



New Jersey Schools Insurance Group

6000 Midlantic Drive, Suite 300 North
Mount Laurel, New Jersey 08054
(609) 386-6060 • FAX (609) 386-8877
www.njsig.org

Board of Trustees Meeting of September 21, 2016 Action Item Risk Based Capital/Surplus Study as of June 30, 2016

The Sigma Actuarial Consulting Group was engaged to perform a strategic Total Adjusted Capital/Risk Based Capital (TAC/RBC) analysis for NJSIG. Sigma used the Group's preliminary 06/30/16 financial reports which included the 06/30/16 Willis Towers Watson study of ultimate liabilities, the 06/30/16 GASB68 adjustments (as per the NJ KPMG state report), and the assumption of a \$3 million 2015/2016 safety grant.

The analysis for the range of the Group's surplus requirement relies on the concept of Risk Based Capital (RBC). RBC is an insurance industry financial evaluation tool defined by the National Association of Insurance Commissioner (NAIC) and is utilized by state insurance commissioners to measure the solvency of insurance companies licensed in their state. The RBC defines the minimum amount of capital (surplus) that an insurance carrier should maintain to allot for claims payments and is also the minimum surplus required to prevent authorized/regulatory agency intervention.

As per the Sigma study, the two major driving components of NJSIG's RBC calculations are claims reserves (at 55.17%) and net written premiums (at 36.03%). Sigma has calculated an adapted RBC after covariance of \$31.6 million. The NJSIG RBC ratio is 2.15. The NAIC industry RBC ratio is 3.36. The NJSIG total adjusted capital (TAC)/surplus threshold range would fall between the 2.15 and 3.36 RBC ratio. At 06/30/16, Sigma recommends a 06/30/2016 surplus target threshold between \$67.9 million and \$106.2million. (Please see attached Section 5, Table 6 from Sigma's study for these results)

The projected 06/30/2016 NJSIG surplus (assuming a \$3 million safety grant) is \$68.2 million. This is within the study's targeted threshold of \$67.9 million and \$106.2 million.

Recommended Resolution: Accept the 6/30/2016 Sigma Actuarial Consulting Group study. Each year-end, until a new surplus study is performed, NJSIG should adopt the methodology that the NJSIG member equity (surplus) target threshold should minimally meet the adapted RBC value (as determined by Sigma), including a yearly inflation factor (as measured by the Consumer Price Index and published by the Bureau of Labor Statistics), times the RBC ratio range of 2.15 – 3.36 (as determined by Sigma). The Group's adapted RBC is to be evaluated at a minimum of every five years by an independent firm.

Michele Carosi

Michele Carosi, Comptroller

Section 4, Table 1

New Jersey School Insurance Group

Historical Income Statements

	Year Ending 6/30				
	2016	2015	2014	2013	2011
Assessments from Participating Members	\$123,898,389	\$123,126,715	\$118,742,207	\$113,612,150	\$103,250,602
Reinsurance Premium	(32,281,555)	(28,099,924)	(26,839,590)	(23,526,359)	(23,007,306)
Other (Claims Servicing Revenue and Other Income)	25,434	46,361	110,341	110,797	284,491
Net Earned Premium	\$91,762,268	\$94,073,152	\$93,012,958	\$87,550,928	\$80,507,787
Net Paid Losses and Change in Net Loss and ALAE Reserves	\$52,142,898	\$63,433,869	\$65,701,497	\$56,565,055	\$52,902,133
Change in ULAE Reserves	(222,594)	(66,497)	50,862	143,743	832,286
Net Claim Costs	\$51,920,304	\$63,367,362	\$65,752,159	\$56,708,796	\$52,902,133
Salaries and Fringe Benefits	\$9,048,214	\$9,297,768	\$19,241,939	\$7,043,173	\$6,139,950
Agent Commissions	14,873,464	15,133,038	14,483,381	13,482,865	12,919,864
Safety Grant Expense	3,090,000	2,200,000	1,700,000	5,175,335	0
Management Fees	675,000	508,250	843,750	875,000	712,500
Office Expenses	1,023,520	897,607	1,000,130	902,898	795,589
Consulting and Professional Fees	618,145	798,174	855,809	714,688	598,177
Travel and Meeting Expense	173,402	236,219	240,181	297,839	230,229
Other	397,577	312,127	337,190	235,310	180,481
Depreciation	469,738	369,371	322,462	365,224	359,169
Other Underwriting Expenses	\$30,047,118	\$28,718,554	\$39,024,822	\$28,842,130	\$22,669,809
Operating Income	\$9,794,848	\$1,087,208	\$11,764,013	\$0	\$1,332,208
Investment Income	\$848,398	\$931,484	\$771,327	\$1,245,938	\$1,528,269
Non-Operating Income	\$849,396	\$931,484	\$771,327	\$1,245,938	\$1,528,269
Net Income	\$10,643,242	\$2,915,690	\$10,962,660	\$1,245,938	\$1,341,327

New Jersey School Insurance Group

Historical Balance Sheets

	Year Ending 6/30				
	2016	2015	2014	2013	2011
Cash and Cash Equivalents	\$285,785,525	\$104,749,018	\$102,149,821	\$70,981,806	\$58,780,124
Investments	40,000,000	182,924,377	188,596,982	183,827,590	202,388,939
Accrued Interest and Dividends	477,322	1,105,729	494,743	537,047	720,730
Assessment Receivable, Net	2,647,690	2,369,849	4,234,378	3,788,085	3,541,090
Reinsurance Receivable	(35,860)	2,089,120	16,747,077	17,083,241	3,074,824
Prepaid Expenses and Other Assets	1,312,323	1,112,215	1,222,793	1,285,918	1,081,337
Capital Assets	791,569	305,893	379,992	227,917	359,455
Total Assets	\$310,978,729	\$294,628,059	\$293,795,068	\$277,741,572	\$287,924,569
Deferred Outflows of Resources	\$3,892,853	\$946,598	\$0	\$0	\$0
Net Loss and ALAE Reserves	\$217,292,000	\$213,188,000	\$213,362,000	\$188,995,000	\$189,148,000
ULAE Reserves	1,098,994	1,721,548	1,768,085	1,737,423	1,593,600
Unearned Assessments	1,908,448	1,555,470	1,711,498	1,830,389	2,288,081
Accounts Payable and Accrued Expenses	3,000,341	4,068,974	3,928,122	3,945,597	6,128,595
Safety Grant Payable	5,787,294	4,802,362	6,818,221	5,843,881	4,644,769
Total Current Liabilities	\$230,085,077	\$225,344,394	\$227,825,924	\$212,352,250	\$203,781,125
Net Pension Liability	\$15,888,572	\$12,188,706	\$11,773,126	\$0	\$0
Total Long-Term Liabilities	\$15,888,572	\$12,188,706	\$11,773,126	\$0	\$0
Total Liabilities	\$245,973,649	\$237,533,100	\$239,599,050	\$212,352,250	\$203,781,125
Deferred Inflows of Resources	\$81,365	\$728,261	\$0	\$0	\$0
Surplus	\$67,995,688	\$57,315,328	\$54,308,838	\$65,389,322	\$84,143,384

Section 5, Table 1

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

R1 - Fixed Income Assets

	Value ¹	Factor	RBC
PR009 - Miscellaneous Assets:			
Cash and Cash Equivalents	\$265,785,525	0.003	\$797,357
Short Term Investments	40,000,000	0.003	120,000
Total	\$305,785,525		\$917,357

¹ NJSIG draft financial statements as of 6/30/16.

DRAFT

Section 5, Table 2

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

R3 - Credit-Related Assets

	Value ¹	Factor	RBC
PR012 - Credit for Receivables:			
Reinsurance Recoverables	\$30,000,000	0.100	\$3,000,000
Investment Income Due and Accrued	477,322	0.010	4,773
Recoverables from Parent, Subsidiaries and Affiliates	2,647,680	0.050	132,384
Total	\$33,125,002		\$3,137,157

¹ NJSIG draft financial statements as of 6/30/16. Reinsurance recoverables are not shown in NJSIG's financial statements in the manner that they would be for a company filing an NAIC yellow book. Therefore, reinsurance recoverables are assumed to be approximately \$30M for purposes of this analysis.

DRAFT

Section 5, Table 3

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

R4 - Underwriting Risk - Reserves

	Net Loss and Loss Adjustment Expense Unpaid ¹	Industry Loss Expense RBC Factor ²	Adjustment Factor for Investment Income ³	Net Loss and Loss Adjustment Expense Reserve RBC
PR017 - Underwriting Risk - Reserves:				
Coverage:				
Workers Compensation	\$178,330,000	0.324	0.830	\$17,640,404
General Liability	26,449,000	0.511	0.852	7,600,702
Automobile Liability	9,079,000	0.230	0.911	1,094,292
Automobile Physical Damage	378,000	0.112	0.976	32,248
Property	3,026,000	0.191	0.966	455,431
Total	\$217,262,000			\$26,823,077
Loss Concentration Factor				94.62%
Total Net Reserve RBC				\$25,379,995

¹ NJSIG draft financial statements as of 6/30/16.

² This factor is not adjusted for company-specific experience.

³ Assumes a 5% interest rate and industry payment patterns.

Section 5, Table 4

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

RS - Underwriting Risk - Net Written Premiums

	Current Year Net Written Premium ¹	Industry Losses and Loss Adjustment Expense Ratio ²	Company Underwriting Expense Ratio ³	Adjustment Factor for Investment Income ⁴	Net Written Premium RBC
PR018 - Underwriting Risk - Net Written Premiums:					
Coverage:					
Workers Compensation	\$69,441,216	1.033	0.327	0.839	\$13,480,779
General Liability	8,525,979	1.042	0.327	0.816	1,515,213
Automobile Liability	5,345,456	0.988	0.327	0.890	1,105,255
Automobile Physical Damage	1,142,242	0.843	0.327	0.971	166,765
Property	7,281,941	0.941	0.327	0.949	1,605,335
Total	\$91,736,834				\$17,873,347
Premium Concentration Factor					92.71%
Total Net Written Premium RBC					\$16,570,380

¹ NJSIG draft financial statements as of 6/30/16.

² This factor is not adjusted for company-specific experience.

³ Based on ratio of expenses to net premium from NJSIG draft financial statements as of 6/30/16.

⁴ Assumes a 5% interest rate and industry payment patterns.

Section 5, Table 5

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

Total Risk-Based Capital After Covariance

	RBC
<u>PR031-PR033 - Computation of Total Risk-Based Capital After Covariance:</u>	
R0 - Affiliated Insurance Company Assets:RBC	\$0
R1 - Fixed Income Assets	917,357
R2 - Equity Assets RBC	0
R3 - Credit-Related Assets	3,137,157
R4 - Underwriting Risk - Reserves	25,379,995
R5 - Underwriting Risk - Net Written Premiums	16,570,380
Total RBC Before Covariance	\$46,004,889
Total RBC After Covariance	<u>\$31,632,791</u>

DRAFT

Section 5, Table 6

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

Comparison of Unique and Industry TAC/RBC Ratios

	Percentage of Total RBC Before Covariance Adjustment		
	NJSIG	Industry	Industry Excluding R0 and R2
R0 - Affiliated Insurance Company Assets RBC	0.00%	14.25%	N/A
R1 - Fixed Income Assets	1.99%	2.39%	4.22%
R2 - Equity Assets RBC	0.00%	29.00%	N/A
R3 - Credit-Related Assets	6.82%	3.82%	6.73%
R4 - Underwriting Risk - Reserves	55.17%	30.93%	54.50%
R5 - Underwriting Risk - Net Written Premiums	36.02%	19.61%	34.55%
Total	100.00%	100.00%	100.00%

	NJSIG	Industry (Thousands)
Total RBC After Covariance (RBC)	\$31,632,791	\$247,350,969
Total Adjusted Capital (TAC)	67,958,568	830,075,697
TAC/RBC Ratio	2.15	3.36

Note: Industry data is from NAIC's Aggregate P/C Results by Year for 2014 (excluding Catastrophe Risk). RBC ratios in the NAIC document (and defined in the RBC for Insurers Model Act) are based on the Authorized Control Level RBC. Ratios in this analysis are based on the Total RBC After Covariance, which is two times the Authorized Control Level RBC.

Section 5, Table 7

New Jersey Schools Insurance Group

Adapted Risk-Based Capital

Percentage of Simulated TAC/RBC Ratios Within Each Action Level

NAIC Action Level	TAC/RBC Ratio	Percentage of TAC/RBC Within Each Level					2014 Industry
		6/30/17	6/30/18	6/30/19	6/30/20	6/30/21	
Mandatory Control Level	Below 0.35	0.00%	0.48%	1.52%	2.54%	3.30%	0.99%
Authorized Control Level	0.35 to 0.50	0.01%	0.22%	0.53%	0.85%	1.02%	0.48%
Regulatory Action Level	0.50 to 0.75	0.13%	0.74%	1.33%	1.80%	2.40%	0.32%
Company Action Level	0.75 to 1.00	0.23%	1.43%	2.53%	3.13%	3.56%	0.48%
No Action Required	1.00 to 1.25	0.74%	2.85%	3.85%	4.78%	5.10%	2.18%
No Action Required	1.25 to 2.50	87.75%	72.24%	63.84%	58.74%	58.77%	14.35%
No Action Required	2.50 to 5.00	11.14%	22.04%	26.20%	28.06%	27.85%	28.48%
No Action Required	5.00 to 50.00	0.00%	0.00%	0.00%	0.00%	0.00%	35.18%
No Action Required	Greater than 50.00	0.00%	0.00%	0.00%	0.00%	0.00%	17.56%
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Note: Industry data is from NAIC's Aggregate P/C Results by Year for 2014 (excluding Catastrophe Risk). RBC ratios in the NAIC document (and defined in the RBC for Insurers Model Act) are based on the Authorized Control Level RBC. Ratios in this analysis are based on the Total RBC After Covariance, which is two times the Authorized Control Level RBC.

DRAFT