Office of LEGISLATIVE AUDITOR GENERAL State of Utah

REPORT NUMBER 2011-06 July 2011



Actuarial Study of PEHP's Contingency Reserves

A Performance Audit of PEHP's Business Practices (report no. 2011-01) released in January 2011, showed that the Public Employees' Health Program (PEHP) has not actuarially determined reserves for the state's medical risk pool. In response to a legislative request, our office asked the actuary firm of Milliman, Inc. to conduct a study of PEHP's contingency reserves. Milliman relied on data and other information provided by PEHP, but the scope of the project was directed by the Legislative Auditor's Office. Milliman has completed their actuarial study and estimated the contingency reserves to cover the various risks of the state's benefit plans (Milliman's full report is in the Appendix). Based on the Milliman report, we recommend the following:

- At least a 50-day contingency reserve (1.63 months) of annual premiums be maintained for the state's medical risk pool.
- Depending on the Legislature's preference, as much as \$26 million in reserves could be refunded to state employers and employees with insurance coverage.

Reserve requirements in *Utah Code* 49-20-401(1)(i) direct PEHP to "maintain reserves sufficient to liquidate the unrevealed claims liability and other liabilities of the employee benefit plans as certified by the program's consulting actuary." However, rather than using

PEHP has not actuarially determined reserves for the state's medical risk pool, as required by the *Utah Code*. PEHP uses a 60-day reserve benchmark.

The January 2011 audit of PEHP showed that the state's medical contingency reserves exceeded their 60-day benchmark by \$19.2 million.

actuarially determined reserves for the medical risk pool, PEHP currently uses a 60-day reserve benchmark. Our January 2011 audit of PEHP showed that contingency reserves exceeded the 60-day benchmark by \$19.2 million. The audit recommended that PEHP should establish minimum reserve levels that meet the requirements described in *Utah Code* 49-20-401(1)(i).

Given the current economic conditions, the Legislative Auditor's Office was asked to oversee an independent actuarial study of the state's medical reserves.

With the current economic conditions, several legislators wanted to know the reserve levels needed for the state employees' medical risk pool to determine if some of those funds could be refunded to state employers and employees with insurance coverage. The co-chairs of the Retirement and Independent Entities Appropriations Subcommittee asked the Legislative Auditor's Office to conduct an independent actuarial study of the state's medical risk pool contingency reserves. This report fulfills that request.

Current Contingency Reserve Levels Can Be Decreased

Milliman has made contingency reserve projections for the state's medical risk pool based on generally accepted actuarial practices. Milliman has included estimates of contingency reserves needed to cover the various risks of the state's medical risk pool. From those estimates, we recommend a total contingency reserve level of at least 50-days of annual premium be maintained for state's medical risk pool. Since the consulting actuary provided a range from 50-days to 80-days, the Legislature could choose a more conservative reserve benchmark. Figure 1 shows the total contingency reserve estimate, and the individual risk components that were analyzed for this study.

Based on an actuarial study, we recommend a contingency reserve level of at least 50 days of annual premium for the state's medical risk pool.

Figure 1. Actuarially Determined Contingency Reserves. We believe 1.63 months (which is equal to 50 days) reserve of annual premium is sufficient for the state's medical risk pool.

Contingency Reserve Components	Months**
IBNR* Underestimate	0.08
Trend Fluctuation	0.85
Claim Fluctuation	0.15
Other Claim Volatility	<u>0.60</u>
Total Months (in terms of annual paid claims)	1.68
Total Months (in terms of annual premium***)	1.63

^{*}IBNR: Incurred but not reported claims. The IBNR totals are estimates and represent an actual financial liability.

The purpose of contingency reserves is to cover all unexpected claims and expenses accrued by risk pool members. Milliman states in their report that "total reserves for self-funded arrangements, like the state's medical risk pool, do not have a single common standard either in principle or in practice that reflects tolerance for variance." One right answer does not exist; reserve levels depend on the amount of risk an employer group is willing to take. However, given the size and the financial stability of the state, we believe the total contingency reserve estimate in Figure 1 represent sufficient funds to generally mitigate unexpected costs for the medical risk pool.

Milliman separated the contingency reserve into four separate risk components. The Milliman report also provided risk level options for each component, except for the IBNR underestimate. Each component is described in detail in the Milliman report in Appendix A. A brief description of each component is given below, along with the risk levels that we recommend for the state's medical risk pool contingency reserves.

IBNR Underestimate. This reserve is intended for claims that have been incurred but not paid for a certain coverage period. Incurred claims for a given coverage period are matched with premiums for the same period. IBNR is based on a judgment made by PEHP. This reserve mitigates the error in estimating the IBNR liability. According to Milliman, "if the IBNR liability is underreserved, it will impact funding for future coverage periods."

The purpose of contingency reserves is to cover all unexpected claims and accrued expenses.

The IBNR underestimate reserve mitigates errors in PEHP's estimate of incurred but not paid claims for a coverage period.

^{**}Months of annual paid claims or premium needed to maintain appropriate reserve levels.

^{***}The actuary provided contingency reserves in terms of annual premium for consistency with the audit of PEHP (report no. 2011-01).

The trend fluctuation reserve is to mitigate errors in premium calculations.

The claim fluctuation reserve mitigates random fluctuations in claim costs.

The other claim volatility reserve mitigates unforeseen events such as a natural disaster.

Milliman calculates this reserve should be 0.08 of a month (or 2.4 days) of annual paid claims.

Trend Fluctuation. This reserve is set up to mitigate the error that may occur when premium amounts have been calculated with a projected trend or other assumptions that do not reflect the actual eventual costs. Milliman provided three different risk levels in their report. The State of Utah is able to adjust reserve funding to account for unexpected changes in trend within 18 months. Therefore, we believe that the 18-month risk level is appropriate. Milliman calculated that this reserve needed to be 0.85 of a month (or 25.9 days) of annual paid claims. Milliman also provided more conservative reserve levels in their report using 24 and 36 months.

Claim Fluctuation. This reserve is intended to mitigate the risk of random fluctuations in claim costs. Claim fluctuation reserves cover actual claim costs when they exceed PEHP's expected claims costs for a given year. Milliman set the reserve to cover the claim fluctuation risk at the 95th percentile. In other words, at the 95th percentile, it is estimated that, in 19 of 20 years, this reserve would be sufficient to cover actual claims that exceed expected claims. We believe a 95th percentile is too conservative. At our request, Milliman also calculated the reserve at 75th percentile. At the 75th percentile, it is expected that this reserve would cover actual claims that exceed expected claims in 15 of 20 years. At the 75th percentile, this reserve needs to be 0.15 months (or 4.6 days) of annual paid claims.

Other Claim Volatility. This reserve is set up for unforeseen events that can consume significant plan resources, such as natural disasters or epidemics. According to Milliman, there is not a standard model to calculate another claim volatility reserve. Milliman provided two estimates in their report. Milliman included a reserve of 10 percent of incurred claims over a 12-month period, and we asked Milliman to include a reserve of 5 percent of incurred claims. Given the financial stability and large employee group of the state, we believe a 5 percent of incurred claims over a 12-month period would be sufficient. This reserve for other extreme events is 0.6 months (or 18.2 days) of average claims for a reserve of 5 percent of incurred claims.

Excess Reserves Should Be Refunded

If a 1.63 months or 50-day reserve of annual premium is implemented for the state's medical risk pool with PEHP, an excess of \$26 million in reserves could be refunded to state employers and employees. When reserves accumulate above the actuarially determined levels, state statute directs the Utah Retirement Systems (URS) Board of Directors to consider refunding excess premiums. *Utah Code* 49-20-402(2) states:

If substantial excess reserves are accrued above those required by this chapter [actuarially determined reserves], and the board determines that a refund is appropriate, a refund shall be made: (a) to covered employees. . .; or (b) directly to covered individuals.

Figure 2 shows the medical risk pool reserves and the potential refund for the fiscal year ending June 2010. The premiums collected and the reserves for the 2010 fiscal year are based on data released in *A Performance Audit of PEHP's Business Practices*.

Figure 2. Recommended Medical Risk Pool Reserves. Implementing a 50-day reserve could provide a \$26.2 million refund.

Description	Amount
2010 Fiscal Year Medical Premiums Collected	\$ 254,560,324
Medical Risk Pool Reserves on 6/30/2010	61,081,636*
50-Day Reserves	34,871,277
Excess Reserves that Could Be Refunded	\$ 26,210,359

^{*}Note: The contingency reserve amount is based on fiscal year 2010 year-end financial data.

Figure 2 shows medical risk pool reserves of \$61 million for the fiscal year ending June 2010. A 50-day reserve of annual premiums would require reserves of \$34.8 million for fiscal year 2010, so \$26 million could be refunded as approved the URS board.

Contingency Reserves Can Be Adjusted to Reduce Risk

If the Legislature would prefer to further reduce the risk of not covering unexpected costs, the Legislature could implement the more If a 50-day contingency reserve is implemented, an excess of \$26 million could be refunded to state employers and employees.

As of June 2010, the state's medical risk pool contingency reserves consisted of \$61 million.

The Legislature could implement a more conservative contingency reserve requirement, such as an 80-day reserve of annual premiums.

conservative estimates presented in the Milliman report. Doing so would increase the total contingency reserve to 2.7 months or 80-days of annual premiums. Figure 3 shows the recommended reserve amounts for the state's medical risk pool for an 80-day reserve.

Figure 3. Calculation of an 80-Day Reserve. A more conservative reserve of 80-days would require most of the current reserves to be retained by PEHP.

With an 80-day reserve, a refund of \$5.3 million could be given to covered employers and employees.

Description	Amount
2010 Fiscal Year Medical Premiums Collected	\$ 254,560,324
Medical Risk Pool Reserves on 6/30/2010	61,081,636
80-Day Reserves	55,794,044
Excess Reserves that Could Be Refunded	\$ 5,287,592

This option would retain most of the current reserves in the state's medical risk pool. A refund of \$5.3 million could be given to state employers and employees with URS board approval.

Recommendations

- 1. We recommend that the Legislature require PEHP to implement at least a 50-day reserve of annual premium for the state's medical risk pool.
- 2. We recommend that the Legislature consider requesting a refund from the URS Board of Directors as much as \$26 million (based on fiscal year 2010 reserves) from the state's medical risk pool or use excess reserves to offset future premium increases.

Appendix

This Page Left Blank Intentionally



State of Utah Contingency Reserve Study

Prepared for: **Auditor General**

Prepared by: **Milliman, Inc.**

Troy J. Pritchett FSA, MAAA

515 East 100 South Suite 600 Salt Lake City, UT 84102

Tel +1 801 924 1390 Fax +1 801 924 1395

milliman.com

This work product was prepared solely for the Legislative Auditors for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty to other parties who receive this work.

June 28, 2011



Troy J. Pritchett FSA, MAAA Consulting Actuary Principal

troy.pritchett@milliman.com

515 East 100 South Suite 600 Salt Lake City, UT 84102

Tel +1 801 924 1390 Fax +1 801 924 1395

June 28, 2011

John M Schaff
Office of the Legislative Auditor General
315 House Building
P. O. Box 145315
Salt Lake City, UT 84115

Dear John:

The Utah Legislative Auditors requested Milliman, Inc. to prepare an actuarial study of the employee health plan contingency reserves for the State of Utah. The study was done under the terms of Milliman's existing contract with PEHP but the scope and the project request was directed by the Legislative Auditors.

In preparing these projections, we relied on data and other information provided by PEHP. We have not audited this data but did review the data for reasonableness and consistency. If the underlying data is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions used for these projections. It is certain that actual experience will not conform exactly to the assumptions used in the projections. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

This report has been prepared for the use of the Legislative Auditors and PEHP. It may not be distributed to any other party without the prior written consent of Milliman. I am a member of the American Academy of Actuaries and meet its qualification standards for preparing projections of this type.

Sincerely,

Troy J. Pritchett, FSA, MAAA

Trong Prithet

Consulting Actuary

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY		4
A.	Scope of Report	4
B.	Reserves	4
C.	Caveats	6
II. RE	SERVE DETAIL	7
A.	Discussion of Reserve and Types of Risk	7
B.	Claim Reserves	8
C.	Trend Fluctuation	8
D.	Claim Fluctuation	8
E.	Other Reserves	8
III. D	ATA SOURCES AND LIMITATIONS	10
IV. EXHIBITS		11

I. EXECUTIVE SUMMARY

A. Scope of Report

The purpose of this study is to make an estimate of the recommended contingency reserve levels to address the following risks for the State of Utah's self-funded medical and pharmacy employee benefits:

- Risks which were not accounted for when the budget was set to cover costs of employee benefits; and require a buffer to cover these if they do happen.
- Risks which were accounted for in preparing the budget for a given coverage period, but where the potential impact of these risks could be higher than what was accounted for in the funding of employee benefits.

This report describes the development of reserves for contingent events (risks), taking into account the availability and timing of funding.

The recommended contingency reserve in this report does not include IBNR and other liabilities required under GASB accounting standards for liabilities incurred as of a financial statement date.

The contingency reserve addressed in this report assumes that the State budgets do not include excess amounts that could be drawn upon to meet cash needs for the risks described in this report.

We also assume that the budget premium amounts do not include contingency amounts above those required to maintain the contingency reserve.

The benefits included in this study are the State of Utah's partially self-funded medical plan for eligible active employees, and the self-funded pharmacy plan.

This study does not include the liability for accrued post retirement or post employment medical benefits.

B. Reserves

We have included an estimate of contingency reserves to cover the various risks of the State of Utah's benefit plans. The reserve estimate includes reserves that might be needed to cover variation in cash needs that arise between budget cycles of an ongoing plan. The total contingency reserve estimate includes a reserve for:

- An underestimate of unpaid claim liabilities estimates, which would impact funding for a future coverage period.
- A reserve to cover 95th percentile of the trend fluctuation over the trend assumption
 that was used to set the budget for the employee benefit plan. (The percentile here
 reflects the tolerance for inadequacy in contingency reserve. A percentile lower than
 95 would require a lower contingency reserve and vice versa.)

- A claim fluctuation reserve to cover 95th percentile of the claim level variation over the average expected claim levels, when other actuarial assumptions used for funding the employee benefit plan are held constant. (*The percentile here reflects* the tolerance for inadequacy in contingency reserve. A percentile lower than 95 would require a lower contingency reserve and vice versa.)
- A reserve to cover variation in claim costs due to other unexpected or unknown contingent events such as data errors, unexpected litigation, natural disasters, a catastrophic epidemic etc.

The estimate of each of the contingency reserves discussed above in terms of months of average paid claims is summarized as follows:

State of Utah	
Contingency Reserve Components*	
	Months
IBNR underestimate	0.08
Trend fluctuation	1.15
Claim fluctuation	0.37
Other claim volatility	1.20
Total	2.80

^{*} If contingency reserves are expressed in terms of months of average monthly premiums instead, the total contingency reserve is 2.71.

Throughout this report we also reference alternative contingency reserve component estimates requested by the Legislative Auditor's Office to reflect higher tolerance levels. Those estimates are summarized in the following table:

State of Utah Contingency Reserve Components** (based on request by Legislative Auditor's Office)	
	Months
IBNR underestimate	0.08
Trend fluctuation	0.85
Claim fluctuation	0.15
Other claim volatility	0.60
Total	1.68

^{**} If contingency reserves are expressed in terms of months of average monthly premiums instead, the total contingency reserve is1.63.

If the claim reserve is set properly and experience meets expectations, then a plan that eliminated future coverage and took in no future premium would have sufficient funds to pay all services incurred prior to a given reserve date. An under estimation of unpaid claim liabilities by the reserving actuary would imply that the unpaid claim liabilities are underfunded for a prior coverage period. A contingency reserve is required to cover this

under funding. The contingency reserve resulting from this situation is relatively small compared to the other contingency reserves discussed here.

Trend fluctuation contingency reserves form a significant portion of the total contingency reserves and account for a range of typical trend variation over the projection period for which the State of Utah must project plan funding.

Claim fluctuation reserves account for statistical variation in benefit claims and take into account the size of the group and the inherent variability in medical benefit claims.

C. Caveats

We received data from Public Employees Health Program. We relied on this data without audit or verification. We did review the data for consistency.

We prepared this report upon the request of the Legislative Auditors for the purpose of recommending an appropriate contingency reserve for the State of Utah employee benefit plan, administered by Public Employees Health Program. The analysis is intended only for this purpose and may not be suitable for other uses.

The projections in this report are estimates based on the data available to us and use generally accepted actuarial practices. However, actual experience will likely differ from these projections.

Following this Executive Summary, Section II of the report discusses each element of the plan reserves in greater detail. Section IV includes exhibits supporting the results.

II. RESERVE DETAIL

The Legislative Auditors requested that Milliman make recommendations on appropriate contingency reserve levels for the State of Utah employee benefit plan administered by Public Employees Health Program. This section discusses the types of fluctuations that need to be reserved for by taking into consideration the length of time between projected budgeted costs and final determination of actual costs.

The contingency reserve level shown in Exhibit II provides for a range of deviations from expected plan requirements over a twenty-four month projection horizon. Additional scenarios are addressed in the text below.

A. Discussion of Contingency Reserve and Types of Risk

Other than the regulatory limits placed on plans subject to funding restraints to maintain the tax-deductible status of contributions, total reserves for self-funded arrangements do not have a single common standard either in principle or in practice that reflects tolerance for variance.

We have summarized our contingency reserve estimates into four types of reserves: underestimation of claim liability (IBNR), trend fluctuation, claim fluctuation and other risks. We present a reserve level that represents the amount of reserve for each of these types of risk.

PEHP separately holds an IBNR liability, which is a reserve for claims that have been incurred but not paid before the reserve date. This reserve creates accounting consistency because incurred claims for a given coverage period are matched with premiums for the same period. This reserve is based on the judgment of the reserving actuary. A contingency reserve needs to be set up for the error in estimating the IBNR liability because if the IBNR liability is under reserved, it will impact the funding for future coverage periods.

A plan faces two major additional risks for which additional reserves may be prudent. The first is the risk that premium amounts have been calculated with a projected trend or other assumptions that do not reflect the true eventual risk. The second risk is that of random fluctuation in cost assuming correct estimation parameters. In practice, the effects of these two risks are not easily separated but they are different risks.

Finally, additional unforeseen events can consume significant plan resources. A reserve for these other contingencies is also desirable. We have included a reserve estimate for the combined effect of the many additional contingencies to which a plan is subject.

The reserves we present in this report are not set to handle a worst case scenario. They are set to cover a high proportion of expected cases. For example, the trend fluctuation reserve is set so that the plan would have sufficient reserve funds, assuming a 24 month period between the start of unexpected increases and the implementation of corrected rates, to cover 95% of expected scenarios. We used 24 months to provide for the fact that the State of Utah budget must be set in advance of an annual legislative session, which is in turn in advance of the experience period of the rates.

B. Variation in IBNR Liability Estimate

We have included Exhibit I to show the estimated error in IBNR reserve expressed as number of months of average paid claims.

PEHP typically looks at reserves calculated from claim lag data with 2 months of run out. From the claim lag data provided by PEHP which has 2 months of run out, we calculated completion factors using different reserving methods based on historical claims payment patterns that show the estimated percent of total expected claims that have been paid as of a given lag duration. Incurred claims are based on applying these completion factors to the paid amounts. The reserve for each month is obtained by subtracting the paid amounts from the total expected incurred claims. The total reserve is the sum of all the monthly reserve amounts.

We then took the difference of the highest and the lowest reserves estimated using different reserving methodologies. This difference when expressed as number of months of average paid claims in the last few months of fiscal year ending June 2010 gave 0.08.

C. Trend Fluctuation

To reserve for the trend uncertainty risk, Milliman has modeled the historical variations in the Health Cost Index (Milliman's proprietary measure of healthcare cost changes) trend over the last several years.

We have set the trend fluctuation reserve at 1.15 months of average paid claims to cover unexpected trend increases with 95% certainty. The 95% reflects the level of tolerance for inadequate contingency reserves. In other words, a contingency reserve to cover risk of trend fluctuation with 95% certainty is higher than a contingency reserve to cover trend fluctuation with say 75% certainty.

The State of Utah is assumed to be able to adjust funding to account for unexpected changes in trend within 24 months. If 36 months were used instead of 24 months, it would increase the contingency reserve due to trend fluctuation to 1.79 months of average paid claims. On the other hand, if 18 months were used instead of 24 months, it would decrease the contingency reserve to 0.85 months.

D. Claim Fluctuation

We set the reserve to cover the claim fluctuation risk at the 95th percentile over the same time period. Considering the size of the State of Utah group, in 95% of cases, actual claims during a single year for all plans will be not more than 1.5% greater than expected claims due solely to random fluctuation.

The random variability of healthcare claims was modeled mathematically using the Milliman claims probability distribution model, which projects annual claim costs for group of lives. The model uses a single-life claims probability distribution, a random-number generator, and a Monte-Carlo simulation technique to project claims for an entire group. The group's claims were projected using 5400 iterations and the difference of the 95th percentile and the

average when expressed as number of months of average paid claims in the last few months of fiscal year ending June 2010 gave 0.37. If a 75th percentile is used instead of a 95th percentile, the claim fluctuation reserve will be reduced to 0.15 months from 0.37 months. We ran the simulations with and without using a specific stop loss of \$75,000. Due to its size, the risk to the State is not materially impacted by the specific stop loss.

E. Other Reserves

Although the trend fluctuation contingency reserve and claim fluctuation contingency reserve cover the contingencies arising from fluctuations in known risks, there could be other extreme events that are unpredictable but require immediate cash availability when they do happen. To make sure the State of Utah has enough cash to pay for liabilities when extreme events occur, we have included a reserve of 10% of incurred claims over a 12 month period, which is 1.2 months of average paid claims to cover contingencies such as:

- Natural disasters
- Epidemics
- Administrative contingencies that could affect cost including cost of new information technology, legislative mandates, unexpected litigation, etc.
- Investment return risk can decrease the level of reserves through investment return being less than expected
- State and federal legislative changes affecting vendors and plan
- Economic downturns such as recessions that can affect employee mix and utilization.

The contingency reserve for other extreme events is 0.6 months of average paid claims if a reserve of 5% of incurred claims is used instead of 10% of incurred claims.

Exhibit II summarizes the reserve elements that make up the total contingency reserve.

III. DATA SOURCES AND LIMITATIONS

We received spreadsheets from PEHP that show total paid claims allocated by month of service for months paid January 2008 through August 2010. This information was provided separately for each plan. The spreadsheets also included premiums and enrollment for the same time period.

We relied on the data provided to us without audit or verification. However, we did review the data for reasonableness.

IV. EXHIBITS

Exhibit I

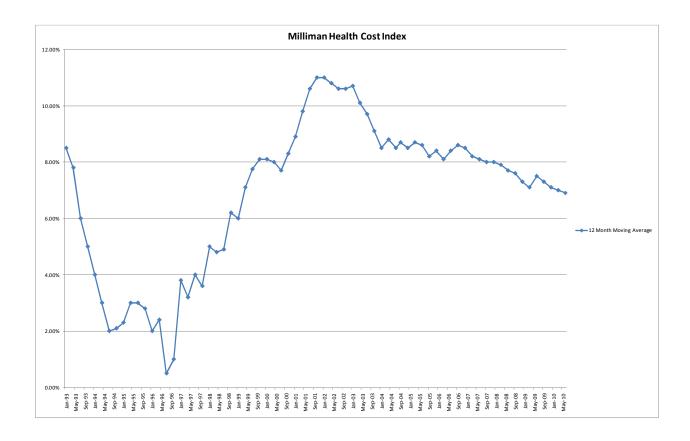
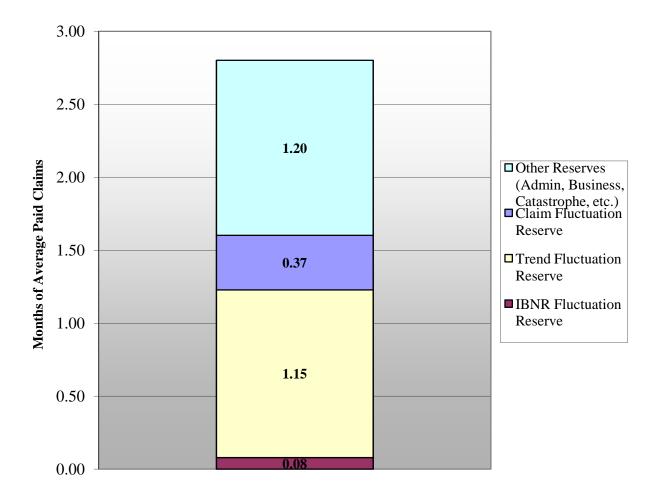


Exhibit II

Contingency reserve components



This Page Left Blank Intentionally

Agency Response

This Page Left Blank Intentionally

560 East 200 South » Salt Lake City, UT » 84102-2004 » 801-366-7555 or 800-765-7347 » www.pehp.org

July 7, 2011

John M. Schaff, CIA Auditor General W315 Utah State Capital Complex Salt Lake City, UT 84114

Mr. Schaff,

PEHP appreciates the opportunity to provide input on Milliman's "State of Utah Contingency Reserve Study" and the Legislative Auditor's exposure draft "Actuarial Study of PEHP's Contingency Reserve" offered in response.

<u>Both Studies Offer Helpful Guidance in Making Reserve Determinations Based on Risk Tolerance</u>

As you know the purpose of these Reports are to determine the appropriate level of funding that should be held in reserves to be actuarially sound. This amount is calculated by looking at either premiums or paid claims and then expressing the proper amount of reserves as either a number of days or months.

In the final analysis, the amount of money that should be held in reserve is really a question of how much risk an organization is willing to assume. As both your summary Study and Milliman's Study point out, there is no single common industry reserve standard. Instead, the optimal level largely goes to an organization's tolerance for risk.

From our perspective, the two levels discussed in the reports can act as a floor at the lower level (50 day premium reserve) and more reflective of a ceiling for the higher level (80 day premium reserve). The State could justifiably adopt the recommendation anywhere between the floor and ceiling. It again comes down to risk tolerance.

As pointed out in the Studies, a contingency reserve of 80 days would create a 95% level of confidence that the reserve should be sufficient to cover actual claims that exceed expected claims in 19 out of 20 years. A contingency reserve of 50 days would create a 75% level of confidence, meaning that reserves would be sufficient 15 of 20 years.

As such, the question for the State is whether it would prefer to face the potential of a supplemental appropriation 1 out of every 20 years or 5 out of every 20 years. Historically, sufficient reserves have been set aside to avoid the need for the State to provide a supplemental appropriation. We believe there has been some wisdom in this approach, but see a smaller reserve level with a higher risk of supplemental appropriation as a reasonable and justifiable option.

Excess Reserves are Available for Refund, Carry Forward for Next Year, or as Protection Against Potential Future Budget Shortfalls.

Both Studies concluded that as of 6/30/2010 the contingency reserve had more funding than necessary to meet either the 80 day or 50 day reserve levels. Under the higher 80-day reserve level, the amount of a refund would be \$5.3 million refund. Under the lower 50-day level, it would be \$26.2 million. We are in agreement with these figures and, as explained above, whether the State would prefer a \$5.3 million refund, a \$26.2 million refund, or something in the middle would depend on the level of risk the state wanted to accept.

If a refund is made, it should take into account House Joint Resolution 46 which instituted a 2% premium reduction funded through a draw down in reserves. PEHP currently estimates HJR 46 will result in a 21 day reduction of reserves. Lastly, we would add that as of 3/31/2011, the contingency reserve amount is at \$82.3 million (107 days) and that state law would require the refund to be returned to employees based on contribution.

In addition to a refund, other options for the excess could include: (1) carrying forward the reserves so that they could be used to pay claims in the following fiscal year and reduce the appropriation for that year or (2) maintaining the excess reserves as a protection against potential budget shortfalls in future years.

We believe that all three options for excess reserves would be appropriate depending on the current fiscal needs and policy of the State.

PEHP Supports the Creation of a Framework that Adopts Ranges for Target Reserve Levels to Prevent Self Funded Pools from Deficits and to Assist Policymakers in Making Contingency Reserve Determinations.

As stated above and in both Studies, there is no single common industry reserve standard. Instead, the optimal level largely goes to an organization's tolerance for risk.

As a result, we believe that it may be helpful to think of the level of contingency reserves along a continuum rather than as one specific point.

In the commercial insurance industry, insurance carriers are required to maintain a minimum level of Risk Based Capital or "RBC." Like a contingency reserve, RBC is a reserve that is created to apply against unexpected claims in excess of premium. An insurance carrier that drops below a minimum level of RBC will be considered insolvent and will be taken over by the Department of Insurance. An insurance carrier that is above the minimum level of RBC but below the "target level" RBC will operate on a probationary status until the target level is achieved. An insurance carrier with reserves over a certain RBC level will be required to refund the excess.

Similarly, we believe it would be prudent for the State and the other risk pools that PEHP manages to follow a similar framework:

	Reserve Level Expressed in	Reserve Level Expressed in
Classification	Premium Days	Premium Months
Excess Level	Over 80 days	Over 2.7 months
Target Level	50 to 80 days	1.6 to 2.7 months
Deficiency Level	15 to 49 days	0.5 to 1.6 months
Default	14 days or less	less than 0.5 months

Excess Level – Any excess above this level could be refunded and still maintain a risk confidence level of 95%. It could also be carried forward to buy down the following year renewal or be maintained as a reserve against a future budget shortfall.

<u>Target Level</u> – Any excess over 50 days would provide a risk confidence level above 75%.

<u>Deficiency Level</u> – Action would be needed to bring this risk pool to the Target level.

<u>Default</u> – A pool within this level would be in default and claim payment suspended.

We believe that this framework would accomplish a couple of things.

First, it would assist policymakers in understanding their options from year-to-year in determining how much should be held in contingency reserves. They would know, for example, in a lean year that they could position themselves toward the lower end of the target level and still have a confidence level of at least 75% that a supplemental appropriation will not be necessary. Similarly, in a good year, they could maintain a reserve above the excess level for future use.

Second, this framework could ensure that a risk pool would be treated as in default before the balance was below zero.

Again, thank you for the opportunity to review and comment on both the Milliman report and your summary analysis.

Sincerely,

Ushn Borer, FSA

PEHP Chief Actuary