

September 23, 2015

Mr. Daniel D. Andersen
Executive Director
Utah Retirement Systems
540 East 200 South
Salt Lake City, UT 84102-2099

Re: Actuarial Analysis: Potential Changes to Working After Retirement Provisions

Dear Dan:

As requested, we have determined the fiscal impact of potential changes to the working after retirement provisions if there was proposed legislation introduced in the next legislative session that was similar to HB 77 (and the 1st substitute) that was introduced during the 2015 session.

Note, the fiscal impact described herein is based on legislation proposed during the last legislative session. This information can be relied upon as providing the relative magnitude of the fiscal impact if similar legislation is enacted. However, we recommend a specific fiscal analysis be performed on any proposed legislation rather than relying on the cost impact information contained herein for final fiscal impact determinations.

Modeled Changes to Working after Retirement Provisions

Below is a summary of the working after retirement provision changes that were modeled for performing the actuarial analysis documented herein. We have also attached Exhibit 1 providing a comparison of the work after retirement provisions currently in effect and the modeled changes.

1. Reemployment within 60 days of the member's initial date of retirement

Current provisions: The member's retirement allowance ceases during his reemployment and the member is returned to active status.

Modeled provisions: Same as current provisions.

2. Reemployment between 60 days and one-year of the member's initial date of retirement

Current provisions: The member's retirement allowance will continue as long as: (1) the member's compensation during the calendar year does not exceed the lesser of \$15,000 or 50% of their final average salary, and (2) the member does not receive employer provided benefits (e.g. medical, dental, retirement, paid time off, annual leave, sick leave, etc.).

Modeled provisions: The retirement allowance will continue as long as: (1) the member is reemployed by a different agency, and (2) the member does not receive retirement, paid time off, annual leave and sick leave benefits (medical, dental, disability, and other employer provided benefits would be permitted).

3. Reemployment with any participating employer of URS after one-year of the member's initial date of retirement

Current Provisions: Member may elect to either: (1) cancel their retirement allowance and return to active status; or (2) continue to receive their allowance and forfeit earning additional retirement benefits.

Modeled provisions: Same as current provisions.

Summary of Fiscal Impact

If such legislation was enacted during the 2016 legislation session, we have determined there would be a \$25.7 million increase in the annual cost for the participating employers in URS.

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 \$223.4 million if this legislation is enacted.

We have also separately analyzed the financial effect if the modeled change includes a provision that requires employers of working retirees to contribute the Board certified contribution rate, rather than the amortization rate that is currently contributed on the payroll of working retirees. The increased contributions on the payroll of the working retirees would finance a portion, but not all, of the fiscal impact of the benefit improvement. Specifically, we determined this modification would finance 35%, or \$9.1 million of the total \$25.7 million in increased annual cost. Exhibit 3 provides additional information by fund.

There are a couple of characteristics to note about this financing mechanism (i.e. increased contributions on the payroll of working retirees). First, this financing arrangement places a larger portion of the financial cost on those employers who utilize working retirees in their workforce. In other words, rather than applying the cost increase proportionately to all employers as a percentage of payroll, this "user fee" requires those employers who utilize working retirees in their workforce to pay a slightly higher portion of the benefit enhancement. However, this surcharge does not cover all of the cost of the changes to the provisions. All employers would experience some increase in their contribution rates; even those employers that do not rehire retirees.

Another characteristic of this financing arrangement is the working retiree's benefit is no longer fully funded at the time they commence their retirement benefit and the retirement system has increased reliance on those anticipated contributions as a working retiree to avoid an actuarial loss due to their retirement. As a result, it will become even more important for the Retirement System

to have appropriate employer reporting processes in place for working retirees to ensure the employers are not under reporting their working retiree payroll in order for URS to collect the appropriate employer contributions on the payroll of their working retirees.

Example of Increase in Cost due to Change in Retirement Behavior

It is more expensive for employers to fund retirement benefits when plan provisions permit or encourage members to commence their retirement benefit at an earlier age. This effect has been studied and documented for stakeholders in URS over the last several years. For completeness to this discussion section, we have provided an example below which illustrates the additional cost to the retirement system for a hypothetical public employee, John Doe, to commence his retirement benefit at an earlier age.

In this example, Mr. Doe, elects to commence his retirement allowance at age 55, with 30 years of service and then work 5 more years to age 60. In Scenario B, Mr. Doe retires at age 60 with 35 years of service. In both scenarios, Mr. Doe is assumed to live to age 85, the approximate life expectancy of a retiree in URS.

Example of Actuarial Loss to URS due to Change in Retirement Behavior where the Member is Encouraged to Commence his benefit Five Years Earlier

	Scenario A Retire at age 55 with 30 years of service, and seek 5 more years of reemployment	Scenario B Retire at age 60 with 35 years of service, and completely exit the workforce
	(1)	(2)
1. Initial retirement allowance ¹	\$39,000	\$54,040
2. Total payments received to age 85	\$1,636,500	\$1,796,800
3. Present value of retirement allowance at age 55 ²	\$601,900	\$535,900
4. Increase in present value of retirement allowance	\$66,000	-
5. Present value of missed normal costs received by the retirement system on and after age 55 ³	\$35,400	-
6. Total actuarial loss to the Utah Retirement Systems (Item 4. + Item 5.)	\$101,400	-

¹ Under Scenario A, Mr. Doe retires at age 55 with an average final compensation (AFC) of \$65,000, and 30 years of service. Under Scenario B, Mr. Doe retires at age 60 with an AFC of \$77,200 (3.50% annual increase in salary from age 55 to age 60) and 35 years of service.

² Present value determined using the 7.50% actuarial valuation interest rate assumption.

³ Present value of future contributions based on a normal cost rate of 11.74% of pay.

Note that we have assumed that Mr. Doe will exit the workforce at the same age in both scenarios (age 60). The only thing that changes is that Mr. Doe commences his retirement benefit 5 years earlier in Scenario A and the system does not receive normal cost contributions for those 5 years.

As the example above shows, the present value, as of age 55, of the member's retirement allowance is larger if he retires at an earlier age. While Mr. Doe's monthly retirement allowance and total benefits received would be larger if he delays retirement to age 60, the present value of this amount is lower because he commenced receiving this retirement allowance five years later.

The \$66,000 in increased present value of Mr. Doe's retirement benefit is an actuarial loss to the retirement system. URS incurs an additional actuarial \$35,400 loss due to lost normal cost contributions from the Mr. Doe's employer. This results in a total actuarial loss of \$101,400.

To prevent URS from incurring these actuarial losses on an ongoing basis, it is necessary to adjust the assumed retirement ages to reflect the fact that members will commence their retirement allowance at earlier ages. In other words, the normal cost will increase to sufficiently fund the member's benefit over the time-frame between hire and benefit commencement which is now 5 years shorter in the example.

Actuarial Analysis

The provision changes modeled herein provide members significant opportunity to increase their personal financial resources late in their career by encouraging members to commence their retirement benefit and continue to participate in the workforce. As a result, we must anticipate the change in the retirement behavior and the age members commence their retirement allowance to identify the financial impact of the modifications to the working after retirement provisions.

To model the anticipated change in retirement behavior, we analyzed the historical working retiree behavior for members retiring four and half years prior to and four and half years after the enactment of SB 43, the working retiree reform legislation enacted during the 2010 legislation and became effective July 1, 2010. Based on this analysis, as well as our prior understanding of the overall change in retirement behavior as a result of performing an experience study in 2014, we have increased the retirement rates below age 65 for public employees and below age 60 for public safety members and firefighters.

If enacted, this legislation would increase the actuarially determined contribution rate for the Noncontributory State and School fund, Fund 16, by 0.41% to 19.27%. The actuarially determined contribution rates for the Noncontributory Public Safety Funds would experience increases ranging from 1.66% to 2.43% of pay, and the contribution rates for the Division A and B Firefighter funds would increase by 1.30% and 1.61%, respectively. The contribution rates for both the Tier II Hybrid Plans would also increase, but they would continue to remain noncontributory. However, since the employer's cost is fixed at 10% of pay (12% of pay for public safety and fighters), the increased cost of the defined benefit plan would decrease the allocation to the members' defined contribution account.

Collectively, this legislation would increase the annual cost for the participating employers in URS by \$25.7 million per year. Please refer to Exhibit 2 for the impact on the actuarially determined contribution rates and annual cost impact for FY 2017 for each fund.

Note that the actuarially determined contribution rates would continue to remain below the Board certified rates that are in effect for fiscal years 2017. In accordance with Utah Code Section 49-11-301(5), the Board has the option of maintaining the current certified contribution rates or increasing the certified contribution rates to reflect the increased cost due to this legislation. We would recommend the Board consider increasing the contribution rates to reflect the cost of the benefit improvement and to avoid extending the projected date the funds will attain a 100% funded status.

If enacted, this proposed legislation would increase the actuarial accrued liability by \$223.4 million. This results in a corresponding increase in the net pension liability that is determined under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68. As a result, the net pension liability recorded on the balance sheets of the participating employers of URS will increase by \$223.4 million, collectively, if this legislation is enacted. Please refer to Exhibit 4. for the impact on the unfunded actuarial accrued liability and funded ratio for each fund.

Comments Regarding Modeled Provisions

In our opinion, removing the earnings limit for retirees who seek reemployment between 60 and 360 days of their initial retirement date provides significant flexibility for members to commence their retirement benefit and shortly thereafter reenter the workforce. Due to Utah's high urbanization rate, the requirement for retirees to seek reemployment at a different agency in order to continue receiving their retirement allowance, will be a relatively low hurdle for most employee groups. Since there are numerous State agencies, often with several agencies operating within a single building or complex, retired State employees will have opportunity to find an employment position that satisfies this requirement. In application, retired city and county employees, including public safety officers and firefighters, will need to seek employment at a different municipality or county. The different agency provision could be slightly more problematic for school teachers since they will have to seek employment at a different school district. However, we also expect a majority of the retired school teachers can seek suitable employment that is within a 30 to 45 minute commute from their current residence.

Note, the different agency provision could be problematic for some employers because of the inability to utilize these retirees in the workforce to provide valuable services for certain essential tasks or projects. For instance, under these provisions, school districts would be unable to utilize recently retired teachers from their school districts as substitute teachers during the school year following the member's retirement.

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.

To model the anticipated change in retirement behavior, we have assumed that the normal retirement rates for state and local government employees would increase by 4% (i.e. add 4%) at each age under age 65. On the other hand, where historical return to work behavior was found to be more prevalent for public educators, normal retirement rates for this employee group were increased by 6% at each age under age 65.

Similarly, the retirement rates for public safety members were increased by 6% at each age prior to age 60, whereas firefighters were only increased by 2% at each age prior to age 60.

Other 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 letter is intended to describe the financial and actuarial effect of the proposed plan changes on URS only. Changes in reemployment provisions could impact the cost of other benefit programs, such as health benefits. Our analysis does not include this possible effect.

It should be noted that we are neither for nor against the proposed changes. Return to work rules for retirees is a policy decision for the Legislature and employers. Our goal is to inform the stakeholders of the impact of changes to these rules.

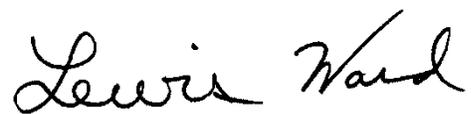
As a reminder, the information provided herein should provide stakeholders an idea of the magnitude of the fiscal impact and we recommend a specific fiscal analysis be performed on any proposed legislation rather than relying on the information contained herein. We are not attorneys, and nothing in this letter should be construed as providing legal or tax advice.

Please feel free to call if you have any questions about this information.

Sincerely,



Daniel J. White, FSA, EA, MAAA
Senior Consultant



Lewis Ward
Consultant

Attachments

cc: Mr. Todd Rupp
Mr. Dee Larsen

Exhibit 1

Comparison of the Current and Modeled Work After Retirement Provisions

	Time Period Between the Member's Reemployment Date and their Date of Retirement		
	Less than 60 Days	Between 60 Days and One Year	After One Year
	(1)	(2)	(3)
Current Provisions	Retirement allowance ceases and the member is returned to active status.	Retirement allowance continues as long as: (1) Member does not receive employer provided benefits, including but not limited to: medical, dental, retirement, paid time off, annual leave, and sick leave. (2) The member's compensation during the year does not exceed the lesser of \$15,000 or 50% of their final average salary.	Retiree may elect to either: (1) Cancel their retirement allowance and return to active status; or (2) Continue to receive their retirement allowance and forfeit earning additional retirement benefits.
Proposed Provisions	Retirement allowance ceases and the member is returned to active status.	Retirement allowance continues as long as: (1) Member does not receive retirement, paid time off, annual leave, and sick leave (medical, dental, disability, and other benefits are permitted). (2) Member is reemployed by a different agency.	Retiree may elect to either: (1) Cancel their retirement allowance and return to active status; or (2) Continue to receive their retirement allowance and forfeit earning additional retirement benefits.

Exhibit 2

Impact on Actuarially Determined Contribution Rates and Annual Cost for Participating Employers (\$ in thousands)

Fund/Division (1)	Actuarially Determined Contribution Rates			Annual Cost for FY 2017 Based on Actuarially Determined Rates		
	Current (2)	Proposed		Current (5)	Proposed	
		Legislation (3)	Increase (4)		Legislation (6)	Increase (7)
I. Public Employees Contributory						
A. Local Government	11.49%	11.81%	0.32%	\$ 6,282	\$ 6,444	\$ 162
B. State and School	14.37%	14.78%	0.41%	5,423	5,545	122
II. Public Employees Noncontributory						
A. Local Government	15.50%	15.82%	0.32%	135,126	138,116	2,990
B. State and School	18.86%	19.27%	0.41%	536,277	548,277	12,000
III. Public Safety Contributory						
A. State	23.50%	25.60%	2.10%	32	35	3
B. Other Division A (2.5% COLA)	16.75%	18.71%	1.96%	471	525	54
C. Other Division A (4% COLA)	19.00%	21.30%	2.30%	60	67	7
D. Other Division B (2.5% COLA)	17.22%	18.84%	1.62%	12	13	1
E. Other Division B (4% COLA)	19.62%	21.59%	1.97%	49	53	4
IV. Public Safety Noncontributory						
A. State	35.12%	37.10%	1.98%	40,444	42,596	2,152
B. Other Division A (2.5% COLA)	28.12%	30.06%	1.94%	31,325	33,487	2,162
C. Other Division A (4% COLA)	30.42%	32.64%	2.22%	10,239	10,969	730
D. Salt Lake City	41.40%	43.60%	2.20%	12,447	13,066	619
E. Ogden	42.24%	44.31%	2.07%	2,533	2,650	117
F. Provo	37.18%	39.38%	2.20%	2,054	2,168	114
G. Logan	37.83%	40.26%	2.43%	964	1,022	58
H. Bountiful	45.84%	47.50%	1.66%	864	894	30
I. Other Division B (2.5% COLA)	27.73%	29.40%	1.67%	15,999	16,901	902
J. Other Division B (4% COLA)	30.18%	32.16%	1.98%	1,436	1,529	93
V. Firefighters ²						
A. Division A	9.34%	10.64%	1.30%	2,514	2,885	371
B. Division B	9.06%	10.67%	1.61%	7,823	9,252	1,429
VI. Judges ²	48.48%	48.48%	0.00%	8,052	8,052	0
V. Tier II - Hybrid Plans ³						
A. Public Employees	7.99%	8.04%	0.05%	73,017	73,964	947
B. Public Safety and Firefighter	10.16%	10.58%	0.42%	8,312	8,945	633
IV. Grand Total				\$ 901,755	\$ 927,455	\$ 25,700

¹ The actuarially determined contribution rates may be less than the Board certified contribution rates because they do not reflect the Board's policy of maintaining the prior year's rate, if greater, as permitted by U.C. Sec. 49-11-301(5), which causes the unfunded liability to be paid down sooner.

² These contribution rates are before reflecting offsets for insurance premiums and court fees.

³ These rates for the Tier II Hybrid Funds exclude the Tier I amortization payment and the 3% Substantial Substitute.

Exhibit 3

Impact on Annual Cost and Contribution Rates if Employers Contribute the Full Board Certified Rate on the Payroll of Working Retirees (\$ in thousands)

Fund/Division (1)	Impact on Annual Cost			Impact on Actuarially Determined Rate		
	Total Cost Increase (2)	Cost Increase Financed by Contributions on Working Retiree Pay (3)	Cost Increase Financed by the Employer Certified Rates (4)	Total Increase in Actuarially Determined Rate (5)	Decrease Due to Increased Contributions on Working Retiree Pay (6)	Net Increase in Actuarially Determined Rate (7)
I. Public Employees Contributory						
A. Local Government	\$ 162	\$ 43	\$ 119	0.32%	-0.07%	0.25%
B. State and School	122	45	77	0.41%	-0.11%	0.30%
II. Public Employees Noncontributory						
A. Local Government	2,990	718	2,272	0.32%	-0.07%	0.25%
B. State and School	12,000	3,269	8,731	0.41%	-0.10%	0.31%
III. Public Safety Contributory						
A. State	3	1	2	2.10%	-0.34%	1.76%
B. Other Division A (2.5% COLA)	54	14	40	1.96%	-0.42%	1.54%
C. Other Division A (4% COLA)	7	2	5	2.30%	-0.58%	1.72%
D. Other Division B (2.5% COLA)	1	0	1	1.62%	-0.15%	1.47%
E. Other Division B (4% COLA)	4	2	2	1.97%	-0.83%	1.14%
IV. Public Safety Noncontributory						
A. State	2,152	1,276	876	1.98%	-0.99%	0.99%
B. Other Division A (2.5% COLA)	2,162	1,294	868	1.94%	-1.00%	0.94%
C. Other Division A (4% COLA)	730	421	309	2.22%	-1.13%	1.09%
D. Salt Lake City	619	372	247	2.20%	-1.15%	1.05%
E. Ogden	117	71	46	2.07%	-1.09%	0.98%
F. Provo	114	67	47	2.20%	-1.10%	1.10%
G. Logan	58	35	23	2.43%	-1.20%	1.23%
H. Bountiful	30	19	11	1.66%	-0.98%	0.68%
I. Other Division B (2.5% COLA)	902	714	188	1.67%	-1.12%	0.55%
J. Other Division B (4% COLA)	93	55	38	1.98%	-1.05%	0.93%
V. Firefighters						
A. Division A	371	85	286	1.30%	-0.27%	1.03%
B. Division B	1,429	266	1,163	1.61%	-0.28%	1.33%
VI. Judges	0	0	0	0.00%	0.00%	0.00%
V. Tier II - Hybrid Plans						
A. Public Employees	947	186	761	0.05%	-0.02%	0.03%
B. Public Safety and Firefighter	633	187	446	0.42%	-0.22%	0.20%
IV. Grand Total	\$ 25,700	\$ 9,142	\$ 16,558			

Exhibit 4

Impact on Unfunded Actuarial Accrued Liability and Funded Ratio by Fund Determined on an Actuarial Value of Asset Basis (\$ in thousands)

Fund/Division (1)	Unfunded Actuarial Accrued Liability			Funded Ratio		
	Current (2)	Proposed Legislation (3)	Increase (4)	Current (5)	Proposed Legislation (6)	Decrease (7)
I. Public Employees Contributory						
A. Local Government	\$ 48,655	\$ 50,194	\$ 1,539	89.8%	89.6%	-0.20%
B. State and School	48,064	49,301	1,237	94.1%	94.0%	-0.10%
II. Public Employees Noncontributory						
A. Local Government	572,485	602,788	30,303	87.0%	86.4%	-0.60%
B. State and School	2,750,262	2,870,450	120,187	85.5%	84.9%	-0.60%
III. Public Safety Contributory						
A. State	250	272	22	99.5%	99.4%	-0.10%
B. Other Division A (2.5% COLA)	2,949	3,388	439	97.7%	97.3%	-0.40%
C. Other Division A (4% COLA)	394	452	58	98.5%	98.2%	-0.30%
D. Other Division B (2.5% COLA)	63	70	8	99.8%	99.8%	0.00%
E. Other Division B (4% COLA)	282	318	36	96.6%	96.2%	-0.40%
IV. Public Safety Noncontributory						
A. State	213,206	231,517	18,311	81.0%	79.7%	-1.30%
B. Other Division A (2.5% COLA)	117,224	134,703	17,479	87.0%	85.3%	-1.70%
C. Other Division A (4% COLA)	42,560	48,751	6,191	83.9%	81.9%	-2.00%
D. Salt Lake City	84,679	89,915	5,236	73.1%	71.9%	-1.20%
E. Ogden	17,879	18,833	954	75.1%	74.1%	-1.00%
F. Provo	12,469	13,453	984	76.7%	75.4%	-1.30%
G. Logan	6,258	6,792	534	79.2%	77.8%	-1.40%
H. Bountiful	6,323	6,531	208	73.1%	72.5%	-0.60%
I. Other Division B (2.5% COLA)	52,569	58,793	6,224	81.7%	80.0%	-1.70%
J. Other Division B (4% COLA)	5,578	6,292	714	85.5%	83.9%	-1.60%
V. Firefighters						
A. Division A	(195)	2,129	2,324	100.1%	98.7%	-1.40%
B. Division B	18,035	27,810	9,774	97.9%	96.7%	-1.20%
VI. Judges	35,489	35,489	0	81.6%	81.6%	0.00%
V. Tier II - Hybrid Plans ²						
A. Public Employees	(7,119)	(6,756)	364	108.7%	108.2%	-0.50%
B. Public Safety and Firefighter	(1,234)	(943)	291	116.6%	112.2%	-4.40%
IV. Grand Total	\$ 4,027,125	\$ 4,250,543	\$ 223,418	85.5%	84.8%	-0.70%