UNITED STATES BANKRUPTCY COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

In re:	Chapter 9
City of Detroit, Michigan,	Case No. 13-53846
Debtor,	Hon. Steven W. Rhodes
/	

SUPPLEMENTAL REPORT OF MARTHA E.M. KOPACZ REGARDING THE FEASIBILITY OF THE CITY OF DETROIT PLAN OF ADJUSTMENT

On April 22, 2014, Judge Rhodes entered an Order¹ appointing me as the Court's expert witness. Pursuant to that Order, "(t)he Court's expert shall investigate and reach a conclusion on:

- (a) Whether the City's plan is feasible as required by 11 U.S.C. § 943(b)(7); and
- (b) Whether the assumptions that underlie the City's cash flow projections and forecasts regarding its revenues, expenses and plan payments are reasonable."

I am providing this Report under Fed. R. Evid. 706(a). On July 18, 2014, I served my initial Expert Report (the "Initial Report") on parties in interest.² Except as noted below, I incorporate the Initial Report by reference in its entirety.

¹ Docket #4215 - Order Appointing Expert Witness

² Docket #6156 - Certificate of Service regarding Expert Report of Martha E. M. Kopacz.

I submit this supplemental Expert Report for three purposes:

- To reaffirm my expert opinions after a review of the 5th and 6th

 Amended Plans of Adjustment filed after the submission of my initial Expert Report;
- To provide certain additional analyses based on information received from the City after the issuance of my Initial Report;
 and
- To correct typographical errors in the Initial Report.

Section I – Reaffirmation of Expert Opinion

Subsequent to July 18, 2014, the City filed two amendments to its Plan of Adjustment ("POA" or "Plan").³ My team and I have reviewed the amended Plans in order to determine what impact, if any, the changes might have on my Opinions. Of particular note, the financial projections supporting the amended POAs have not changed from the financial projections I analyzed in connection with my Initial Report. Thus, there are no new or additional forecasts, or *quantitative* information, to be evaluated or critiqued.

However, some of the changes reflected in the amended Plans, as well as the more recent approved tender offer for DWSD bonds, do impact my *qualitative* assessment of the current POA. The settlements reached with creditors after the date of the Initial Report and the DWSD bond tender approved by the Court on August 25, 2014 help to reduce uncertainties for the City post-confirmation and, in some cases, reduce the amount of long term cash outflows from the City. The DWSD bond refinancing increases the likelihood that DWSD will be able to make its contribution to the pension obligations, as contemplated in the most recently

³Docket #6257 - July 25, 2014 Fifth Amended Plan; Docket #6379 - July 29, 2014 Corrected Fifth Amended Plan; Docket #6908 - August 20, 2014 Sixth Amended Plan

amended POA, and also provides some encouraging data that may benefit the City in its future efforts to tap the capital markets.

Based on the foregoing, I reaffirm my opinions in the Initial Report that:

- (a) The City's plan is feasible as required by 11 U.S. C. § 943(b)(7); and
- (b) The assumptions that underlie the City's plan of adjustment projections regarding its revenues, expenses and plan payments are reasonable.

Section II – Supplemental Analysis Regarding Unfunded Pension Liabilities

Section J in my Expert Report addresses Pension Issues. I conclude that section of the Report with future reporting recommendations⁴. These recommendations stem from my concern that the City may have continuing unfunded pension obligations far into the future and that these obligations may increase beyond the assumptions presented in the July 2, 2014 financial projections.

Prior to issuing my Initial Report, the City provided me and my team with information regarding a sensitivity analysis of the future unfunded pension obligations. At that time, the information was limited to the obligations of the

⁴ Initial Expert Report of Martha E. M. Kopacz, beginning on page 154.

Police & Fire Retirement System ("PFRS") under several scenarios. This sensitivity analysis was prepared at my request by the City's actuarial firm, Milliman, Inc., and is discussed on pages 152 through 154 of the Initial Report.

Subsequent to the conclusion of my deposition, the City provided me with a similar analysis, prepared by Milliman, Inc., regarding future unfunded obligations of the General Retirement System ("GRS"). For the sake of clarity and simplicity, I am incorporating below the identical PFRS sensitivity analysis from my Initial Report, to which I have added a new sensitivity analysis for GRS. Adding the potential unfunded obligation related to GRS to that of the PFRS, which was identified in the Initial Report, provides a more complete picture and bolsters the recommendations for systematic and robust reporting contained in the Initial Report.

Sensitivity Analysis

The Society of Actuaries issued a *Report of the Blue Ribbon Panel on Public Pension Funding* in February 2014. The Blue Ribbon Panel recommended stress tests measuring the effect of investment returns over a 20-year period that are three percentage points above and below those used in calculating standardized plan

contributions⁵. The panel believes that +/- 3% points represents "plausible stresses" based on its review of prior market returns⁶.

In response to my request for an appropriate sensitivity analysis for the pension plans, Milliman has analyzed the PFRS and GRS plans assuming various average rates of return for the FY2014-2023 period and the aforementioned scenarios of 1) a bear market 5-year period followed by a bull market 5-year period and 2) a bull market 5-year period followed by a bear market 5-year period.

PFRS Sensitivity Analysis

As illustrated below, if the PFRS plan averages a 6% rate of return (75 basis points lower than the assumed rate of return) over the nine years ending June 2023, the Plan is forecasted to be only 70% funded in June 2023, resulting in an additional \$236 million of unfunded liability versus the POA projections. That unfunded variance expands to \$527 million if the PFRS plan averages a 5% rate of return during this time period. Finally, if PFRS is negatively impacted by a bear market/bull market cycle (as opposed to the inverse) with five years averaging 0%

⁵ The Society of Actuaries "Report of the Blue Ribbon Panel on Public Pension Plan Funding"; February 2014

⁶ The Society of Actuaries "Report of the Blue Ribbon Panel on Public Pension Plan Funding"; February 2014

followed by five years averaging 10%, the pension plan would have \$342 million more in unfunded liabilities during the 10-year period in question.

PFRS Average Rate of Return Scenario Analysis⁷

Average Rates of Return July 2014 - June 2023	Estimated Funding Status June 2023	Estimated Projected Unfunded Liability June 2023		Estimated Projected Unfunded Liability Variance	
3.00%	43%	\$	1,717	\$	1,036
5.00%	60%	\$	1,208	\$	527
6.00%	70%	\$	917	\$	236
6.75%	78%	\$	681	\$	-
8.00%	92%	\$	252	\$	(429)
0% - 1st 5 years; 10% - 2nd five years	53%	\$	1,439	\$	758
10% - 1st 5 years; 0% - 2nd five years	64%	\$	1,097	\$	416

GRS Sensitivity Analysis

Similar to the PFRS analysis above, if the GRS plan averages a 6% rate of return (75 basis points lower than the assumed rate of return) over the nine years ending June 2023, the plan is forecasted to be only 69% funded in June 2023, resulting in an additional \$163 million of unfunded liability versus the POA projections. At an average 5% rate of return during this time period, the unfunded variance expands to \$359 million. Lastly, if GRS is negatively impacted by a bear market/bull market cycle (as opposed to the inverse) with five years averaging 0%

⁷ Milliman, Inc. letter; dated July 9, 2014

followed by five years averaging 10%, the pension plan would have \$165 million more in unfunded liabilities during the 10-year period in question.

GRS Average Rate of Return Scenario Analysis⁸

Average Rates of Return July 2014 - June 2023	Estimated Funding Status June 2023	Unf	nated Projected unded Liability June 2023	nated Projected unded Liability Variance
3.00%	47%	\$	1,209	\$ 665
5.00%	61%	\$	903	\$ 359
6.00%	69%	\$	707	\$ 163
6.75%	76%	\$	544	\$ -
8.00%	89%	\$	247	\$ (297)
0% - 1st 5 years; 10% - 2nd five years	57%	\$	964	\$ 420
10% - 1st 5 years; 0% - 2nd five years	65%	\$	799	\$ 255

Section III – Errata Items

Set forth below are certain non-substantive "errata" changes to the Initial Report.

Date Change

On page 59 of my Initial Report, there is an error in paragraph 2, line six.

The second reference to "FY 2015" in the statement "....property assessments in FY2015 and a 3-4% drop in FY2015." should instead be "FY 2016."

⁸ Milliman, Inc. letter; dated July 22, 2014

Footnote 47

During my deposition, it was brought to my attention that Footnote 47 of my Initial Report was in error. Following the deposition, I determined that Footnote 47 applied to a different sentence in the Initial Report. As explained below, I am incorporating in full the relevant section of the Initial Report and correcting the misapplied footnote to the proper text.

Pension

Within the Pension Issues section of my Report (Section J) is a subsection dealing with "Pension Funding Level", beginning on page 126 and concluding in the middle of page 129. The Detroit Retirement Systems have sought to exclude this portion of my Initial Report based on the mistaken belief that my statements and conclusions are erroneous. Although I will leave to the Court the decision whether to exclude these passages, the record should be clear as to the relevant sources on which I relied. As I noted in my Initial Report, I relied on information and data supplied by the parties in this case. To clarify, set forth below are the same pages from my Initial Report to which I have added footnotes which reference the relevant source.

Pension Funding Level

The accounting for defined benefit plans can be very complex. The calculations used to determine the appropriate funding levels required each year are dependent upon macro-economic factors, actuarial assumptions, and other variables that can be difficult to understand and can be manipulated to bias the required funding levels.

Historically, a number of different practices have contributed to a significant funding shortfall in the two pension plans. The Retirement Systems utilized unrealistic rate of return assumptions and managed the pension plans in accordance with questionable investment strategies that resulted in considerable underfunding of the respective Plans. The Retirement Systems assumed aggressive annual rates of return on investment (PFRS: 8.0%; GRS: 7.9%), allocated asset gains and losses over a seven-year period which masked potential funding shortfalls, and utilized renewing 29- (PFRS) and 30- (GRS) year amortization periods for funding the unfunded pension obligations.

The calculation of this funding shortfall, or the Unfunded Actuarial Accrued Liability ("UAAL"), is dependent upon the use of assumptions as noted above.

⁹ Docket #4391 – Fourth Amended Disclosure Statement; page 120, ¶ (b)(ii)

Based on the assumption methodologies used by the retirement systems previously, the UAAL was projected, at the end of FY2012, to have been approximately \$977 million. At June 30, 2013, that UAAL estimate was \$1.5 billion as PFRS reported it was 89% funded with a UAAL of \$415 million. At that same time, GRS reported it was 70% funded with a UAAL of \$1.1 billion. Using what the City now believes are more accurate assumptions, the City's actuary - Milliman, Inc. - has estimated that the combined systems' UAAL, at June 30, 2013, was approximately \$3.5 billion. 12

In addition to issues involving the aggressiveness of the rate of return assumption used to determine funding levels, also contributing to the increase of the UAAL were a number of questionable activities engaged in by the retirement systems, which included:

• Utilizing GRS fund assets to pay the promised returns on the Annuity Savings Program which, upon members of GRS allocating 3%, 5% or 7% of their after-tax salaries into a discreet defined contribution plan, effectively guaranteed a minimum 7.9% annual investment return

¹⁰ Docket #13 - Declaration of Charles M. Moore; ¶11

¹¹ Docket #4391 - Fourth Amended Disclosure Statement; page 120, ¶ (b)(i)

¹² Docket #13 - Declaration of Charles M. Moore; ¶13

regardless of the actual investment performance of the pension plans' assets¹³

- Using actual market returns for crediting purposes rather than the guarantee, the City believes that over \$387 million of excess investment earnings were credited to Annuity Savings Funds from 2003-2013¹⁴
- GRS trustees, when the plan's actual returns were higher than the assumed rate of return, paid a portion of the positive variance between the actual investment return and the assumed rate of return in an additional pension check to already retired pensioners in what is commonly referred to as the "13th check" program ¹⁵
- The City periodically deferred its required year-end PFRS contributions, and then borrowed to pay those deferrals with debt priced at a rate of $8\%^{16}$
- Retirement System officials have been accused and/or indicted of material fiduciary misconduct, allegedly draining the pension of necessary liquidity and contributing to the underfunding of the Retirement Systems.¹⁷

The foregoing represents my Supplemental Report. Except as expressly set forth herein, my Initial Report remains valid without modification. Should additional

¹³ Docket #4391 – Fourth Amended Disclosure Statement; page 121, ¶(iii)(A)

¹⁴ Docket #4391 – Fourth Amended Disclosure Statement; page 39, second full paragraph

¹⁵ Docket #4391 – Fourth Amended Disclosure Statement; page 121, ¶(iii)(A)

 $^{^{16}}$ Docket #13 – Declaration of Charles Moore; ¶20 and Docket #4391 - Fourth Amended Disclosure Statement; page 122/771, ¶(iii)(C)

¹⁷ Docket #4391 – Fourth Amended Disclosure Statement; page 121 and 122, ¶ (iii)(B). (Note this is the original location of Footnote 47 found to be in error.)

information become available after the issuance of this Supplemental Report, I respectfully reserve the right to amend or supplement this Supplemental Report.

Respectfully submitted,

Dated: August 27, 2014

/s/ _Martha E. M. Kopacz

Martha E.M. Kopacz