

August 17, 2017

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:

Conduent 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 Conduent to review any statement you wish to make on the results contained in this report. Conduent 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 mortality tables from either of the two most recently published actuarial valuation reports of the Florida Retirement System, including the projection scale for mortality improvement. Appropriate risk and collar adjustments must be made based on plan demographics. The tables must be used for assumptions for preretirement and postretirement mortality. Section 112.664(1)(b), Florida Statutes prescribes the same mortality as Section 112.664(1)(a) and 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, 2016 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.

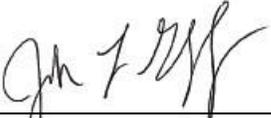
The Committee reviewed the investment rate of return assumption in February 2017 based on the Committee's established investment policy and the long term expected returns of the various asset classes in which the Retirement Plan is invested. The Committee concluded that an investment rate of return of 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.

Conduent



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, 2016	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	\$ 1,601,153	\$ 1,641,232	\$ 2,498,063
b. Interest	10,576,267	10,753,819	10,246,765
c. Benefit changes	0	0	0
d. Differences between actual & expected experience	480,158	196,734	112,865
e. Change in assumptions	3,234,845	1,121,327	2,433,240
f. Benefit payments	(9,687,883)	(9,687,883)	(9,687,883)
g. Contribution refunds	(43,464)	(43,464)	(43,464)
h. Net change in pension liability	\$ 6,161,076	\$ 3,981,765	\$ 5,559,586
i. Total pension liability - beginning of year	\$ 135,374,257	\$ 137,553,568	\$ 173,076,155
j. Total pension liability - ending of year	\$ 141,535,333	\$ 141,535,333	\$ 178,635,741
2. Plan Fiduciary Net Position			
a. Contributions - Employer	\$ 6,254,492	\$ 6,254,492	\$ 6,254,492
b. Contributions - State	605,857	605,857	605,857
c. Contributions - Member*	787,161	787,161	787,161
d. Net Investment Income	5,238,367	5,238,367	5,238,367
e. Benefit payments	(9,687,883)	(9,687,883)	(9,687,883)
f. Contribution refunds	(43,464)	(43,464)	(43,464)
g. Administrative expenses	(237,405)	(237,405)	(237,405)
h. Other**	95,989	95,989	95,989
i. Net change in plan fiduciary net position	\$ 3,013,114	\$ 3,013,114	\$ 3,013,114
j. Plan fiduciary net position - beginning of year	\$ 91,178,684	\$ 91,178,684	\$ 91,178,684
k. Plan fiduciary net position - ending of year	\$ 94,191,798	\$ 94,191,798	\$ 94,191,798
3. Net pension liability / (asset)	\$ 47,343,535	\$ 47,343,535	\$ 84,443,943
4. Certain key assumptions			
Valuation date	10/01/2016	10/01/2016	10/01/2016
Measurement date	09/30/2016	09/30/2016	09/30/2016
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 Combined Healthy	RP-2000 Combined Healthy	RP-2000 Combined Healthy
Generational projection scale	Scale BB	Scale BB	Scale BB
Collar adjustment - Males	10% White / 90% Blue	10% White / 90% Blue	10% White / 90% Blue
Collar adjustment - Females	White	White	White

*Includes receivable member contribution of \$94,674 for contributions not deducted on overtime earnings in the 2016 fiscal year.

**Prior year state premium tax reserve of \$287,697 less current year state premium tax reserve of \$191,708.

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)
2017	94,191,798	7,243,282	7,444,769	93,990,311
2018	93,990,311	7,099,437	10,700,542	90,389,206
2019	90,389,206	6,822,037	10,428,096	86,783,148
2020	86,783,148	6,594,378	8,877,630	84,499,896
2021	84,499,896	6,208,627	14,054,496	76,654,027
2022	76,654,027	5,678,830	11,559,694	70,773,162
2023	70,773,162	5,274,788	9,866,445	66,181,505
2024	66,181,505	4,762,420	13,563,433	57,380,492
2025	57,380,492	4,176,422	10,553,469	51,003,445
2026	51,003,445	3,601,541	12,203,139	42,401,847
2027	42,401,847	2,927,468	11,844,874	33,484,440
2028	33,484,440	2,113,750	14,402,198	21,195,992
2029	21,195,992	1,251,939	11,311,119	11,136,812
2030	11,136,812	408,488	12,298,013	0

Number of years for which current market value of assets is adequate to sustain the payment of expected retirement benefits (funding valuation basis) 13.91

Certain Key Assumptions -- Funding valuation basis

Investment return assumption	8.00%
Base mortality table	RP-2000 Combined Healthy
Disabled mortality table	RP-2000 Combined Healthy
Generational projection scale	Scale BB
Collar adjustment - Males	10% White / 90% Blue
Collar adjustment - Females	White

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)
2017	94,191,798	7,243,282	7,444,769	93,990,311
2018	93,990,311	7,099,437	10,700,542	90,389,206
2019	90,389,206	6,822,037	10,428,096	86,783,147
2020	86,783,147	6,594,378	8,877,630	84,499,895
2021	84,499,895	6,208,627	14,054,496	76,654,027
2022	76,654,027	5,678,830	11,559,694	70,773,162
2023	70,773,162	5,274,788	9,866,445	66,181,505
2024	66,181,505	4,762,420	13,563,433	57,380,492
2025	57,380,492	4,176,422	10,553,469	51,003,446
2026	51,003,446	3,601,541	12,203,139	42,401,847
2027	42,401,847	2,927,468	11,844,874	33,484,441
2028	33,484,441	2,113,750	14,402,198	21,195,993
2029	21,195,993	1,251,939	11,311,119	11,136,813
2030	11,136,813	408,488	12,298,013	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) 13.91

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 BB
Collar adjustment - Males	10% White / 90% Blue
Collar adjustment - Females	White

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)
2017	94,191,798	5,431,418	7,444,769	92,178,447
2018	92,178,447	5,214,367	10,700,542	86,692,272
2019	86,692,272	4,893,250	10,428,096	81,157,426
2020	81,157,426	4,606,996	8,877,630	76,886,792
2021	76,886,792	4,197,714	14,054,496	67,030,010
2022	67,030,010	3,680,061	11,559,694	59,150,377
2023	59,150,377	3,257,341	9,866,445	52,541,273
2024	52,541,273	2,751,500	13,563,433	41,729,341
2025	41,729,341	2,191,768	10,553,469	33,367,640
2026	33,367,640	1,641,297	12,203,139	22,805,798
2027	22,805,798	1,018,178	11,844,874	11,979,102
2028	11,979,102	292,974	14,402,198	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)

11.83

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 BB
Collar adjustment - Males	10% White / 90% Blue
Collar adjustment - Females	White

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, 2018	Funding Assumptions	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions
1. Valuation Date	10/1/2016	10/1/2016	10/1/2016
2. Valuation Payroll			
a. Total Annual Compensation	\$ 5,960,249	\$ 5,960,249	\$ 5,960,249
b. Valuation Payroll	6,381,893	6,381,893	6,381,893
3. Annual Cost as of Valuation Date			
a. Entry Age Normal Accrued Liability	\$ 141,980,130	\$ 141,980,130	\$ 179,126,865
b. Actuarial Value of Assets	<u>100,584,768</u>	<u>100,584,768</u>	<u>100,584,768</u>
c. Unfunded Accrued Liability	\$ 41,395,362	\$ 41,395,362	\$ 78,542,097
d. Unfunded Accrued Liability Payment	\$ 4,009,477	\$ 4,009,477	\$ 5,453,280
e. Entry Age Normal Cost	\$ 1,538,739	1,538,739	2,428,564
f. Administrative Expenses	\$ 686,738	686,738	686,738
g. Interest Adjustment	<u>244,601</u>	<u>244,601</u>	<u>253,313</u>
h. Total Annual Cost as of the Valuation Date	\$ 6,479,555	\$ 6,479,555	\$ 8,821,895
4. Minimum Required Contribution as of Valuation Date			
a. Total Required Contribution	\$ 6,479,555	\$ 6,479,555	\$ 8,821,895
b. Estimated Employee Contributions	708,390	708,390	708,390
c. Estimated State Contributions	362,870	362,870	362,870
d. Estimated City Contributions	5,408,295	5,408,295	7,750,635
5. Minimum Required Contribution (as a % of Valuation Payroll)			
a. Total Required Contribution	101.5%	101.5%	138.2%
b. Estimated Employee Contributions	11.1%	11.1%	11.1%
c. Estimated State Contributions	5.7%	5.7%	5.7%
d. Estimated City Contributions	84.7%	84.7%	121.4%
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
Disabled mortality table	RP-2000 Combined Healthy	RP-2000 Combined Healthy	RP-2000 Combined Healthy
Generational projection scale	Scale BB	Scale BB	Scale BB
Collar adjustment - Males	10% White / 90% Blue	10% White / 90% Blue	10% White / 90% Blue
Collar adjustment - Females	White	White	White