



October 26, 2012

Mr. Martin Lebowitz  
Plan Administrator  
City of North Miami Beach  
17011 N.E. 19<sup>th</sup> Avenue – Room 311  
North Miami Beach, Florida 33162-3100

**Re: Retirement Plan for General Employees of the City of North Miami Beach  
Plan Reform as of October 1, 2011**

Dear Marty:

As requested, we are pleased to present our Actuarial Study of the Retirement Plan for General Employees of the City of North Miami Beach (Plan) as of October 1, 2011.

**Purpose** - The purpose of the Study is to evaluate options for Plan redesign that would meet the overall goals and objectives of the City.

We understand the City has proposed freezing the Plan and installing a defined contribution plan for future benefits. Under this approach the City would be responsible for funding Plan benefits earned as of the date the Plan is frozen. We further understand the City contribution under the defined contribution Plan would max out at 8% of pay.

Overall goal is to redesign a schedule of plan benefits that will have a best estimate going forward cost of 8% of pay from the City and 7% of pay from the employees. In addition to the 8% of pay City contribution, the City will amortize current unfunded accrued benefits over a period of 25 years.

To reduce risk:

1. City will contribute annually 8% of pay (in addition to the 25 year amortization payment for current unfunded accrued benefits (*UAB*)) - any excess resulting from the excess of the annual 8% of pay City contribution (in addition to the 25 year amortization payment for current unfunded accrued benefits) above the minimum funding requirement will be held in reserve,
2. Members will contribute an additional 1% of pay into a reserve fund,
3. In the event a future minimum City funding requirement exceeds 8% of covered payroll (in addition to the 25 year amortization payment for current *UAB*), the reserve in items 1. and 2. above will be drawn down to the fullest to offset any future minimum City funding requirement above 8% of covered payroll (in addition to the 25 year amortization payment for current *UAB*),

4. Five-year smoothed actuarial value of assets is reset to market value - deferred investment losses are fully recognized,
5. Net assumed investment return is reduced to 7.50%, compounded annually,
6. Mortality assumption is strengthened and
7. DROP interest crediting is either fund return or money market return as elected by DROP member.

**Background** – The City’s FYE 2013 minimum required contribution is 32.6% of covered payroll. Members currently contribute 7% of covered pay.

Unrecognized investment losses total \$6,086,915 (Actuarial Value = \$60,135,822 less Market Value = \$54,048,907) as of October 1, 2011.

Net assumed investment return is 7.75%, compounded annually.

The mortality assumption is generally the rates from the RP-2000 Mortality Table with full generational projection by Scale AA.

DROP interest is credited at the fixed rate of 3%, compounded monthly.

In addition, the Board is interested in modifying the following current provisions:

1. Normal retirement eligibility is the earlier of attainment of age 62 or attainment of age 55 with twenty (20) years of service.
2. Early retirement eligibility is the earlier of attainment of age 55 with fifteen (15) years of service or completion of twenty (20) years of service, regardless of age.
3. **Benefit accrual rate is three percent (3%) for each year of credited service.**
4. Plan participants are 100% vested upon completion of six (6) years of credited service.
5. Maximum period of DROP participation is five (5) years.
6. **COLA adjustments are 2.25% per annum.**

**Proposed Changes** – We understand the City wishes to determine the effect on its Plan contribution of the following proposed changes to the timing of contributions.

Under all Scenarios benefits accrued and eligibilities are not reduced. In additions, no changes in benefits or eligibilities are contemplated for active members who have reached retirement age.

The unfunded present value of accrued benefits is \$33,830,147 (\$87,879,054 - \$54,048,907) as of October 1, 2011 under the strengthened assumptions.

### Scenario 1

1. Normal retirement eligibility: earlier of (1) age 62 with 10 years of service or (2) age 60 with 25 years of service (future accruals),
2. Early retirement eligibility: earlier of (1) age 55 with 20 years of service or (2) completion of 25 years of service, regardless of age (future accruals),
3. Early retirement reduction factor: 1/15 for the first 5 years, 1/30 thereafter benefit commencement precedes normal retirement date,
- 4. Future service multiplier: 2.8% (future accruals),**
5. Vesting: 100% after 10 years of service (for currently non-vested members),
6. DROP period: 36 months (future DROPs),
- 7. COLA rate: 2.00% per annum (future retirees),**
8. COLA deferral period: 3 years (future retirees).

### Scenario 2

1. Normal retirement eligibility: earlier of (1) age 62 with 10 years of service or (2) age 60 with 25 years of service (future accruals),
2. Early retirement eligibility: earlier of (1) age 55 with 20 years of service or (2) completion of 25 years of service, regardless of age (future accruals),
3. Early retirement reduction factor: 1/15 for the first 5 years, 1/30 thereafter benefit commencement precedes normal retirement date,
- 4. Future service multiplier: 2.8% (future accruals),**
5. Vesting: 100% after 10 years of service (for currently non-vested members),
6. DROP period: 36 months (future DROPs),
- 7. COLA rate: 0.75% per annum (future retirees),**
8. COLA deferral period: 3 years (future retirees) – N/A.

### Scenario 3

1. Normal retirement eligibility: earlier of (1) age 62 with 10 years of service or (2) age 60 with 25 years of service (future accruals),
2. Early retirement eligibility: earlier of (1) age 55 with 20 years of service or (2) completion of 25 years of service, regardless of age (future accruals),
3. Early retirement reduction factor: 1/15 for the first 5 years, 1/30 thereafter benefit commencement precedes normal retirement date,
- 4. Future service multiplier: 2.4% (future accruals),**
5. Vesting: 100% after 10 years of service (for currently non-vested members),
6. DROP period: 36 months (future DROPs),
- 7. COLA rate: 2.00% per annum (future retirees),**
8. COLA deferral period: 3 years (future retirees and DROPs).

**Scenario 4**

1. Normal retirement eligibility: earlier of (1) age 62 with 10 years of service or (2) age 60 with 25 years of service (future accruals),
2. Early retirement eligibility: earlier of (1) age 55 with 20 years of service or (2) completion of 25 years of service, regardless of age (future accruals),
3. Early retirement reduction factor: 1/15 for the first 5 years, 1/30 thereafter benefit commencement precedes normal retirement date,
4. **Future service multiplier: 2.6% (future accruals),**
5. Vesting: 100% after 10 years of service (for currently non-vested members),
6. DROP period: 36 months (future DROPs),
7. **COLA rate: 1.50% per annum (future retirees),**
8. COLA deferral period: 3 years (future retirees and DROPs).

**Results** – The attached Exhibits set out the key financial results of our Study for each Scenario. The following sets out the minimum annual required City contribution as a dollar amount and as a percentage of projected FYE 2013 covered payroll (\$11,507,283):

Item	Minimum Annual Required City Contribution		
	Base Plan	UAB Amortization EOY	Total
Current Plan / Strengthened Assumptions	\$ 4,614,420 (40.1%)	Included in Base	\$ 4,614,420 (40.1%)
<b>Scenario 1</b> – Includes 2.8% multiplier / 2% COLA / Strengthened Assumptions	\$ 1,050,160 (9.1%)	\$3,034,925 (26.4%)	\$4,085,085 (35.5%)
<b>Scenario 2</b> – Includes 2.8% multiplier / 0.75% COLA / Strengthened Assumptions	\$ 912,073 (7.9%)	\$3,034,925 (26.4%)	\$3,946,998 (34.3%)
<b>Scenario 3</b> – Includes 2.4% multiplier / 2% COLA / Strengthened Assumptions	\$ 900,566 (7.8%)	\$3,034,925 (26.4%)	\$3,935,491 (34.2%)
<b>Scenario 4</b> – Includes 2.6% multiplier / 1.5% COLA / Strengthened Assumptions	\$ 912,073 (7.9%)	\$3,034,925 (26.4%)	\$3,946,998 (34.3%)

**Other Considerations**

We anticipate double digit investment return for the Plan for fiscal year ended September 30, 2012. On that basis, we would expect results to be more favorable as of September 30, 2012.

**Actuarial Assumptions and Methods, Plan Provisions, Financial Data, Member Census Data** – The actuarial assumptions and methods, Plan provisions, financial data and member census data employed for purposes of our Actuarial Study are the same actuarial assumptions and methods, plan provisions, financial data and member census data utilized for the October 1, 2011 Actuarial Valuation with the exception of the following:

1. The actuarial value of assets is reset to market value.
2. Investment return is 7.5%, net of investment expenses.
3. Mortality Projection Scale BB replaces Projection Scale AA.

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This Actuarial Study describes the financial effect of the proposed changes on the Plan, from a neutral perspective.

These calculations are based upon assumptions regarding future events. However, the Plan's long term costs will be determined by actual future events, which may differ materially from the assumptions made. These calculations are also based upon present and proposed Plan provisions that are outlined or referenced in this Actuarial Study. If you have reason to believe the assumptions used are unreasonable, the Plan provisions are incorrectly described or referenced, important Plan provisions relevant to this proposed Actuarial Study are not described or that conditions have changed since the calculations were made, you should contact the undersigned prior to relying on information in this Actuarial Study.

If you have reason to believe that the information provided in this Actuarial Study 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 undersigned prior to making such decision.

Future actuarial measurements may differ significantly from the current measurements presented in this Study due to such factors as the following: Plans 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); and changes in Plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This Actuarial Study 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 Study in a manner other than the intended purpose may produce significantly different results.

Mr. Martin Lebowitz  
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The signing actuaries are independent of the Plan Sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

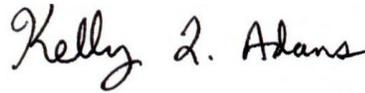
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If you should have any question concerning the above or if we may be of further assistance with this matter, please do not hesitate to contact us.

Sincerest regards,



Lawrence F. Wilson, A.S.A.  
Senior Consultant and Actuary



Kelly L. Adams, A.S.A.  
Consultant and Actuary

Enclosure

**Retirement Plan for General Employees  
of the City of North Miami Beach**

**Comparison of Cost Data as of October 1, 2011**

	<i>Strengthened Assumptions 7.5% / Mortality / Market Value</i>		<i>Scenario 1 - All Changes 2.8% Multiplier &amp; 2.00% COLA</i>		<i>Scenario 2 - All Changes 2.8% Multiplier &amp; 0.75% COLA</i>	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants						
1. Active employees	261	N/A	261	N/A	261	N/A
2. Terminated vested	35	N/A	35	N/A	35	N/A
3. Receiving benefits	194	N/A	194	N/A	194	N/A
4. DROP participants	37	N/A	37	N/A	37	N/A
5. Annual payroll of active employees	\$ 11,326,066	100.0%	\$ 11,326,066	100.0%	\$ 11,326,066	100.0%
6. Annual projected payroll of active employees (2012 - 2013)	\$ 11,507,283	100.0%	\$ 11,507,283	100.0%	\$ 11,507,283	100.0%
B. Present Value of Future Benefits	\$ 111,366,642	983.3%	\$ 105,042,559	927.4%	\$ 103,462,909	913.5%
C. Total Normal Costs	\$ 1,985,704	17.5%	\$ 1,794,422	15.8%	\$ 1,734,273	15.3%
D. Total Actuarial Accrued Liability	\$ 98,728,419	871.7%	\$ 94,080,573	830.7%	\$ 93,001,866	821.1%
E. Actuarial Value of Assets	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%
F. Unfunded Actuarial Accrued Liability	\$ 44,679,512	394.5%	\$ 40,031,666	353.4%	\$ 38,952,959	343.9%
G. Increase in Expected City Contribution	\$ 863,046 <sup>1</sup>	7.5%	\$ 333,711 <sup>1</sup>	2.9%	\$ 195,624 <sup>1</sup>	1.7%
H. Accumulated Benefits						
1. Present Value of Accumulated Benefits	\$ 87,879,054	775.9%	\$ 87,879,054	775.9%	\$ 87,879,054	775.9%
2. Market Value of Assets	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%
3. Unfunded Present Value of Accumulated Benefits	33,830,147	298.7%	33,830,147	298.7%	33,830,147	298.7%
I. Total Required Contribution	\$ 5,419,930	47.9%	\$ 4,890,595	43.2%	\$ 4,752,508	42.0%
J. Expected City Contribution						
1. Amortization with Interest of Unfunded Present Value of Accumulated Benefits	\$ 3,034,925 <sup>1</sup>	26.4%	\$ 3,034,925 <sup>1</sup>	26.4%	\$ 3,034,925 <sup>1</sup>	26.4%
2. Minimum Additional City Funding Requirement	\$ 1,579,495 <sup>1</sup>	13.7%	\$ 1,050,160 <sup>1</sup>	9.1%	\$ 912,073 <sup>1</sup>	7.9%
3. Total City Contribution	\$ 4,614,420 <sup>1</sup>	40.1%	\$ 4,085,085 <sup>1</sup>	35.5%	\$ 3,946,998 <sup>1</sup>	34.3%
K. Employee Contributions						
1. Regular (7% of pay)	\$ 805,510 <sup>1</sup>	7.0%	\$ 805,510 <sup>1</sup>	7.0%	\$ 805,510 <sup>1</sup>	7.0%
2. Reserve (1% of pay)	\$ 115,073 <sup>1</sup>	1.0%	\$ 115,073 <sup>1</sup>	1.0%	\$ 115,073 <sup>1</sup>	1.0%
3. Total	\$ 920,583 <sup>1</sup>	8.0%	\$ 920,583 <sup>1</sup>	8.0%	\$ 920,583 <sup>1</sup>	8.0%

<sup>1</sup> Percent of pay applied to expected 2012-2013 covered payroll (\$11,507,283)

**Retirement Plan for General Employees  
of the City of North Miami Beach**

**Comparison of Cost Data as of October 1, 2011**

	<i>Strengthened Assumptions 7.5% / Mortality / Market Value</i>		<i>Scenario 3 - All Changes 2.4% Multiplier &amp; 2.00% COLA</i>		<i>Scenario 4 - All Changes 2.6% Multiplier &amp; 1.50% COLA</i>	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants						
1. Active employees	261	N/A	261	N/A	261	N/A
2. Terminated vested	35	N/A	35	N/A	35	N/A
3. Receiving benefits	194	N/A	194	N/A	194	N/A
4. DROP participants	37	N/A	37	N/A	37	N/A
5. Annual payroll of active employees	\$ 11,326,066	100.0%	\$ 11,326,066	100.0%	\$ 11,326,066	100.0%
6. Annual projected payroll of active employees (2012 - 2013)	\$ 11,507,283	100.0%	\$ 11,507,283	100.0%	\$ 11,507,283	100.0%
B. Present Value of Future Benefits	\$ 111,366,642	983.3%	\$ 103,355,080	912.5%	\$ 103,570,948	914.4%
C. Total Normal Costs	\$ 1,985,704	17.5%	\$ 1,727,590	15.3%	\$ 1,737,055	15.3%
D. Total Actuarial Accrued Liability	\$ 98,728,419	871.7%	\$ 92,960,111	820.8%	\$ 93,091,525	821.9%
E. Actuarial Value of Assets	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%
F. Unfunded Actuarial Accrued Liability	\$ 44,679,512	394.5%	\$ 38,911,204	343.6%	\$ 39,042,618	344.7%
G. Increase in Expected City Contribution	\$ 863,046 <sup>1</sup>	7.5%	\$ 184,117 <sup>1</sup>	1.6%	\$ 195,624 <sup>1</sup>	1.7%
H. Accumulated Benefits						
1. Present Value of Accumulated Benefits	\$ 87,879,054	775.9%	\$ 87,879,054	775.9%	\$ 87,879,054	775.9%
2. Market Value of Assets	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%	\$ 54,048,907	477.2%
3. Unfunded Present Value of Accumulated Benefits	33,830,147	298.7%	33,830,147	298.7%	33,830,147	298.7%
I. Total Required Contribution	\$ 5,419,930	47.9%	\$ 4,741,001	41.9%	\$ 4,752,508	42.0%
J. Expected City Contribution						
1. Amortization with Interest of Unfunded Present Value of Accumulated Benefits	\$ 3,034,925 <sup>1</sup>	26.4%	\$ 3,034,925 <sup>1</sup>	26.4%	\$ 3,034,925 <sup>1</sup>	26.4%
2. Minimum Additional City Funding Requirement	\$ 1,579,495 <sup>1</sup>	13.7%	\$ 900,566 <sup>1</sup>	7.8%	\$ 912,073 <sup>1</sup>	7.9%
3. Total City Contribution	\$ 4,614,420 <sup>1</sup>	40.1%	\$ 3,935,491 <sup>1</sup>	34.2%	\$ 3,946,998 <sup>1</sup>	34.3%
K. Employee Contributions						
1. Regular (7% of pay)	\$ 805,510 <sup>1</sup>	7.0%	\$ 805,510 <sup>1</sup>	7.0%	\$ 805,510 <sup>1</sup>	7.0%
2. Reserve (1% of pay)	\$ 115,073 <sup>1</sup>	1.0%	\$ 115,073 <sup>1</sup>	1.0%	\$ 115,073 <sup>1</sup>	1.0%
3. Total	\$ 920,583 <sup>1</sup>	8.0%	\$ 920,583 <sup>1</sup>	8.0%	\$ 920,583 <sup>1</sup>	8.0%

<sup>1</sup> Percent of pay applied to expected 2012-2013 covered payroll (\$11,507,283)