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Memorandum

TO:	**RECTOR & ASSOCIATES**
FROM:	**Jim Toole**
CC:	**Rob Stewart**
DATE:	03/06/2014
RE:	**GHMSI BENCHMARK SURPLUS RANGE RECONCILIATION**

We were asked us to examine three questions relating to the Appleseed letter to the DISB dated January 29, 2014:

1. Is it possible to quantify the drivers of the change in the surplus level findings for GHMSI from the 2009 Rector Report to the 2013 Rector Report?

2. Is it possible to quantify the various aspects that went into the modification of the Rating Adequacy and Fluctuation factor (Item 1 from the Appleseed letter)?

3. Is it possible to quantify the positive and negative impacts to GHMSI's operations arising from health care reform (Item 7 from the Appleseed letter)?

Background:
There were a large number of assumption and modeling changes made by various parties between the 2009 and 2013 Rector reports. These updates reflect evolutionary changes in the underlying business and revolutionary changes in the economic and business environment (recession, ACA, etc.) Some changes were quantitative and explicitly enumerated in establishing assumptions while some were qualitative: considered in establishing assumptions, but not explicitly enumerated in the derivation of the assumptions.

We were able to estimate the relative impact of quantitative adjustments to assumptions (e.g. the change in the Rating Asset Adequacy and Fluctuation assumption from 2009 to 2013). We were not able to explicitly derive the impact of qualitative considerations; they were "folded into" the derivation of the quantitative measures via the range intervals, representative values, and/or probabilities selected for use in the Milliman model.

We are not able to identify the impact of cumulative changes made by Milliman to their underlying processes, modelling approach, and/or adjustments to the programming code underlying the Milliman models.

Question 1:
Quantify the drivers of the change in the surplus level findings for GHMSI from the 2009 Rector Report to the 2013 Rector Report.

We have provided a summary of the assumption and modeling changes that occurred between the 2008 and 2011 Milliman reports and the 2009 and 2013 Rector reports:

1) Material changes that Milliman made to their assumptions since 2009

   a. Premium Growth
   b. Rating Adequacy and Fluctuation
   c. Equity Portfolio Asset Values (including the impact of pensions)
   d. Other Business Risks
   e. Additional ACA Adjustment

Index	Milliman 2011 vs Milliman 2008 Rating Factor	RBC % Change
1	Premium Growth Rate	-30%
2	Rating Adequacy	300%
3	Reserve Liability	0%
4	Bond Interest Rate	-20%
5	Bond Portfolio Impairment	0%
6	Equity Portfolio	70%
7	Loss of Commercial Business	0%
8	Loss of FEP Ind. Business	0%
9	Loss of FEP Service Center Income	0%
10	Loss of Blue Card Income	0%
11	ASC Default	-20%
12	Catastrophic Events	0%
13	Unidentified Growth and Development	0%
14	Additional ACA Adjustment	100%
	Total Change 2011 vs 2008	400%

2) Material changes that we made to our assumptions since 2009

   a. Premium Growth
   b. Rating Adequacy and Fluctuation
   c. Equity Portfolio Asset Values (including the impact of pensions)
   d. Other Business Risks

Index	Rector 2013 vs Rector 2009 Rating Factor	RBC % Change
1	Premium Growth Rate	40%
2	Rating Adequacy	180%
3	Reserve Liability	0%
4	Bond Interest Rate	-20%
5	Bond Portfolio Impairment	0%
6	Equity Portfolio	70%
7	Loss of Commercial Business	0%
8	Loss of FEP Ind. Business	0%
9	Loss of FEP Service Center Income	0%
10	Loss of Blue Card Income	0%
11	ASC Default	-20%
12	CAT Event	0%
13	Unidentified Growth	0%
14	Additional ACA Adjustment	0%
	Total Change 2013 vs 2009	250%

Question 2:
Quantify the various aspects that went into the modification of the Rating Adequacy and Fluctuation factor.

The rating adequacy component of the model had the largest relative changes between the 2011 and 2008 Milliman models and the Rector model. The most significant changes recognized the uncertain impact that health care reform would have on GHMSI to forecast accurate premiums rates in a volatile marketplace. Neither Milliman nor Rector included the impact of health care reform in their 2008 models and analysis. We estimate our rating adequacy assumption is between 100% to 150% higher than the previous rating adequacy assumption as a result of health care reform.

Question 3:
Quantify the positive and negative impacts to GHMSI's operations arising from health care reform.

The impact of ACA and health care reform were not considered in the 2008 Milliman and Rector models and analysis. The newly enacted reforms have introduced new uncertainties and risks for insurers and generally have resulted in higher capital needs for health insurers.

Both the 2011 Milliman model and the 2013 Rector model took the impact of ACA and health care reform into consideration. In its 2011 model, Milliman only took into account in its stochastic modeling process those health care reform requirements that were in effect prior to 1/1/14. We have not determined the growth in RBC requirements under the 2011 Milliman model for health care reforms in effect prior to 1/1/14. For those health care reform requirements that were effective on or after 1/1/14, Milliman estimated that the impact of those health care reforms could increase GHMSI's surplus target range by an additional 100% to 150% of RBC.

To account for the effect of all health care reform requirements (in effect both before and after 1/1/14), Rector's 2013 model instead revised Milliman's rating adequacy and fluctuation factor and took the effect of health care reform into account in the selected probabilities of premium growth levels. In the Rector 2013 model, the total growth in RBC requirements due to ACA reform (both reforms effective before and after 2014) is approximately 200%.