943	\$ 93,355,943	\$ 93,355,943
k. Plan fiduciary net position - ending of year	<u>\$ 91,178,684</u>	<u>\$ 91,178,684</u>	<u>\$ 91,178,684</u>
3. Net pension liability / (asset)	\$ 44,195,573	\$ 46,374,884	\$ 81,897,471
4. Certain key assumptions			
Valuation date	10/01/2015	10/01/2015	10/01/2015
Measurement date	09/30/2015	09/30/2015	09/30/2015
Investment return assumption	8.00%	8.00%	6.00%
Base Mortality table	RP-2000 Combined Healthy	RP-2000 Combined Healthy	RP-2000 Combined Healthy
Disabled Mortality table	RP-2000 Disabled Retiree	RP-2000 Combined Healthy	RP-2000 Combined Healthy
Generational projection scale	Scale AA	Scale AA	Scale AA
Collar Adjustment	Blue Collar	None	None

*Includes receivable member contribution of \$51,433 for contributions not deducted on overtime earnings in the 2015 fiscal year.

**Prior year state premium tax reserve of \$475,780 less current year state premium tax reserve of \$287,697.

City of North Miami Beach Section 2 Retirement Plan for Police Officers & Firefighters

Projection of Market Value of Assets, Investment Return, and Benefit Payments

Fiscal Year Ending	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2016	91,178,684	6,969,156	8,287,901	89,859,939
2017	89,859,939	6,863,811	8,283,958	88,439,793
2018	88,439,793	6,659,742	10,589,764	84,509,771
2019	84,509,771	6,355,928	10,319,878	80,545,820
2020	80,545,820	6,099,992	8,760,383	77,885,429
2021	77,885,429	5,683,535	13,950,867	69,618,097
2022	69,618,097	5,120,543	11,442,742	63,295,899
2023	63,295,899	4,678,155	9,826,965	58,147,089
2024	58,147,089	4,227,528	10,814,026	51,560,590
2025	51,560,590	3,706,649	10,660,026	44,607,214
2026	44,607,214	3,090,509	12,186,128	35,511,595
2027	35,511,595	2,380,880	11,726,778	26,165,698
2028	26,165,698	1,565,935	13,441,609	14,290,024
2029	14,290,024	697,807	11,353,283	3,634,548
2030	3,634,548	0	11,771,455	0

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits (funding valuation basis) 14.31

Certain Key Assumptions -- Funding valuation basis

Investment return assumption	8.00%
Base mortality table	RP-2000 Combined Healthy
Disabled mortality table	RP-2000 Disabled Retiree
Generational projection scale	Scale AA
Collar adjustment	Blue Collar

Notes:

The projection above excludes future contributions that the City, State, and members of the Retirement Plan are legally required to make. As such, these projections are not an appropriate measurement of the period of time that the Retirement Plan's assets will sustain the payment of expected retirement benefits. When future contributions are taken into account, the Retirement Plan is projected to accumulate enough assets to sustain projected benefit payments indefinitely. Thus, the projections for the closed group of members ignoring future contributions are of limited value in assessing the viability of the system.

Retirement Plan for Police Officers & Firefighters

Projection of Market Value of Assets, Investment Return, and Benefit Payments

Fiscal Year Ending	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2016	91,178,684	6,968,958	8,292,957	89,854,685
2017	89,854,685	6,862,725	8,300,943	88,416,467
2018	88,416,467	6,656,564	10,623,203	84,449,828
2019	84,449,828	6,349,276	10,367,211	80,431,893
2020	80,431,893	6,088,493	8,821,168	77,699,218
2021	77,699,218	5,665,491	14,031,100	69,333,609
2022	69,333,609	5,094,132	11,535,833	62,891,908
2023	62,891,908	4,641,614	9,934,580	57,598,942
2024	57,598,942	4,178,757	10,939,422	50,838,276
2025	50,838,276	3,643,341	10,800,801	43,680,817
2026	43,680,817	3,009,964	12,350,133	34,340,647
2027	34,340,647	2,280,213	11,905,007	24,715,853
2028	24,715,853	1,442,018	13,643,719	12,514,152
2029	12,514,152	547,303	11,568,290	1,493,165
2030	1,493,165	0	12,004,887	0

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits (Section 112.664(1)(a), F.S. basis) 14.12

Certain Key Assumptions -- Section 112.664(1)(a), F.S. basis

Investment return assumption	8.00%
Base mortality table	RP-2000 Combined Healthy
Disabled mortality table	RP-2000 Combined Healthy
Generational projection scale	Scale AA
Collar adjustment	None

Notes:

The projection above excludes future contributions that the City, State, and members of the Retirement Plan are legally required to make. As such, these projections are not an appropriate measurement of the period of time that the Retirement Plan's assets will sustain the payment of expected retirement benefits. When future contributions are taken into account, the Retirement Plan is projected to accumulate enough assets to sustain projected benefit payments indefinitely. Thus, the projections for the closed group of members ignoring future contributions are of limited value in assessing the viability of the system.

City of North Miami Beach Section 2 Retirement Plan for Police Officers & Firefighters

Projection of Market Value of Assets, Investment Return, and Benefit Payments

Fiscal Year Ending	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2016	91,178,684	5,225,556	8,292,957	88,111,284
2017	88,111,284	5,041,276	8,300,943	84,851,617
2018	84,851,617	4,777,043	10,623,203	79,005,457
2019	79,005,457	4,433,841	10,367,211	73,072,088
2020	73,072,088	4,123,545	8,821,168	68,374,465
2021	68,374,465	3,687,666	14,031,100	58,031,031
2022	58,031,031	3,140,828	11,535,833	49,636,026
2023	49,636,026	2,684,465	9,934,580	42,385,911
2024	42,385,911	2,219,752	10,939,422	33,666,241
2025	33,666,241	1,700,670	10,800,801	24,566,110
2026	24,566,110	1,108,859	12,350,133	13,324,836
2027	13,324,836	447,542	11,905,007	1,867,372
2028	1,867,372	0	13,643,719	0

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits (Section 112.664(1)(b), F.S. basis) 12.14

Certain Key Assumptions -- Section 112.664(1)(b), F.S. basis

Investment return assumption	6.00%
Base mortality table	RP-2000 Combined Healthy
Disabled mortality table	RP-2000 Combined Healthy
Generational projection scale	Scale AA
Collar adjustment	None

Notes:

The projection above excludes future contributions that the City, State, and members of the Retirement Plan are legally required to make. As such, these projections are not an appropriate measurement of the period of time that the Retirement Plan's assets will sustain the payment of expected retirement benefits. When future contributions are taken into account, the Retirement Plan is projected to accumulate enough assets to sustain projected benefit payments indefinitely. Thus, the projections for the closed group of members ignoring future contributions are of limited value in assessing the viability of the system.

**City of North Miami Beach
Retirement Plan for Police Officers & Firefighters**

Section 3

Actuarially Determined Contributions

Fiscal Year Ending September 30, 2017	Funding Assumptions	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions
1. Valuation Date	10/1/2015	10/1/2015	10/1/2015
2. Valuation Payroll			
a. Total Annual Compensation	\$ 6,056,254	\$ 6,056,254	\$ 6,056,254
b. Valuation Payroll	6,394,859	6,394,859	6,394,859
3. Annual Cost as of Valuation Date			
a. Entry Age Normal Accrued Liability	\$ 135,645,217	\$ 137,827,817	\$ 173,372,809
b. Actuarial Value of Assets	<u>95,513,806</u>	<u>95,513,806</u>	<u>95,513,806</u>
c. Unfunded Accrued Liability	\$ 40,131,411	\$ 42,314,011	\$ 77,859,003
d. Unfunded Accrued Liability Payment	\$ 3,766,235	\$3,904,243	\$ 5,254,104
e. Entry Age Normal Cost	1,589,997	1,630,774	2,568,164
f. Administrative Expenses	655,716	655,716	655,716
g. Interest Adjustment	<u>235,852</u>	<u>242,865</u>	<u>250,635</u>
h. Total Annual Cost as of the Valuation Date	\$ 6,247,800	\$ 6,433,598	\$ 8,728,619
4. Minimum Required Contribution as of Valuation Date			
a. Total Required Contribution	\$ 6,247,800	\$ 6,433,598	\$ 8,728,619
b. Estimated Employee Contributions	709,829	709,829	709,829
c. Estimated State Contributions	331,723	331,723	331,723
d. Estimated City Contributions	5,206,248	5,392,046	7,687,067
5. Minimum Required Contribution (as a % of Valuation Payroll)			
a. Total Required Contribution	97.7%	100.6%	136.5%
b. Estimated Employee Contributions	11.1%	11.1%	11.1%
c. Estimated State Contributions	5.2%	5.2%	5.2%
d. Estimated City Contributions	81.4%	84.3%	120.2%
6. Certain key assumptions			
Investment Return Assumption	8.00%	8.00%	6.00%
Base Mortality Table	RP-2000 Combined Healthy	RP-2000 Combined Healthy	RP-2000 Combined Healthy
Generational Projection Scale	Scale AA	Scale AA	Scale AA
Collar Adjustments	Blue Collar	None	None