

URS Fiscal Analysis of 2016 H.B. 205

This document has been prepared by the Utah Retirement Systems (URS) based on information and analysis received from its consulting actuary, Gabriel Roeder Smith & Company.

Summary of Fiscal Impact

If enacted, H.B. 205, Tier II Retirement Amendments, has the following fiscal impact on URS:

Increase in unfunded actuarial accrued liability:	Increase in annual cost for all participating employers:	Increase in the participating employer contribution rates:
\$10.8 million	<ul style="list-style-type: none"> • \$10.0 million in Fiscal Year 2018 • \$13.2 million in Fiscal Year 2019 	<ul style="list-style-type: none"> • Tier II Public Employees' Contributory Retirement System: 1.00% increase • Tier II Public Safety and Firefighter Contributory Retirement System: 2.00% increase

If enacted, this proposed legislation would increase the participating employer contribution rate for participating employers in the Tier II Public Employees' Retirement System from 10% to 11% of pay and the employer contribution rate for the Tier II Public Safety and Firefighter Retirement System from 12% to 14% of pay (the employers would still be required to contribute the additional cost of the Tier I amortization cost on Tier II payroll). This proposed legislation would also provide increased benefits in the defined benefit component of both Tier II Hybrid Plans.

H.B. 205 would increase the annual cost for the participating employers in URS by \$10.0 million in Fiscal Year 2018 and \$13.2 million in Fiscal Year 2019. Since Tier II has an increasing active membership, the dollar amount of the fiscal impact will increase in future years. However, the fiscal cost will remain a constant 1.00% of pay for the Tier II Public Employees' Retirement System and 2.00% of pay for the Tier II Public Safety and Firefighters Retirement System.

Under Governmental Accounting Standards Board (GASB) Statement No. 68, participating employers of URS are required to record a liability on their balance sheet equal to their proportionate share of the System's net pension liability (i.e. unfunded liability). The net pension liability recorded on the balance sheets of these participating employers will increase, collectively, by \$10.8 million if this legislation is enacted.

Proposed Legislative Provisions

H.B. 205 would, beginning July 1, 2017, increase the employer contributions from 10% to 11% of pay for the Tier II Public Employees' Retirement System and from 12% to 14% of pay for the Tier II Public Safety and Firefighter Retirement System. It would also increase the multiplier in the Tier II Public Employees' Hybrid Plan from 1.50% to 1.72% for service after July 1, 2017, up to a maximum of 35 years of service credit (i.e. 60.2% of final average salary (FAS) for service earned after July 1, 2017). Similarly, the multiplier in the Tier II Public Safety and Firefighter Hybrid Plan would increase from 1.50% to 2.00% for service credit after July 1, 2017, up to a maximum of 25 years of service credit (i.e. 50% of FAS for service earned after July 1, 2017).

Currently, a Tier II public employee hired at age 35 (the average hire age for a public employee) would receive a benefit equal to 45% of FAS at age 65 with 30 years of service. Under the proposed benefit provisions, this employee would earn 51.6% of FAS at age 65 with 30 years of service. Members with more than 35 years of service would have their benefit limited to 60.2% of FAS.

Similarly, under the current provisions a Tier II public safety or firefighter hired at age 30 (the average hire age for members in this system) would receive a benefit equal to 37.5% of FAS at age 55 with 25 years of service (their first age eligible to retire). Under the proposed benefit provisions, this employee would earn 50% of FAS at age 55 with 25 years of service. Members with more than 25 years of service would have their benefit limited to 50% of FAS. For most public safety officers and firefighters this would occur prior to age 60.

Tier II Hybrid plan members who entered the system prior to July 1, 2017, the effective date of the proposed changes, will have the possibility to earn slightly larger retirement benefits (as a percentage of FAS) than members hired after July 1, 2017, because their service credit earned under the current 1.50% multiplier is not included in determining the benefit cap (i.e. 60.2% of FAS for Public employees and 50% of FAS for public safety and firefighters).

Discussion and Actuarial Analysis

The fiscal cost of this proposed legislation is equal to the increase in the employer’s fixed contribution rate times the projected payroll of members earning benefits in the Tier II systems. Note, since all employees hired after July 1, 2011 participate in the Tier II retirement systems, the membership and covered payroll are projected to increase each year. The following tables provide the projected fiscal cost for fiscal years 2018 and 2019, the first two years after the effective date of the proposed legislation.

Projected Fiscal Impact for Fiscal Year 2018			
(\$ in Thousands)			
Retirement System	Projected Payroll	Increase in Employer Contribution Rate	Fiscal Impact
Tier II PE Retirement System (Hybrid & DC)	\$847,000	1.00%	\$8,470
Tier II PS & FF Retirement System (Hybrid & DC)	\$80,000	2.00%	\$1,600
	Total Fiscal Impact FY 2018:		\$10,070

Projected Fiscal Impact for Fiscal Year 2019			
(\$ in Thousands)			
Retirement System	Projected Payroll	Increase in Employer Contribution Rate	Fiscal Impact
Tier II Public Employees (Hybrid & DC)	\$1,135,000	1.00%	\$11,349
Tier II Public Safety & Firefighters (Hybrid & DC)	\$92,000	2.00%	\$1,840
	Total Fiscal Impact FY 2019:		\$13,189

Since Tier II has as increasing active membership, the dollar amount of the fiscal impact will increase in future years. However, the fiscal cost will remain a constant 1.00% of pay for the Tier II Public Employees' Retirement System and 2.00% of pay for the Tier II Public Safety and Firefighters Retirement System.

The enhancements to the defined benefit component will increase the required contribution to the defined benefit component of the hybrid plan. Below is a table showing the change in the actuarially determined contribution rate for that component of the hybrid plan.

Impact the Actuarially Determined Contribution Rates (ADC)				
Retirement System	ADC Current Plan¹	ADC Proposed Change¹	Current Board Certified Rate	Increase Contribution Rate (3) – (4)
(1)	(2)	(3)	(4)	(5)
Tier II Public Employees	7.83%	8.82%	8.22%	0.60%
Tier II Public Safety & Firefighters	10.00%	13.26%	10.67%	2.59%

¹ Before reflecting the 0.08% contribution rate for the 75% of pay death benefit to all active members.

As the previous table shows, there is currently a difference, or margin, between the actuarially determined rate of the defined benefit plan and the Board certified rate. Specifically, this difference is 0.39% of pay for the Tier II Public Employees' System and 0.67% of pay for the Tier II Public Safety and Firefighters System. If H.B. 205 is enacted, the contribution rate increases shown in column five does not maintain the current margin. In other words, the margin in the contribution rates is being used to offset some of the cost increase due to the benefit enhancement.

Below is a table showing the current Board certified contribution rates, by component, as well as the contribution rates that would be effective under the proposed legislation.

Impact of the Proposed Legislation on the Contributions to the Hybrid Systems						
Retirement System	Current Certified Rates			Proposed Legislation		
	DB	DC	Total Plan	DB	DC	Total Plan
Tier II Public Employees	8.22%	1.78%	10.00%	8.82%	2.18%	11.00%
Tier II Public Safety & Firefighters	10.67%	1.33%	12.00%	13.26%	0.74%	14.00%

Members in the Tier II Public Employees’ hybrid plan would experience a 0.40% increase in the contribution to their DC account. In this instance, members will observe increased benefits in both hybrid plan components. On the other hand, public safety members and firefighters would experience a larger retirement benefit from the DB component, but a decrease in their DC benefit. Under the Entry Age Normal (EAN) cost method, the normal cost is the theoretical annual amount, expressed as a level percentage of pay, when contributed over an employee’s entire career will accumulate sufficient funds to provide the projected retirement benefit. This may be different than the cost of the member’s benefit over the following year. The normal cost rate for the Tier II Public Employees’ System increased from 7.92% to 8.80%. Similarly, the normal cost rate for the Tier II Public Safety and Firefighter System increased from 10.16% to 13.12%. It is clearly understood that the normal cost will increase due to the proposed legislation.

It may be less understood that there will also be an increase in the actuarial accrued liability due to the plan changes in H.B. 205. Under the Entry Age Normal cost method, the actuarial accrued liability can be thought of as the accumulation of prior normal costs. The normal cost rate represents the cost of the retirement benefit over their entire career, for current employees, this includes years of service that have already been earned. So the increase in the normal cost for those prior years of service will result in an increase in the actuarial accrued liability. If enacted, this proposed legislation would increase actuarial accrued liability for the Tier II Public Employees’ Retirement System from \$81.6 million to \$90.2 million (\$8.6 million increase). Similarly, the actuarial accrued liability for the Tier II Public Safety and Firefighter Retirement System would increase from \$7.4 million to \$9.6 million (\$2.2 million increase). Under this proposed legislation, the funded ratios of the Public Employee and Public Safety and Firefighter Systems would be 98% and 90%, respectively.

Note, the increase to the actuarial accrued liability would have been greater if the proposed changes were applied to all service (including service earn prior to the effective date of the legislation) or if there were no maximum service limit.

The higher multiplier will result in members accruing benefits at a faster rate. However, the cap on service credit after July 1, 2017 will limit the retirement benefit that is provided by the defined benefit plan. Note, both of these changes will encourage many members to retire at a younger age (compared to the current plan), especially for the public safety and firefighter system where the service limit is attained after 25 years. We also expect there would be an increased number of public safety members and firefighters seeking reemployment after commencing their retirement benefit. Since the service cap for public employees is 35 years, that cap will have a smaller impact on changes in retirement behavior in that plan. We anticipate these behaviors to occur because they were observed when the Tier I public safety and firefighter system had a service cap in effect for those who retired prior to July 1, 2010. As a

result we have modified the retirement assumption to reflect this anticipated change in retirement behavior.

The increase in the employer contribution rate to the Tier II Public Safety and Firefighter System will result in overall increased retirement benefits to the members. However, the decrease in the defined contribution component of the hybrid plan to 0.74% of pay means the hybrid plan has less margin to absorb adverse experience or other increases before the cost of the defined benefit plan exceeds the 14.00% employer contribution rate and member contributions would be required. On the other hand, this margin actually increases for the Tier II Public Employees' Retirement System.

The proposed legislation results in a \$1.5 million and \$0.9 million unfunded actuarial accrued liability in the defined benefit component of the Public Employees' and Public Safety and Firefighter System, respectively. As a result, the actuarially determined contribution rates include an amortization charge of 0.02% and 0.14% of pay, respectively. These amortization charges would be eliminated and the members would receive additional contributions to their DC account if the State made a one-time appropriation to fully fund the unfunded actuarial accrued liability.

The amortization cost was determined using a 20-year funding period. Given that the unfunded actuarial accrued liability was the result of a plan change, we recommend this be funded over a closed period that does not exceed 20 years and any additional unfunded actuarial accrued liability occurs in future years due to investment losses or assumption changes be amortized separately.

Data and Assumptions

This modeled analysis is based on the member and financial data that were used to prepare the January 1, 2015 actuarial valuation, which was presented and adopted by the Board in August 2015. Based on careful consideration of the retirement behavior observed in the Tier I public safety retirement system when the service cap was in place, we have increased the retirement rates at certain ages to reflect anticipated changes in retirement behavior. Specifically, at ages under 65 where members would receive no future increases in their total accruals (i.e. once a public employee attained 35 years of service under the 1.72% accrual rate and when a public safety or firefighter attained 25 years of service under the 2.00% accrual rate), the retirement rates were set to the greater of the retirement rates currently assumed or 35%.

Other Actuarial Comments

Our calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate significantly from our projections, depending on actual plan experience. This information is intended to describe the financial and actuarial effect of the proposed plan changes on URS only.

It should be noted that we are neither for nor against the proposed changes. The level of retirement benefits to be provided to employees is a policy decision for the Legislature and employers. Our goal is to inform the stakeholders of the impact on URS of changes to these rules. As a reminder, the information provided herein should provide stakeholders an idea of the magnitude of the fiscal impact and we recommend a specific fiscal analysis be performed on any proposed legislation rather than relying on the information contained herein.

Administrative Cost Analysis

As with all bills that alter benefit design or make substantive benefit modifications, implementation of H.B. 205 will likely result in some administrative costs. However, such costs will be handled within existing budgets, will not result in direct, measurable costs for URS, and will not result in an increase to actuarially determined contribution rates in addition to those discussed above resulting from the benefit modifications.