

THREE: APPENDICES

MISCELLANEOUS ASSUMPTIONS

continued

Average Final Compensation Load

What is the Average Final Compensation Load Assumption and How Do We Use it?

The Average Final Compensation (AFC) Load assumption is used to estimate the expected cost of certain increases to member benefits near retirement. More specifically, it represents the increase in pensionable salary upon retirement for unknown sources of compensation. For example, certain retirement systems allow cash-out payments for excess vacation leave as a form of pensionable compensation. The pensionable payments included in the retiree AFC consist of payments billable and non-billable to the employer. The AFC Load assumption is meant to estimate the cost to the retirement system associated with the non-billable payments. Employers reimburse the retirement system for billable payments.

We apply the AFC load to the expected retirement benefits for all active members in PERS, TRS, LEOFF, and WSPRS Plans 1. The assumed loads are used to increase the modeled benefits to adjust for either unknown pensionable payments, e.g., cash-outs, or unexpectedly higher salary, e.g., “salary spiking”, that members may earn prior to retirement.

High Level Takeaways

In general, we observed declining rates in the experience for PERS 1 and TRS 1, and steady rates for WSPRS 1. We lowered the load assumption for PERS 1 as the decline was more pronounced than in TRS 1. We retained our load assumption for TRS 1 and WSPRS 1.

Additionally, we retained our current load assumption for LEOFF 1 given the few remaining active members.

Data and Assumptions

We looked at 23 years of experience study records, from 1996-2018. No special data was added for this assumption, and no data was excluded.

We assume the amount collected by DRS for billable payments covers the expected cost of those payments to the retirement system.

General Methodology

We analyzed the AFC load by determining the portion of final AFC that is attributable to the non-billable pensionable payments of retired members. Using historical retiree data, we calculated annual loads, and weighted average loads corresponding to aggregated experience over different time periods. We considered the results and relied on professional judgment to set the final loads.

Law Changes

The law listed below expanded the sources of pensionable salary.

- ❖ **SB 5274 (2017)** – Allows voluntary overtime, up to 70 hours per year, to be included in salaries for purposes of calculating retirement benefits in WSPRS.

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Analysis and Results

Analysis

Past Experience

The following tables show the historical AFC loads by year, from 1996 to 2018, as well as weighted average loads for certain time periods. The time periods chosen for the weighted average loads correspond to the prior experience study (1996-2012), the current experience study (2013-2018), and the entire study period (1996-2018). As an example, a load of 5 percent means, on average, a member's AFC increased by 5 percent at retirement due to unexpected payments that would otherwise not have been accounted for in the plan liability without the AFC load.

Historical AFC Loads			
	PERS 1	TRS 1	WSPRS 1
1996	5.48%	0.93%	1.79%
1997	5.17%	1.61%	2.92%
1998	5.27%	0.99%	5.67%
1999	5.16%	1.08%	4.65%
2000	5.49%	1.12%	7.38%
2001	5.96%	1.06%	7.45%
2002	4.89%	1.00%	6.16%
2003	5.13%	0.87%	7.13%
2004	4.50%	0.97%	7.01%
2005	4.84%	0.81%	6.90%
2006	4.68%	0.76%	7.60%
2007	4.58%	0.71%	10.54%
2008	4.62%	1.00%	6.68%
2009	4.06%	1.04%	7.54%
2010	4.74%	0.89%	6.75%
2011	3.88%	0.72%	6.19%
2012	3.64%	0.70%	6.30%
2013	3.88%	0.65%	7.04%
2014	2.84%	0.59%	6.27%
2015	2.38%	0.57%	7.67%
2016	2.52%	0.35%	6.74%
2017	1.69%	0.53%	6.11%
2018	1.03%	0.08%	4.71%

Weighted Average AFC Loads			
	PERS 1	TRS 1	WSPRS 1
1996-2012	4.80%	0.95%	6.32%
2013-2018	2.57%	0.53%	6.58%
1996-2018	4.39%	0.90%	6.43%

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Methods and Format of Assumptions

In studying this assumption, we considered the materiality and impact of the LEOFF 1 assumption and the WSPRS Voluntary Overtime law (SB 5274). For reference, we considered the following:

- ❖ We did not perform analysis for LEOFF 1 due to the few number of remaining active members (26 active members as of June 30, 2018). We do not expect this assumption to materially impact our liabilities, so we retained our current assumption of 4.50 percent. Please see the [2007-2012 Demographic Experience Study](#) for information on how this assumption was set.
- ❖ We considered an adjustment to the WSPRS load assumption based on SB 5274 since it expands sources of pensionable salary. Based on information from WSPRS, members participated in voluntary overtime prior to the passage of this bill; that overtime will now be included as pensionable salary. Following the passage of this bill into law, we adjusted our underlying salary growth assumption to reflect the anticipated increase in member salaries. This bill also limits the maximum amount of pensionable overtime salary to 70 hours per year. While it is possible that members will work more voluntary overtime during their years closest to retirement, it is our understanding there are administrative practices in place to prevent salary spiking (i.e., inflating a member's compensation during their AFC period to receive a larger pension benefit at retirement). We will continue to monitor this in future experience studies and if administrative practices change, it may lead to an increase in our load for WSPRS.

Results

Experience shows a steady decline in rates for PERS 1 and TRS 1 based on both recent and long-term experience; we have no reason to expect this trend will not continue in the future. We reduced the PERS 1 load to be more consistent with recent experience. Considering the size and materiality of the TRS 1 load assumption, we retained the old assumption. WSPRS 1 experience is more volatile than the other plans over the study period, and we do not observe a clear trend emerging in the data. However, the experience aligns with our old assumption, so we chose not to change the WSPRS load assumption. We retained the LEOFF 1 assumption as only 26 actives remain in the plan as of June 30, 2018. The following table shows the old and new AFC load assumptions.

AFC Load Assumption				
	PERS 1	TRS 1	WSPRS 1	LEOFF 1
Old	4.00%	0.75%	7.00%	4.50%
New	2.50%	0.75%	7.00%	4.50%