SUPPLEMENTAL STUDY – SALARY SPIKING

The annuity benefit provided from the Plan uses the average of the member's highest three calendar years' annual base salaries. In any plan that provides benefits based on final salary or final average salary, there can be concerns of "salary spiking" whereby a member works overtime, takes on additional duties, or receives a promotion in the years immediately preceding retirement with the intention of increasing their annuity benefit (in excess of the assumed salary increases). The compensation considered for the Statewide Defined Benefit Plan purposes, both benefits and contributions, does not include non-mandatory overtime pay. This severely limits the potential for members to inflate their pay and take advantage of salary spiking. However, an analysis of the data is the best way to ensure spiking is not a problem for the SWDB Plan.

GRS analyzed historical data for calendar years 2000 through 2015. GRS eliminated any partial years of data in which a member was hired or terminated employment. Year over year increases were calculated on successive full years of employment. This data was then identified as being in one of three categories:

1. Employment not within three years of termination or retirement
2. Employment within three years of termination
3. Employment within three years of retirement

In general, it is anticipated that members with less service will receive higher salary increases, and we would expect to observe lower overall pay increases for members near retirement (whether they are in the final averaging period or not). To help remove this natural bias, the grouped year-by-year increase data was then compared to the merit portion of the salary increase assumption for those members. This merit increase is based on the number of years of service a member has attained. GRS then compared the net increase for grouped data.

Over the period, the group within three years of retirement showed no observable increase in salary increases (measured as salary increase less merit increase assumption) as compared to the continuing active group. Both groups had an average excess increase of 3.1% over the merit assumption over the 15 year period. Although this does not guarantee that there are no individual members taking advantage of salary spiking within the SWDB Plan, it does provide some reassurance that there is not a trend within the overall group for doing so.

Net Increase Compared to Assumed																
Year of Increase	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	**Average**
1. Continuing	4.6%	5.1%	5.1%	4.1%	2.3%	3.1%	3.6%	3.6%	3.9%	1.3%	4.3%	0.8%	1.7%	1.7%	2.6%	3.1%
2. Termination	2.4%	2.7%	2.2%	1.1%	1.0%	0.9%	3.3%	1.6%	1.1%	-1.3%	-0.2%	0.3%	0.9%	0.8%	1.5%	0.9%
3. Retirement	4.4%	4.0%	4.2%	3.9%	2.4%	2.6%	3.2%	4.3%	4.4%	1.9%	4.8%	0.9%	1.0%	1.9%	3.2%	3.1%