Audit No. 13-01

A Performance Audit of The Utah Retirement Systems' Assumed Investment Rate of Return

OFFICE OF THE

UTAH STATE AUDITOR

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25 February 2013

Mr. John Dougall,

The Office of the Utah State Auditor has conducted *A Performance Audit of the Utah Retirement Systems' (URS) Assumed Investment Rate of Return* and presents its findings herewith. Pension systems across the nation, both public and private, have faced the daunting task of reevaluating assumptions made to ensure that pensions are sufficiently funded to ensure solvency for plan participants and avoid preventable burdens on employers.

In order to ensure adequate funding, URS, with the assistance of its actuary, must assume an investment rate of return that will most accurately forecast the availability of future funds. An overly optimistic assumed investment rate of return may threaten the plan's ability to pay out future benefits, encumbering future taxpayers; an overly conservative assumed investment rate of return may come at the opportunity cost of funding present-day initiatives. Therefore, careful and regular analysis is essential to ensure that plan recipients receive promised benefits while protecting present-day and future taxpayers from unnecessary burdens.

To that end, this report presents three findings to help stakeholders and citizens in general understand and minimize certain risks and to increase the overall transparency of the rate-setting assumptions and process. Field work for this audit, which commenced in January 2013 and concluded in February 2013, included the following:

- Analysis of actuarial reports, experience studies, and asset allocation and liability studies provided to URS by Gabriel, Roader, Smith, and Company (GRS) from 2008 to 2012.
- Analysis of capital market assumptions from six reputable investment consulting firms used by GRS.
- Comparison of URS' pension assumed investment rate of return with those from 126 public retirement systems.
- Comparison of URS practices with systems in nine western states.
- Analysis of URS Board meeting minutes for calendar year 2012.

Finding 1 addresses concerns regarding an optimistic assumed investment rate of return, **Finding 2** cites the need for greater transparency, and **Finding 3** demonstrates the budgetary impact of changing the assumed investment rate of return. This audit was performed in accordance with applicable *Government Auditing Standards*, issued by the Comptroller General of the United States. We recognize and appreciate the cooperation of URS management and GRS throughout the course of this audit. Please contact me if you have any questions regarding this report.

Sincerely,

David S. Pulsipher CIA, CFE
Performance Audit Director

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Executive Summary

Finding 1: URS' Assumed Investment Rate of Return Appears Optimistic

In its 2011 experience study, Gabriel, Roeder, Smith, and Company (GRS) recommended reducing Utah Retirement Systems' (URS) assumed investment rate of return from 7.75 percent to 7.50 percent, based on mapping URS' asset allocation to forecasts from the URS consultant and five other reputable investment consulting firms. While a reduction appears justified and 7.50 percent appears to be within the actuarial "best-estimate range," it still appears optimistic given forecasts presented by GRS.

Given the wide range of reasonable expectation of investment returns, the assumed investment rate of return used provides no information about the rate's likelihood. Including all six investment consulting firms used by GRS, URS has a 43 percent probability of meeting or exceeding a 7.50 percent return. One firm is much more optimistic than the other five, with a forecast almost two standard deviations greater than the mean of all six. Considering all consultants' forecasts, a rate of 7.00 percent has a 51 percent chance of being met. URS should provide stakeholders with the probability of realizing the assumed rate to ensure that policy makers understand the risks involved with a chosen rate.

While consideration of assumed rates of other public pension systems can provide helpful background information, it should not serve as a basis for decisions. We recommend that, based on analysis provided in this finding, the URS Board lower the system's assumed investment rate of return.

Finding 2: Increased Transparency Would Increase Risk Awareness

Contrary to practices in all other western public employee retirement systems surveyed, URS does not disclose actuarial reports and other assumptions to the stakeholders. URS claims that statute exempts the URS Board and management from complying with the state's Open and Public Meetings Act and the Government Records Access and Management Act, though URS is statutorily defined as "an independent state agency."

Furthermore, changes to the Government Accounting Standards Board statements will require URS to disclose assumptions and rate-setting methodology beginning in June 2014. Due to the impact these assumptions have on the overall solvency of the system, we recommend that URS immediately provide stakeholders with assumptions and methodology used to calculate the assumed investment rate of return and the probability that they will meet or exceed that assumed rate.

Finding 3: Increased Ongoing Contributions Are Required with Lower Assumed Rates

Changes to the assumed investment rate of return will have an immediate and ongoing budgetary impact on the state; however, the required contribution rates to ensure funding will continue to increase if delayed due to the compounding effect of realizing a lower investment rate of return than assumed. A 0.25 percent reduction in the assumed rate would require an additional $54 million for the noncontributory state and school fund. We recommend that the Legislature increase the contribution rate to reflect a lower assumed investment rate of return that has a greater chance of happening.

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Background

Utah Retirement Systems (URS) was organized in 1907 as a pension plan providing services to public employees. URS is "…an independent state agency" that includes management of 401(k) and 457 plans, Roth and traditional IRA Plans, and the Public Employees Health Program in addition to its eight public pension systems. URS manages total assets of over $23 billion, $3.3 billion of which are defined contributions. In its 2011 annual report, URS reports an actuarial funded status of 78.3 percent for noncontributory funds, based on an assumed investment rate of return of 7.50 percent.

According to the *State Retirement and Insurance Benefit Act* (***Utah Code*** 49-11), the URS Board, which consists of seven nonpartisan members who are appointed by the Governor and approved by the Senate to serve four-year terms, oversees the system. The board consists of four members with investment or banking experience, one school employee, one public employee, and the State Treasurer.

Among other duties, the board is responsible to "…adopt interest rates, premium rates, and annual contribution rates after reviewing actuarial recommendations." The board fulfills part of its statutory responsibility by relying on analysis conducted by Gabriel, Roeder, Smith, and Company (GRS), an actuarial firm based in Dallas, Texas. GRS issues an annual actuarial study and a triennial experience study to the URS Board.

URS, like many pension systems nationwide, historically assumed an 8.0 percent investment rate of return for its retirement systems. However, in its 2008 experience study, GRS recommended a 0.25 percent reduction, which would establish an investment rate at the midpoint of GRS' assessment of "the range of reasonable assumptions." GRS's assessment was based on mapping URS' capital asset allocation with forecasts provided by URS' investment consultant.

In its subsequent experience study in 2011, GRS included forecasts based on mapping URS' capital asset allocation from five additional reputable investment consulting firms. Based on this analysis, GRS recommended an additional 0.25 percent reduction of the assumed investment rate of return. URS accepted this recommendation.

The assumed investment rate of return impacts the overall funding of a retirement system. An increase in an assumed investment rate of return will decrease funding needs, while a decrease to an assumed investment rate of return will require additional funding to maintain solvency. A retirement system cannot remain solvent by realizing a lower investment rate of return than the rate assumed when funded. In contrast, opportunity costs discourage an assumed investment rate of return that is less than the realized rate of return. Therefore, retirement systems should make continual efforts to reassess the predictability of the assumed investment rate of return.

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Finding 1 URS' Assumed Rate of Return Appears Optimistic

In its 2011 experience study, Gabriel, Roeder, Smith, and Company (GRS) recommended reducing Utah Retirement Systems' (URS) assumed investment rate of return from 7.75 percent to 7.50 percent, based on mapping URS' asset allocation to forecasts from the URS consultant and five other reputable investment consulting firms. While a reduction appears justified and 7.50 percent appears to be within the actuarial "best-estimate range," it still appears optimistic given forecasts presented by GRS.

Given the wide range of reasonable expectation of investment returns, the assumed investment rate of return used provides no information about the rate's likelihood. Including all six investment consulting firms used by GRS, URS has a 43 percent probability of meeting or exceeding a 7.50 percent return. One firm is much more optimistic than the other five, with a forecast almost two standard deviations greater than the mean of all six. Considering all consultants' forecasts, a rate of 7.00 percent has a 51 percent chance of being met. URS should provide stakeholders with the probability of realizing the assumed rate to ensure that policy makers understand the risks involved with a chosen rate.

While consideration of assumed rates of other public pension systems can provide helpful background information, it should not serve as a basis for decisions. We recommend that, based on analysis provided in this finding, the URS Board lower the system's assumed investment rate of return.

One Optimistic Forecast Influences The Simple Average Investment Return

The URS Board contracts with GRS to provide actuarial analysis to help them forecast a reasonable assumed investment rate of return based on URS' target asset allocation. In its most recent experience study, GRS recommended reducing URS' assumed investment rate of return to 7.50 percent, based on net expected nominal rates of return projected by six reputable investment consulting firms.

One of these six investment consultant firms, however, projects a much more optimistic investment rate of return than the other five, with an expected net nominal investment rate of return that is almost two standard deviations higher than the mean of all six firms. **Figure 1.1** shows the analysis reported in GRS' 2011 experience study.

Figure 1.1 GRS Expected Investment Rate of Return

Investment Consultant	Expected Nominal Return	Inflation Assumption	Expected Real Return	Actuary Inflation Assumption	Expected Nominal Return	Plan Incurred Expense Assumption	Expected Nominal Return Net of Expenses
1*	7.90%	2.50%	5.40%	2.75%	8.15%	0.35%	7.80%
2	7.59%	3.00%	4.59%	2.75%	7.34%	0.35%	6.99%
3	7.35%	2.75%	4.60%	2.75%	7.35%	0.35%	7.00%
4	7.43%	2.40%	5.03%	2.75%	7.78%	0.35%	7.43%
5	7.54%	2.50%	5.04%	2.75%	7.79%	0.35%	7.44%
6	8.71%	2.02%	6.69%	2.75%	9.44%	0.35%	9.09%
Average	**7.75%**	**2.53%**	**5.23%**	**2.75%**	**7.98%**	**0.35%**	**7.62%**

**URS consultant*
Source: GRS Actuarial Experience Study, period ending December 31, 2010

Only two of the five investment consulting firms expect a net nominal investment rate of return of at least 7.50 percent. Additionally, the removal of investment consulting firm six, whose forecast does not appear to be consistent with the other five firms, reduces the net expected nominal investment rate of return, as shown in **Figure 1.2**.

Figure 1.2 Expected Investment Rate of Return Excluding an Outlier

Investment Consultant	Expected Nominal Return	Inflation Assumption	Expected Real Return	Actuary Inflation Assumption	Expected Nominal Return	Plan Incurred Expense Assumption	Expected Nominal Return Net of Expenses
1*	7.90%	2.50%	5.40%	2.75%	8.15%	0.35%	7.80%
2	7.59%	3.00%	4.59%	2.75%	7.34%	0.35%	6.99%
3	7.35%	2.75%	4.60%	2.75%	7.35%	0.35%	7.00%
4	7.43%	2.40%	5.03%	2.75%	7.78%	0.35%	7.43%
5	7.54%	2.50%	5.04%	2.75%	7.79%	0.35%	7.44%
Average	**7.56%**	**2.63%**	**4.93%**	**2.75%**	**7.68%**	**0.35%**	**7.33%**

**URS consultant*
Source: Office of the Utah State Auditor analysis

Investment consulting firm six's optimistic forecast is not consistent with the other five firms and inflates the net expected nominal investment rate of return when included in the average. Excluding this forecast from the analysis also reduces the standard deviation from 0.78 percent to 0.34 percent, bringing all five firms within or near one standard deviation of the mean. While GRS' recommendation to set the assumed investment rate of return at 7.50 percent still lies within the actuarial "best-estimate range," its relationship to the arithmetic mean when excluding an outlier demonstrates a willingness to accept additional risk. Even when including investment consulting firm six, it's more likely than not that URS will fail to meet or exceed their assumed rate of return of 7.50%

URS' Has a 43 Percent Probability of Realizing 7.50%

GRS used the average of the net expected nominal investment rate of return to support its recommendation to reduce the assumed rate. While GRS' 2011 experience study shows the probability of meeting or exceeding its former assumed rate of 7.75 percent, it does not state that URS will meet or exceed the recommended assumed rate of 7.50 percent less than 50 percent of the time. **Figure 1.3** shows the "best-estimate range" for the six investment consulting firms.

Figure 1.3 GRS Likelihood of Investment Returns

Investment Consultant	Distribution of 20-Year Average Geometric Net Nominal Return			Probability of Exceeding 7.75%	*Probability of Exceeding 7.50%***
	25th	50th	75th		
1*	5.09%	7.01%	8.96%	39.90%	*43.26%*
2	4.99%	6.50%	8.03%	29.10%	*32.97%*
3	4.99%	6.51%	8.04%	29.20%	*33.23%*
4	5.71%	7.05%	8.40%	36.20%	*40.94%*
5	5.34%	6.91%	8.51%	36.10%	*40.73%*
6	6.78%	8.48%	10.21%	61.30%	*64.85%*
Average	**5.48%**	**7.08%**	**8.69%**	**38.63%**	***43.05%***

**URS consultant*
***This analysis was conducted by Office of the Utah State Auditor and was* not *included in the study.*
Source: GRS Actuarial Experience Study, period ending December 31, 2010

Based on data provided in GRS' experience study, we calculated that URS has a 43 percent probability of realizing a 7.50 percent investment rate of return, with an average median expectation of 7.08 percent. Only one investment consulting firm – firm six, whose forecast is much more optimistic than the other five firms – predicts that URS has at least 50 percent probability of realizing its current assumption. The median expectation of the six consultants drops below seven percent by removing the apparent outlier, as shown in **Figure 1.4**.

Figure 1.4 Expected Likelihood of Investment Returns Excluding an Outlier

Investment Consultant	Distribution of 20-Year Average Geometric Net Nominal Return			Probability of Exceeding 7.75%	*Probability of Exceeding 7.50%*
	25th	50th	75th		
1*	5.09%	7.01%	8.96%	39.90%	*43.26%*
2	4.99%	6.50%	8.03%	29.10%	*32.97%*
3	4.99%	6.51%	8.04%	29.20%	*33.23%*
4	5.71%	7.05%	8.40%	36.20%	*40.94%*
5	5.34%	6.91%	8.51%	36.10%	*40.73%*
Average	**5.22%**	**6.80%**	**8.39%**	**34.10%**	***38.25%***

**URS consultant*
Source: Office of the Utah State Auditor analysis

By removing investment consulting firm six, URS' probability of realizing its assumed rate of 7.50 percent is reduced to 38 percent, with a median expectation of 6.80 percent. Additionally, none of the remaining five forecasts predicts a 50 percent likelihood of realizing the assumed rate of 7.50 percent. **Figure 1.5** compares the assumed investment rate of return options and the probability that URS will realize each rate.

Figure 1.5 Calculated Likelihood of Investment Returns

Investment Consultant	7.50%	7.25%	7.00%	6.75%	6.50%	6.25%
1*	43.26%	46.69%	*50.16%*	*53.63%*	*57.08%*	*60.48%*
2	32.97%	37.04%	41.27%	45.61%	*50.02%*	*54.44%*
3	33.23%	37.29%	41.49%	45.81%	*50.19%*	*54.58%*
4	40.94%	45.87%	*50.88%*	*55.88%*	*60.80%*	*65.57%*
5	40.73%	44.82%	48.98%	*53.15%*	*57.30%*	*61.38%*
6	*64.85%*	*68.40%*	*71.78%*	*74.99%*	*78.01%*	*80.81%*
Average	**43.05%**	**47.19%**	***51.37%***	***55.54%***	***59.67%***	***63.70%***
Average Excluding 6	**38.25%**	**42.35%**	**46.54%**	***50.79%***	***55.03%***	***59.23%***

**URS Consultant*
Source: Office of the Utah State Auditor analysis

Based on these calculations, investment consulting firm six is the only firm that forecasts a greater than 50 percent probability of realizing a 7.50 percent or a 7.25 percent return. Three of the six predict a greater than 50 percent likelihood of realizing a 7.00 percent return, while a sub-7.0 percent assumption would be required to have all firms suggest a greater than 50 percent likelihood of realizing the investment return.

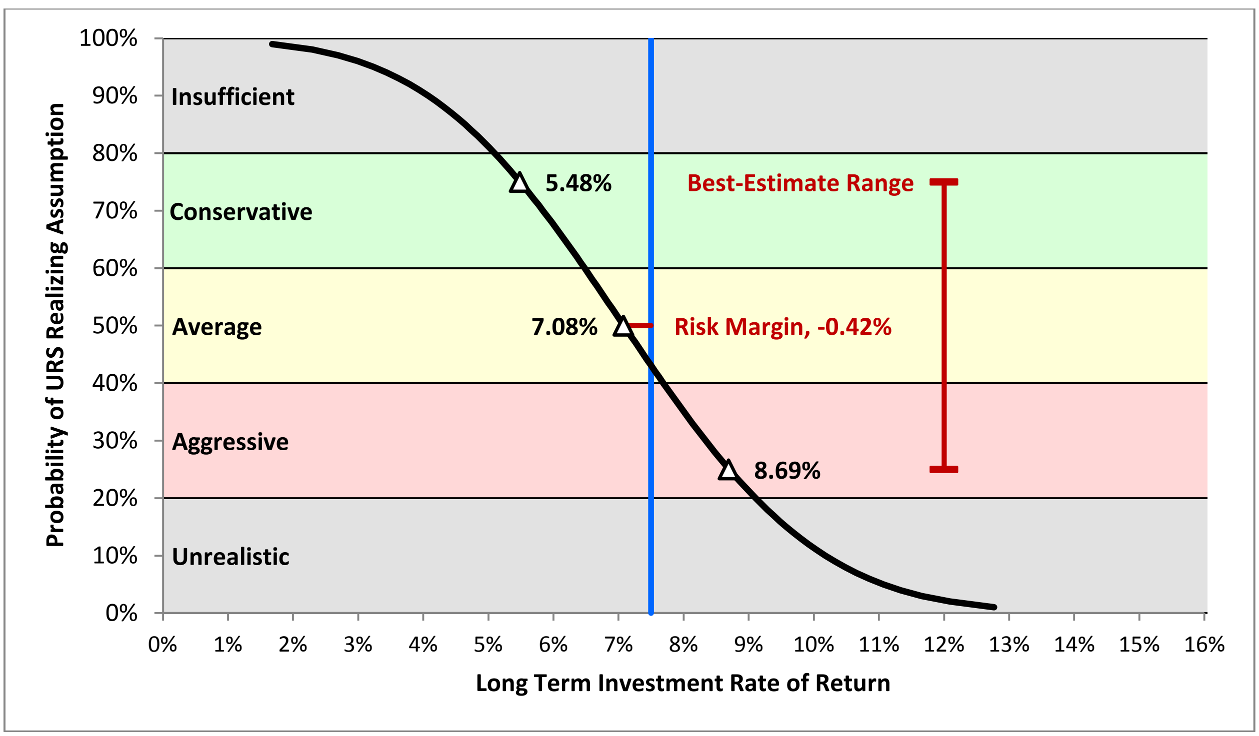
While historic trends of the investment returns may have met investment rate assumptions, GRS, in addition to other actuaries and investment consultants, caution against using only historical rates of return as basis for future returns. Providing stakeholders with the probability of the assumed investment rate of return will allow policy makers to understand, guide, and accept the desired level of rate assumption risk.

URS Should Communicate Confidence Level of Assumptions to Stakeholders

URS could increase the overall transparency of assumptions made to arrive at the assumed investment rate of return by communicating the actuaries' confidence level of realizing various rates of return to policy makers. The American Academy of Actuaries (AAOA) identifies the actuarial "best-range estimate" to be between the 25th and 75th percentile. While the AAOA allows actuaries to make a specific point estimate recommendation within this best-estimate range, it also clarifies that "…the plan sponsor is ultimately responsible for selecting these assumptions." Therefore, URS bears the responsibility for using data provided by the actuary to establish an appropriate assumed investment rate of return.

The difference between the actual assumed investment rate of return and the risk-centered rate of return is the risk margin that URS assumes it could realize. A negative risk margin denotes a more aggressive position relative to the actuarial assumptions, while a positive risk margin signifies a more conservative approach. **Figure 1.6** shows the probability of realizing given rate of returns, as well as the current risk margin.

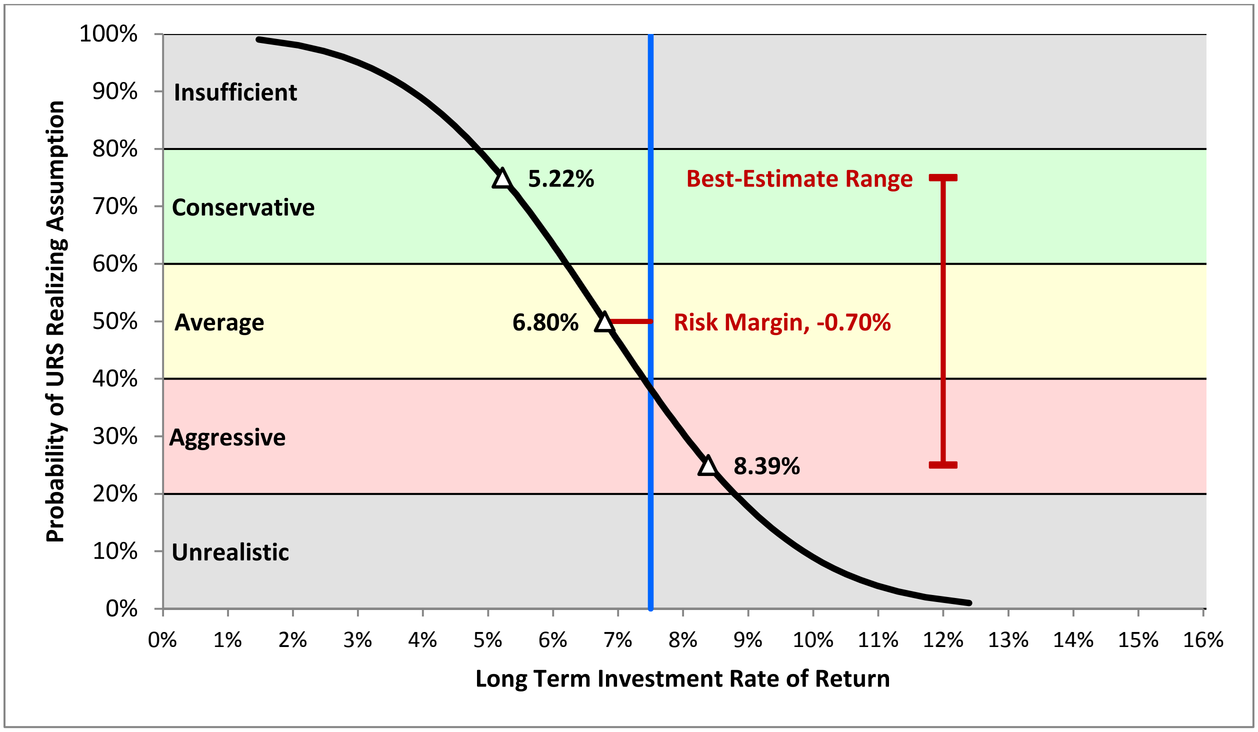
Figure 1.6 Likelihood of Realizing Investment Rate of Return



Source: Office of the Utah State Auditor analysis of expected rates of returns from six investment consultant firms reported in GRS' 2011 Experience Study.

As shown above, the current assumed investment rate of return of 7.50 percent lies within the actuarial "best-range estimate," but the negative 0.42 percent risk margin identifies a more optimistic outlook than the investment consulting firm forecasts. The actuarial “best-range estimate” that includes all six investment consulting firms is between 5.48 percent (25th percentile) and 8.69 percent (75th percentile). However, due to concerns regarding the outlying effect of investment consulting firm six, **Figure 1.7** shows the difference in the probability distribution if URS excluded this forecast.

Figure 1.7 Adjusted Likelihood of Realizing Investment Rate of Return



Source: Office of the Utah State Auditor analysis of expected rates of returns from five investment consultant firms reported in GRS’ 2011 Experience Study.

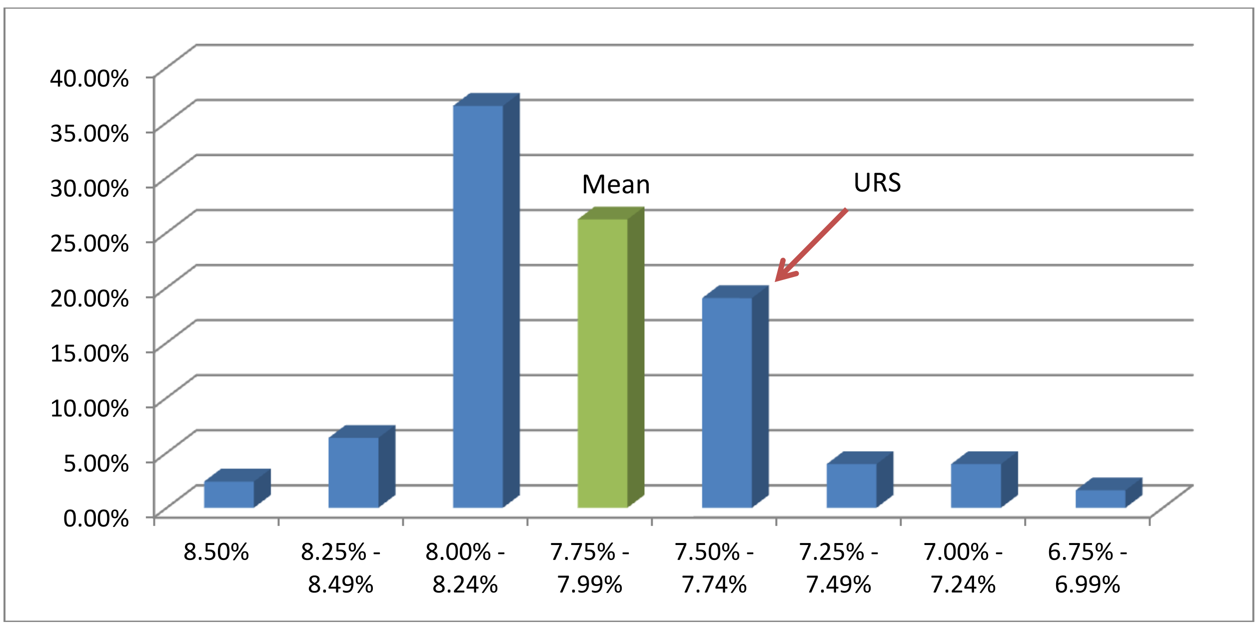
While remaining within the imputed actuarial “best-estimate range” of 5.22 percent (25th percentile) to 8.39 percent (75th percentile), URS’ likelihood of realizing a 7.50 percent return decreases to 38.25 percent once the outlying investment consulting firm is removed. Additionally, the risk margin moves to negative 0.70 percent, which demonstrates additional risk that has not necessarily been disclosed to stakeholders.

Because of the confidential nature – assigned by URS – of assumptions used to calculate the assumed investment rate of return, policy makers, plan recipients, and the general public do not appear to fully understand the risks of assuming a rate of 7.50 percent. Therefore, we recommend that URS, with the assistance of its actuary, provide stakeholders with the confidence levels of realizing rates of return after each actuarial experience study.

Comparisons with Other Systems Should not Serve as a Basis for Rate-Setting Decisions

On the surface, URS' assumed rate appears to be more conservative than other public pension systems nationwide. However, without careful consideration to variables such as asset allocation, risk tolerance, demographic differences, desired funding level, and governance, general comparisons should not serve as a basis for decisions. Additionally, some other systems assume a higher investment rate of return because of government entity funding constraints caused if decision makers lowered their investment return expectations. **Figure 1.8** shows the distribution of assumed rates of return for 126 other public pension systems.

Figure 1.8 **Assumed Net Investment Rates of Return for 126 Public Pension Systems**



Source: National Association of State Retirement Administrators

Most public pension systems nationwide have a higher assumed investment rate of return than URS, though a simple comparison of the assumed investment rate of return is not a sufficient basis for setting the rate because of the differences previously mentioned. For example, URS claims to have a more conservative portfolio than other systems, as implied by the Chief Investment Officer in the 2011 Comprehensive Annual Financial Report (CAFR).

> *"Although the [Utah Retirement] Systems may lose money in negative equity markets, it expects to lose less than most of its peers because of how the portfolio is structured…However, positioning the portfolio to protect in negative equity markets may also cause the portfolio to underperform in positive equity markets."*

The 126 retirement systems in **Figure 1.8** have an average assumed investment rate of return of 7.80 percent, with a median of 7.90 percent.

Recommendations

1. We recommend that, based on analysis provided in this finding, the URS Board lower the system's assumed investment rate of return.

2. We recommend that URS, with the assistance of its actuary, provide stakeholders with the probability of realizing rates of return with each actuarial experience study.

Finding 2 Increased Transparency Would Increase Risk Awareness

Contrary to practices in all other western public employee retirement systems surveyed, URS does not disclose actuarial reports and other assumptions to the stakeholders. URS claims that statute exempts the URS Board and management from complying with the state's *Open and Public Meetings Act* and the *Government Records Access and Management Act*, though URS is statutorily defined as "an independent state agency."

Furthermore, changes to the Government Accounting Standards Board statements will require URS to disclose assumptions and rate-setting methodology beginning in June 2014. Due to the impact these assumptions have on the overall solvency of the system, we recommend that URS immediately provide stakeholders with assumptions and methodology used to calculate the assumed investment rate of return and the probability that they will meet or exceed that assumed rate.

URS Is the Only Western Public Employee Retirement System That Maintains Confidentiality Over Actuarial Assumptions and Documents

Unlike practices in all public employee pension systems surveyed in western states, URS does not disclose actuarial reports or rate-setting assumptions to stakeholders, nor does the board conduct open meetings. Some of the surveyed systems include actuarial reports on their websites, and all surveyed systems shared the actuarial reports and assumptions with the Office of the Utah State Auditor. **Figure 2.1** summarizes the results of this survey.

Figure 2.1 Public Access to Western States' Public Pension Information

System	Are board meetings open to the public?	Are actuarial reports & assumptions available to the public?
Arizona State Retirement System	Yes	Yes
California Public Employees Retirement System	Yes	Yes
Colorado State Employees Retirement System	Yes	Yes
Idaho Public Employee Retirement System	Yes	Yes
Montana Public Employees Retirement Board	Yes	Yes
New Mexico Public Employees Retirement Association	Yes	Yes
Nevada Public Employees Retirement System	Yes	Yes
Oregon Employees Retirement System	Yes	Yes
Utah Retirement Systems	**No**	**No**
Washington Department of Retirement Systems	Yes	Yes
Wyoming Retirement System	Yes	Yes

Source: Office of the Utah State Auditor

All ten western retirement systems surveyed conduct open board meetings and publish board meeting minutes and agendas on their respective websites, in addition to providing assumptions and methodologies to stakeholders. Some systems, such as Colorado and California, only close board meetings to discuss personnel matters and other confidential information, similar to statutory requirements for other boards in Utah. Though all retirement system boards may have varying responsibilities and composition, they all appear to perform similar functions to the URS Board.

While it appears that some information discussed in board meetings may require confidentiality, a large portion of information found in the meeting minutes does not seem to warrant confidentiality and would be useful information to disseminate to stakeholders. Additionally, it appears that statute would already allow the URS Board to close the meetings to discuss topics for which they express concern. Like other Utah boards, the URS Board would have the ability to close board meetings when discussing topics of a statutorily-defined confidential nature, as set forth in ***Utah Code*** 52-4-205.

URS management claims that the board regularly discusses proprietary information, such as investment decisions, that they must protect. Further management concerns include the inability to retain certain investment fund managers who claim to only conduct business with URS because their investment strategies will remain private. However, all other western systems reviewed are able to manage privacy concerns and retain the services of fund managers while conducting open and public meetings. Therefore, it does not appear to place an undue or unprecedented burden on URS to comply with similar requirements of comparable boards in Utah and retirement system boards throughout the country.

URS Claims to Be Exempt From the *Utah Open and Public Meetings Act*

URS management and its board claim to be exempt from the state's *Open and Public Meetings Act* (***Utah Code*** 52-4) as well as the *Government Records Access and Management Act* (***Utah Code*** 63G-2). The *Utah State Retirement and Insurance Benefit Act* (***Utah Code*** 49-11-201) states that, though identified as "…an independent state agency …the [URS] board and office are exempt from those acts which are applicable to state and other governmental entities under this code."

However, according to the *Utah Open and Public Meetings Act*, boards similar to the URS Board must conduct open meetings. ***Utah Code*** 52-4-103(8)(a) defines a "public body" subject to the act as,

> *"…any administrative, advisory, executive, or legislative body of the state or its political subdivisions that:*
>
> *(i) is created by the Utah Constitution, statute, rule, ordinance, or resolution;*
> *(ii) consists of two or more persons;*
> *(iii) expends, disburses, or is supported in whole or in part by tax revenue; and*
> *(iv) is vested with the authority to make decisions regarding the public's business."*

URS management contends that its funds are not public and, therefore, URS should not be subject to this act. As previously mentioned, however, URS is statutorily defined as an "independent state agency" and the state and its taxpayers are ultimately liable for the system's solvency. Additionally, URS manages assets purchased with public funds on behalf of public employees. We believe that benefits of transparency outweigh any inconvenience caused by opening meetings and documents to the public. Therefore, we recommend that the Legislature clarify statute to require URS to comply with the state's *Open and Public Meetings Act* and the *Government Records Access and Management Act*.

GASB Changes Will Require URS to Disclose Key Assumptions

Due to growing concerns regarding the basis for assumptions used to determine the health of public retirement systems, the GASB Statement 68 increases the reporting requirements for public pension plans. This statement, which will amend Statement 27 on June 15, 2014, requires that public pension programs disclose,

> *"The long-term expected rate of return on pension plan investments and a brief description of how it was determined, including significant methods and assumptions used for that purpose"*

While URS has more than one year to comply with this amended standard, the statement also states that "earlier application is encouraged." Due to the importance of providing stakeholders with information that will affect the contribution rate, as shown in **Finding 1** and **Finding 3**, we recommend that URS immediately provide stakeholders with assumptions and methodology used to calculate the assumed investment rate of return.

Recommendations

1. We recommend that the Legislature clarify statute to require URS to comply with the state's *Open and Public Meetings Act* and the *Government Records and Management Act*.

2. We recommend that URS immediately adopt the GASB revisions that will require it to provide stakeholders with assumptions and methodology used to calculate the assumed investment rate of return.

Finding 3 Increased Ongoing Contributions Are Required for Lower Assumed Rates

A lower expected investment rate of return will require additional immediate ongoing retirement funding in order to maintain plan solvency of the noncontributory funds. **Figure 3.1** shows the immediate budgetary impact of assuming lower investment rates of return than the current assumption of 7.50 percent for Noncontributory State and School Fund (Fund 16).

Figure 3.1 Budgetary Impact of Changes to the Assumed Investment Rate of Return

Assumed Investment Rate of Return	Contribution Rate	Immediate Ongoing Budgetary Impact (in millions)
7.50%	20.46%	-
7.25%	22.23%	$54
7.00%	24.06%	$110
6.75%	25.95%	$168
6.50%	27.93%	$228

Source: GRS

Changes to the assumed investment rate of return will have an ongoing budgetary impact on the state on the noncontributory funds; however, the required contribution rates to ensure solvency will continue to increase if delayed due to the compounding effect of realizing a lower investment rate of return than expected. Therefore, we recommend that the Legislature increase the contribution rate to reflect a lower assumed investment rate of return that has a greater chance of happening.

Recommendations

1. We recommend that the Legislature increase the contribution rate to reflect a lower assumed investment rate of return that has a greater chance of happening.

2. We recommend that the Legislature fund the retirement system according to the desired level of risk assumed in the expected investment rate of return.

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URS Response

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February 22, 2013

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Utah State Capitol Complex
Salt Lake City, UT 84114

Dear Mr. Dougall:

Enclosed please find Utah Retirement Systems' (URS) response to Performance Audit 13-01, *A Performance Audit of URS' Assumed Investment Rate of Return*. The response is comprised of a two page Executive Summary and a more detailed response.

URS requests if this Performance Audit is presented in a public forum, sufficient notice be provided to allow URS' actuary, Gabriel Roeder Smith and Company, whose office is located in Dallas, Texas, to make arrangements to participate in person.

Sincerely,

Robert V. Newman

Robert V. Newman
Executive Director

Executive Summary

Finding 1: URS' Assumed Investment Rate of Return Appears Optimistic

- Utah Retirement Systems' Board (Board) in its fiduciary role hires experts; Board hired Gabriel Roeder Smith and Company (GRS) to provide actuarial services including recommendations for actuarial assumptions
- GRS uses an established and consistent process for setting and revising actuarial assumptions including the assumed investment rate of return
- GRS and URS are in agreement that 7.50% is an appropriate assumed investment rate of return for FY 2013-2014; Deloitte and Touche's actuary also supports the 7.50% assumption (Deloitte and Touche is the independent auditor of URS)
- Assumed investment rate of return is adjusted to reflect changes in expected market returns; adjusted from 8.00% to 7.75% in 2008 and adjusted to 7.50% in 2011
- Historical return experience has demonstrated that URS' return assumption has not been optimistic; lowest compound return for any 30-year period beginning 1976 is 8.92%
- URS preliminary investment return for the year ended December 31, 2013 is 12.33%; for 3 years 9.54%; for 5 years 2.89%; for 10 years 8.22%; for 20 years 8.13%; and for 30 years 9.28%
- GRS recommended and the Board adopted a statistically unbiased best-point assumed investment return assumption of 7.50%
- Recognition of URS active management strategies supports using a higher return assumption than 7.50%, but using 7.50% provides for margin
- National survey of public pension plans found only 10 plans out of 126 have a lower (more conservative) assumed investment rate of return than URS

Finding 2: Increased Transparency Would Increase Risk Awareness

- Historically URS has provided its actuarial assumptions through disclosures in its Comprehensive Annual Financial Report which is prepared each year
- Legislative action established URS' exemption from the Open and Public Meetings Act and the Government Records Access and Management Act; State Attorney General opinions and court rulings support this exemption

- URS is a trust fund established for the exclusive benefit of its members; court rulings have established URS is not doing the public's business but is functioning as a fiduciary to its members

- URS investment access and returns have benefited from these exemptions

Finding 3: Increased Ongoing Contributions Are Required with Lower Assumed Rates

- Contribution rates have a self-correcting mechanism because plan experience is reviewed annually and changes are implemented to account for gains or losses

- Rate setting process provides margin to allow the plan to incur some adverse experience without requiring an increase in contribution rates

- Using an assumed investment rate of return less than 7.50% will result in an immediate increase in employer contributions and the system attaining a 100% funded status earlier than the funding policy expects

Introduction

The Utah State Auditor has completed Audit No. 13-01, “A Performance Audit of URS’ Assumed Investment Rate of Return.” The report is divided into three “Findings” or sections. Each Finding contains two recommendations.

Finding 1 addresses the assumed investment rate of return. The Utah Retirement Systems Board (Board) in its fiduciary role, hires experts to perform certain functions. One function is to have actuarial studies performed on the various plans, systems, and programs administered by Utah Retirement Systems (URS). In conjunction with these studies, recommendations regarding assumptions, including the assumed investment rate of return, are provided. The Board has retained the actuarial firm of Gabriel Roeder Smith & Company (GRS) to provide actuarial consulting services to URS. Because Finding 1 addresses the work of GRS, the response to Finding 1 has been provided by GRS.

Finding 2 is directed at transparency. Because the recommendations associated with this Finding should be considered while taking into account the legal backdrop for how URS is viewed by the courts, Finding 2 will be addressed by URS’ general counsel.

Finding 3 is directed to the Legislature and requests additional funding for URS. This Finding assumes Finding 1 is implemented. Changing the assumed investment rate of return is a Board function. Such action would require reconsideration by the Board and recertification of increased contribution rates to all 462 participating employers, and not just the State of Utah. GRS has provided a response to this Finding.

The URS’ independent auditor, Deloitte and Touche, uses their firm’s actuary to review the GRS actuarial assumptions adopted by URS. The Deloitte and Touche actuary has also concluded the assumptions to be reasonable.

Finding 1

GRS is pleased with the State Auditor Office’s (SAO) finding and comment that the Utah Retirement System’s (URS) assumed investment rate of return is within a ‘best-range estimate”. However, we disagree with its conclusion that the System’s assumed rate of return appears optimistic. It is our opinion that the 7.50% investment return assumption adopted by the Board in 2011 is the “best-point estimate” for the return assumption.

Identifying an appropriate long-term investment return assumption is a complex process and takes into account numerous factors in analyzing current available information. URS has been using an established and consistent process for many years and has resulted in the Board, from time to time, changing the return assumption. Historical experience provides evidence that this process has been successful. If we look at historical returns over long time periods (20 to 30 years), since URS began measuring returns on a market value of assets basis in 1976, there was only one 20-year period where the net compound return was less than the current 7.50% return assumption, and that 20-year return was only slightly less at 7.40%. There have been only three 20-year periods where the compound return was less than 8.00% and all three of those included both the 2000-2002 bear market and the impact of the financial market collapse in 2008-2009. In fact, all three occurred after URS lowered its investment return assumption to 7.75% and two of them occurred after URS moved their investment return assumption to 7.50%. When we look at the even longer 30-year returns, the lowest compound return number is 8.92%. Of course historical return experience is no guarantee for the future, but the experience should demonstrate that URS's return assumption has not been historically optimistic, and that URS has continually and prudently adjusted the return assumption to keep pace with investment future market expectations.

Comments Regarding the SAO's Independent Assessment

The SAO's report suggests that a 7.00% investment return assumption is a more appropriate assumption. Our comments below provide several discussion points that attempt to reconcile our differing opinions and further support GRS's recommendation of the 7.50% assumption as being unbiased and a "best-point estimate" assumption. Since the SAO report was silent regarding some of the discussion points, we presume they were not considered in its independent assessment.

> *(1) The SAO's reference to the System having a 51 percent likelihood of achieving a 7.00% return is downward biased for forecasting future expectations.*

This information is disclosed in the GRS 2011 experience study report and provided to the Board as a measure of volatility and risk. However, it is important to understand these statistics and measures to ensure that they are used appropriately to develop an unbiased future return estimate. Inappropriate use can result in biased conclusions and recommendations.

For example, the 50th percentile return estimate (i.e., the 7.00% average referenced in the report) provides the point estimate in the distribution where the number of instances the annual return exceeds this estimate is expected to be equal to the number of instances the annual returns will be lower than this estimate. However, this estimate does not take into account the expected dollar gain or loss that is associated with the experience. Investment return distributions are skewed to the right. They are not symmetrical or bell shaped. As a result, the potential for investment gains exceeds investment losses. Thus, using a 50^{th} percentile return estimate is downward biased. The arithmetic average takes into account the size of the investment gain or loss, but has the potential to be upward biased because it does not fully reflect the effect of "volatility drag". As a result, GRS recommended to the URS Board a return assumption that is between these two point estimates, which we believe is an unbiased best-point estimate assumption.

GRS is aware of two independent research papers, *Geometric or Arithmetic Mean: A Reconsideration ©2003, Eric Jacquier, Alex Kane, and Alan J. Marcus*, and *Geometric Return and Portfolio Analysis ©2003, Brian McCulloch*, supporting this claim. The following is the synopsis from a 2003 article on this subject in the Financial Analysts Journal:

> *An unbiased forecast of the terminal value of a portfolio requires compounding of its initial value at its arithmetic mean return for the length of the investment period. Compounding at the arithmetic average historical return, however, results in an upwardly biased forecast. This bias does not necessarily disappear even if the sample average return is itself an unbiased estimator of the true mean, the average is computed from a long data series, and returns are generated according to a stable distribution. In contrast, forecasts obtained by compounding at the geometric average will generally be biased downward. The biases are empirically significant. For investment horizons of 40 years, the difference in forecasts of cumulative performance can easily exceed a factor of 2. And the percentage difference in forecasts grows with the investment horizon, as well as with the imprecision in the estimate of the mean return. For typical investment horizons, the proper compounding rate is in between the arithmetic and geometric values.*
>
> *Geometric or Arithmetic Mean: A Reconsideration* ©2003*, Eric Jacquier, Alex Kane, and Alan J. Marcus*

GRS provided the SAO both of these research papers prior to the SAO issuing its draft report. However, the SAO did not reference or adjust for this concern in its analysis and discussion.

Also, the SAO report includes extensive discussion about probabilities and confidence intervals. However, the forward-looking capital market assumptions used to develop those probabilities are not certain. In fact, experts and professionals in the investment community have differing opinions regarding these expectations. As a result, it would be injudicious to rely on these estimates and probabilities as absolute and perfect.

> *(2) Investment consulting firm number six is not an outlier when compared to the universe of return expectations developed by investment consulting firms.*

The SAO report commented that one of the investment consulting firms, firm #6, has optimistic return expectations that are not consistent with the other five firms and inflates the averages. GRS provides actuarial consulting services to more than 300 public sector pension plans, including 26 statewide retirement systems. As a result, we encounter capital market assumptions developed by a multitude of investment consulting firms. The URS analysis used assumptions developed by Callan, URS's investment consultant, as well as those developed by five other investment consulting firms. The other firms were selected based on their nationally recognized reputation of providing quality investment consulting services. While investment consultant #6 provided the most optimistic return expectations and appears to be an outlier when compared to the other five firms, it is not an outlier when compared to the universe of return expectations developed by firms providing investment consulting services to pension plans. Therefore their expectations should not be discounted when performing the analysis.

(3) *GRS's analysis included margin because it did not provide advance recognition of the benefits attributable to active management strategies.*

URS' internal investment office utilizes several sophisticated active management strategies to increase the plan's return and/or reduce the plan's risk. The return and risk expectations developed by the investment consultants model the underlying index or benchmark for each asset class and do not reflect the benefits of active management strategies. As a method for introducing some conservatism and margin in the analysis, GRS reflected the investment expenses related to active management but did not advance recognize the benefits of those strategies in the return and risk expectations. If the risk and return strategies related to the active management strategy were recognized in the return assumption, the geometric (i.e., the 50th percentile return) and arithmetic return expectations would be higher, perhaps as much as 25 to 50 basis points higher.

(4) *The investment consultant's time horizon is significantly shorter than URS'.*

The retirement system has more than a 30-year investment horizon. However, the majority of the investment consultants develop their forward-looking returns using a 7 to 10 year time horizon. A few investment consulting firms provide separate capital market assumptions with a 10-year and 30-year time horizon. In each of these instances, their 30-year return expectations exceed their 10-year return assumptions. In a couple of these instances, the differences are significant. Also, while the 30-year returns expectations were higher, their volatility expectations remained the same.

As another opportunity to include some margin in the process, GRS used 10-year assumption sets for each of the firms used in the analysis and did not increase the analysis results to account for URS' extended time horizon.

(5) *Benchmarking URS' return assumption to assumptions used by other statewide retirement systems provides some useful information.*

We agree with the SAO's comments that comparing URS' investment return assumption to other statewide retirement systems provides limited information without consideration of differences in investment policies. But many of these retirement systems have investment strategies similar to URS and are all are subject to the same level of scrutiny regarding the appropriateness of their investment return assumptions. Even so, less than 10% of the 126 other public employee retirement systems have a nominal return assumption less than URS' 7.50% assumption in the survey cited in the SAO report.

Comments Regarding the SAO's Recommendations

Below are our responses to the SAO's recommendations regarding URS's investment return assumption and the increased contributions that would result with lower investment experience.

Recommendation #1 *regarding the investment assumption*. The SAO recommends that, based on the analysis provided in this finding, the URS Board lower the System's assumed investment rate of return.

GRS Response: We believe that the 7.50% return assumption adopted by the Board in 2011 is the "best-point estimate" for the return assumption. By selecting one particular measurement and focusing solely on that outcome, the SAO ignored many other factors that demonstrate the appropriateness of the 7.50% recommended return assumption. If you recognize the margin from the use of shorter term capital market expectations, even though some longer term (and higher return) expectations were available, and the anticipated higher returns and reduced risk from active management, we expect the plan's investment experience to meet or exceed the 7.50% return assumption over a long period of time.

URS Board's Response: The Board has adopted a process, consistent with best practice, for administering public pension plans and in conformity with its fiduciary duties to members of the systems, plans, and programs it administers. Part of that process involves receiving and acting on reports and recommendations from a Board appointed actuarial firm. After reviewing the reports and recommendations from the actuary, the Board has adopted actuarial assumptions which include the assumed investment rate of return. The Board believes that the 7.50% assumed investment rate of return is appropriate for fiscal year 2013-2014.

Recommendation #2 *regarding the investment assumption.* The SAO recommends that URS, with the assistance of its actuary, provide stakeholders with the probability of realizing rates of return with each actuarial experience study.

URS and GRS Response: As previously discussed, the return and risk expectations are subjective and do vary among the experts and professionals in the investment community. Different stakeholders are likely to have differing opinions regarding the return assumption and communicating probabilities may provide a false sense of certainty or create confusion. Also, as discussed previously, the probabilities associated with the geometric returns on a forward looking basis have a downward bias when used for forecasting future return expectations. We believe communicating this information, out of context, provides little value to the stakeholders, particularly when the Board has adopted a "best-point estimate" return assumption.

Stakeholders can currently find a significant amount of information in the URS Comprehensive Annual Financial Report (CAFR). Also, URS will be expanding its disclosure information when GASB Statement #67, the Accounting and Financial Reporting for Pensions, becomes effective for URS for the plan year ending December 31, 2014. For instance, URS will describe the process that was used to develop the investment return assumption and disclose the unfunded actuarial accrued liability if discount rates 1.00% greater than and 1.00% less than the current assumption are used. Stakeholders will find this disclosure information easier to understand and more informative as it provides the financial impact if an alternative investment return assumption is used.

Finding 2

URS agrees with Recommendation 2 in Finding 2 that GASB recommendations on disclosure of actuarial information should be implemented as soon as possible. URS began that process well before this audit commenced. This is addressed more fully below. However, the Audit Report goes well beyond that recommendation to address the Open and Public Meetings Act and Government Records Access and Management Act (GRAMA). There are a number of reasons why Recommendation 1 in Finding 2 is misplaced.

Analysis is Incomplete

There is a wide variety of circumstances, including historical, demographic, political, cultural, and financial that determine the best course of action for each public pension plan. The exact governance structure, including privacy, Open Meetings, and application of GRAMA type laws should depend upon the specific conditions of the public pension plan.

The size of public pension boards range from 1 to 26 members. Some boards are made up exclusively of active or retired plan participants, some are exclusively ex officio or appointed members; many have all three types of members. Many boards have members elected from the participant groups, which leads to an entirely different set of issues that must be addressed. Some boards have extensive qualification requirements, some have little or none. Other boards split the administrative and investment duties apart; many combine them into the same body. Many boards have a history of problems including “pay to play” which have resulted in specific privacy issues being addressed.

Background of URS and Open Meetings / GRAMA Laws

U.C.A. §49-11-201(4) states *“The Board and Office are exempt from those acts which are applicable to state and other governmental entities under this code.”* This legislative pronouncement reflects both the policy and law of the State of Utah for over three decades. The Audit Report recommends this long standing policy be overturned after a limited review of other states' policies. Utah and the URS have long been regarded as being among the best run entities among their peers. In part, this is because Utah policy makers take the time to address issues in detail, and are not afraid to do things differently, and usually better, than other places. URS is unusual in its exemption from Open Meetings and GRAMA type laws. But it is as a result of a well thought out process developed over many years that has yielded positive results. The following is an explanation of why this has been the express policy of Utah.

To be a qualified, tax advantaged retirement plan under Section 401(a) of the Internal Revenue Code the funds of the plan must be held in trust and be used only for the exclusive benefit of the beneficiaries. Utah law recognizes and codifies this requirement in U.C.A. §49-11-301(3). Utah Code further recognizes the URS trust funds, like the funds of other state created entities are not state funds ("”State funds" does not include funds held by the Utah State Retirement Board or the Workers' Compensation Fund) U.C.A.§67-4-2(5)(c).

Utah Attorney General Opinion 78-07 addressed the question of whether URS was subject to audit by the State Auditor. At that time the State Auditor was only performing financial audits. Because the current audit was a performance audit, an apparent departure from past practice, URS did not attempt to prevent this auditor from moving forward. However, the reasoning of the opinion is relevant to the current discussion.

While the opinion found that URS was not authorized to operate without any audit, the Attorney General's office found :

"In the event a disagreement were to arise between the Retirement Board and the State Auditor as to the manner of investment, utilization of facilities, form of accounts, etc. it is likely that a public issue would be made of the alleged discrepancies. In any event, it appears customary for the State Auditor to publish the results of his audits and particularly areas of deficiency. While this may well be a healthy and desired result in the conduct of the State's business in general, it is easily apparent that confidentiality and fiduciary accountability are over-riding considerations in the case of an investment fund such as that administered by the Retirement Board. In order to function effectively as fiduciaries, the Board Members must have the full and unfettered authority as well as accountability."

. . .

"The Retirement Fund is a trust fund with the Retirement Board as trustee [49-9-10 U.C.A., 1953 as amended] and as a trustee is a fiduciary, subject to the standard of care specified in [33-3-1 U.C.A., 1953, as amended] and is obligated to act in the interest of the beneficiaries of the trust. To interpose control by the State Auditor or any State official or agency, whose duty is to the State at large, would violate the Retirement Board's responsibility to act for the benefit of the members of the Retirement System and give control to an official who is not subject to the same standard of care, and

whose loyalty might well be contrary to the interests of the Board in exercising its fiduciary responsibility to benefit its members, rather than the State in general."

. . .

"We thus conclude that the Retirement Fund is not subject to audit by the State Auditor since the Fund is not a "state fund", the employer contribution made by the state or political subdivision is made as an employer, and not as a general public function, and the fiduciary responsibilities placed upon the Retirement Board would be in conflict with control exercised by the State Auditor or other public official."

This opinion was cited with approval in *Hansen v. Utah State Retirement Board*, 652 P.2d 1332 (Utah 1982). In addition to the rationale of the opinion, the court recognized that 80% of the participants in the fund are not state employees, no state funds are appropriated to meet any administrative costs and the investments are not subject to the Board of Examiners.

In *Ellis v. Utah State Retirement Board*, 757 P.2d 882 (Utah App. 1988) the issue of the Open Meetings Act was specifically raised. In ruling on the matter the Court stated:

"We are persuaded that the Open and Public Meetings Act is not applicable to the Retirement Board. First, the Utah State Retirement Fund is administered as a common trust fund and not supported by tax revenue. Second, the Retirement Board is not vested with the authority to make decisions regarding the public's business. The Board administers funds for the benefit of the beneficiaries and not the public at large. . . . Ellis's argument that the Board acted contrary to the Open and Public Meetings Act is without merit."

For at least the last 35 years the policy the State of Utah has followed is consistent with the line of reasoning set forth above. Without significant discussion by stakeholders, it should not be changed now.

Impact of Open Meetings / GRAMA Laws on Investments

Due to the unique status of URS not being subject to Open Meetings / GRAMA laws, it has been able to pursue an investment process benefitting URS participants by reducing the volatility of returns while still meeting its return expectations.

In order to respond to the Audit Report, URS asked its managers and consultants for their input on how the change would affect current and future investments opportunities.

As a result of NOT being subject to Open Meetings / GRAMA laws URS has had superior access to top quartile Private Investment funds. URS consultants identified several investment managers where URS would not have likely gained access in the past. In addition, several investment managers were identified where future access would likely be threatened. In some instances, exclusion from Open Meetings / GRAMA laws was the identifiable defining reason why URS was allowed access. This was based on direct feedback from the investment manager and further evidenced by the fact that no other state plans were allowed into the investment. If Utah changes URS' public disclosure requirements, URS will experience reduced access to the best managers.

While the negotiating balance between investors and investment managers will ebb and flow, those investment managers with the best performance are often heavily oversubscribed (investors want to give them more money than they can invest). This is particularly true of venture capital investments where URS works hard to obtain the quality exposure it needs. Often in an oversubscribed scenario, the successful investment manager is looking for reasons to eliminate potential investors in a non-offensive way and Open Meetings / GRAMA laws often become a reason.

Most partnership investment agreements allow the investment manager to "kick out" an investor who either violates confidentiality requirements or whose domicile law changes or requires more open sharing of information. This is difficult to quantify because it is left up to the investment manager's discretion but the current portfolio of commitments could be impacted by a change in Utah law regarding Open Meetings / GRAMA laws.

As a result of NOT being subject to Open Meetings / GRAMA, URS has received superior access to investment information. More information leads to better informed decisions and superior returns. There are several layers of information that investment managers are willing to share. If an investor is allowed to invest in the fund, those investors subject to Open Meetings and GRAMA laws are provided the least amount of critical decision making information. These investors are often limited to only the quarterly financial statements, basic risk reports and statements of value. For example, in the case of private equity, limited or no information is provided on the underlying fund's portfolio companies. Being subject to Open Meetings / GRAMA laws would result in little to no access to underlying portfolio financials and performance metrics. Better understanding of funds and their underlying performance drives better investment decision making. This will impact a significant portion of URS' portfolio.

The Absolute Return portfolio transparency will be greatly affected. URS currently receives security position detail from many managers. When aggregated, this level of detail provides a clear picture of risks and exposures. Without this detail, staff will have less information for making investment decisions. The software transparency and exposure aggregation initiative URS is implementing will be severely compromised.

As a result of NOT being subject to Open Meetings / GRAMA laws URS has benefited from an efficient cost structure. In order to continue to gain access to top quartile mangers who don't allow investors with public disclosure requirements into their funds, some public investors who have disclosure requirements have hired private equity fund of funds managers. The fund of funds managers have access to the detailed investment information but do not share this information with investors who have public disclosure requirements. The investor must take the approach of blindly trusting the fund of funds manager. We say "blindly" because they are denied access to key underlying performance metrics and are forced to only observe top line summary performance numbers. Fund of funds are an increased cost URS' has sought to avoid. One of our gatekeepers, who also functions as a fund of funds manager, specifically mentioned they have a "FOIA Friendly" financial statement they send to one of their clients because they know it will be disclosed.

It has been our observation that state plans being subject to public disclosure have to dedicate significant resources in the form of increased computer programming, processing, printing, and copying expenses plus hiring of additional staff to accommodate information requests. This is especially true in states where the legislation was vague or could be widely interpreted. While some requests for information are from concerned constituents, it has been our experience in discussions with other state plans, many of the detailed information requests which come month after month are from data brokers who are looking to aggregate and sell the data. For example, we know of a large private equity data broker that files GRAMA type requests for large amounts of data on a regular basis.

URS has not had sufficient time to determine the full extent of the limitations and disclosures it would face if subjected to Open Meetings / GRAMA laws, but there would be a significant dollar as well as opportunity cost to the system.

Comments Regarding the SAO's Recommendations

Recommendation #1 The SAO recommends the Legislature clarify statute to require URS to comply with the State's *Open and Public Meetings Act* and the *Government Records and Management Act.*

URS Response: The information provided in this response demonstrates that URS' exemption from the Open and Public Meetings Act and the Government Records Access and Management Act is established by Legislative action and supported by State Attorney General opinion and court rulings. Courts have determined URS is not doing the public's business but rather is functioning as a fiduciary in serving its members. To limit URS' ability to place investments with desirable managers whose returns would benefit the members of URS would be unwise. Implementing dramatic change without a careful and well reasoned approach, including consideration of associated costs, both opportunity and dollar costs, would be short sighted.

Recommendation #2 The SAO recommends URS immediately adopt the GASB revisions that will require it to provide stakeholders with assumptions and methodology used to calculate the assumed investment rate of return.

URS Response: URS agrees the GASB revisions will require URS to provide additional information. URS is already in the process of implementing the GASB revisions, well in advance of the required date for URS of December 31, 2014, and plans on implementing the revisions in its 2013 Comprehensive Annual Financial Report (CAFR). URS has reviewed with the Legislative Retirement and Independent Entities Committee the major changes GASB 67 and 68 will have on URS participating employer's financial reporting, and provided them with a sample employer disclosure. URS is also working with the SAO to provide training to employers and auditors on how the changes will impact the employer's financial reporting. It is noteworthy that a significant amount of actuarial information is already disclosed in the URS CAFR. The CAFR currently contains information regarding actuarial assumptions and valuations in a number of places including the Management Discussion and Analysis, Notes to the Financial Statements, Notes to Required Supplementary Information and an additional 18 pages in the Actuarial Section of the CAFR.

Finding 3

Recommendation #1 The SAO recommends the Legislature increase the contribution rate to reflect a lower assumed investment rate of return that has a greater chance of happening.

Recommendation #2 The SAO recommends the Legislature fund the retirement system according to the desired level of risk assumed in the expected investment rate of return.

URS and GRS Response to both recommendations: The contribution rates are calculated in accordance with the Board's funding policy and have a self-correcting mechanism that automatically changes the contribution rates when the plan experiences gains or losses (from demographic or economic experience). This automatic adjustment process is designed to ensure the financial condition of the Retirement System will continue to improve, even if the Retirement System incurs adverse experience. Also, Section 49-11-301(5) of the Utah Code allows the Board to maintain the employer contribution rate at the prior year's rate, if the actuarially calculated rate would decrease and if the funded ratio is less than 110%. The Board has utilized this financial safeguard provision by maintaining the contribution rates, when applicable, since this provision was enacted in 2004. Considering these two principal elements of the URS funding policy, there is virtually no likelihood of the Retirement System becoming insolvent due to adverse experience (e.g., investment returns less than expected).

The contribution rates are currently projected to increase from FY 2014 to FY 2015 as the 2008 investment loss becomes fully recognized in the actuarial value of assets. The Retirement Systems has experienced net investment gains (i.e., investment returns in excess of the assumed rate of return) since 2008 which is projected to produce some decrease in the actuarially calculated contribution rates after FY 2015. If the Board continues its practice of certifying a contribution rate that is the greater of: (1) the actuarially calculated rate, or (2) the prior year's certified rate, then the contribution rates are projected to remain unchanged after FY 2015. As a result, contribution rates after FY 2015 will have margin to allow the plan to incur some adverse experience without requiring an increase in the rates. If the Legislature requires the use of an investment return assumption lower than the current 7.50% best-point estimate, contributions will increase for all 462 participating employers and will result in the system attaining a 100% funded status earlier than the current funding policy expects.