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# *Correspondence Memorandum*

**Date:** October 2, 2018

**To:** Group Insurance Board

**From:** Jim Guidry, Director
Benefit Services Bureau
Division of Retirement Services

**Subject:** Income Continuation Insurance (ICI) Program Administrative Services Contract Amendment and Extension

**The Department of Employee Trust Funds requests the Group Insurance Board (Board) amend the current administrative services contract with Hartford Life and Accident Insurance Company (The Hartford) to add one two-year contract extension and exercise that option to extend the contract from January 1, 2020, through December 31, 2021.**

## Background

At its February 8, 2017 meeting, the Board approved ETF's proposal recommending a redesign of the ICI program. The redesign of the ICI program was primarily intended to address the growing actuarial deficit in the state program. Additionally, the ICI redesign proposed to streamline administration of the ICI program, and was also an integral component to the overall disability programs redesign effort. A summary of the ICI changes is included with this memo.

At the same meeting, the Board approved an amendment to the administrative services contract with Aetna Life Insurance Company (Aetna) that added two additional one-year extensions; from January 1, 2018 through December 31, 2019. The approved contract extensions provided ETF with consistent administration of the current ICI program while developing a restructured program, and provided ETF with the opportunity to focus more staff resources on development and implementation of disability program initiatives instead of diverting resources to work on developing an RFP and possibly onboarding a new third-party administrator.

Significant components of the ICI redesign plan, such as decoupling sick leave requirements and eliminating long-term disability coverage, require changes in state

Reviewed and approved by Matt Stohr, Administrator, Division of Retirement Services

Matt Stohr Electronically Signed 10/25/18

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law. ETF's original proposal had an implementation date of January 1, 2019 or 2020, depending on the effective date of the legislation. ETF was unable to secure legislative action in the previous legislative session, which has resulted in a shift of the targeted implementation date to January 1, 2021. ETF has included the ICI redesign legislation in ETF's 2019-2021 biennial budget request, and the ETF Board voted to support the budget request at its September 20, 2018 meeting.

Aetna was awarded a five-year contract in December 2008 to provide administrative services for the ICI and long-term disability insurance (LTDI) programs on behalf of ETF. The contract included two two-year extensions, and in February 2017, the Board approved two additional one-year extensions, scheduled to end on December 31, 2019.

Several key people at Aetna worked with the ICI and LTDI plans prior to 2008. Aetna acquired its disability business from Broadspire (and CORE before them), the previous administrator for the ICI and LTDI programs. In November 2017, The Hartford purchased Aetna's disability insurance business, which included administration of the ICI program. The 2019 contract extension was signed by The Hartford on September 7, 2018, extending the contract through December 31, 2019.

The Hartford and its predecessors have consistently met or exceeded the performance standards set forth in the contract, including:

- Answering 90% of incoming calls within 60 seconds, with an abandoned call rate of 5% or less.
- Sending written notice of approval/denial of claims and evidence of insurability applications within 15 days of receiving all information needed to make a determination.
- Sending written notice of determination on claim reconsideration requests within 90 days of receiving all information needed to make a determination.

**Disability Programs Redesign**

In 2012, the ETF Disability Programs Section began a comprehensive review of the disability programs offered by ETF. The goal was to identify any inefficiencies or structural concerns, and to develop responses that would make the administration of, and participation in, the disability programs less complicated and confusing. The first phase of this review resulted in technical revisions to the ICI program in 2013. The second phase examined ways to streamline services and reduce the number of duplicative programs. This resulted in two efforts; the elimination of the LTDI program by the ETF Board in September 2016, and the approval to submit statutory changes to the ICI program by the Group Insurance Board in February 2017. Both programs were administered by The Hartford.

The closure of the LTDI program to new claims occurred on January 1, 2018 as planned. The transition of LTDI benefit payments to ETF was completed on February 1, 2018. The transfer of LTDI administrative functions from The Hartford to ETF will be completed in 2018. This change has resulted in a reduction in the administrative services contract fee of $864,000 annually beginning in 2019.

**Proposal**

ETF recommends the Board amend the current administrative services contract with The Hartford to add one additional two-year contract extension, and exercise that option to extend the contract from January 1, 2020, through December 31, 2021.

Advantages of extending the current administrative services contract with The Hartford include:

- **Staff focus:** The primary reason for this request is to allow ETF to focus staff resources on implementing changes to the existing ICI program and corresponding administrator responsibilities. There will be a significant amount of work required to update the ICI plan language, develop and implement a communications strategy, coordinate with employers and re-enroll approximately 50,000 current ICI plan participants. Additionally, the plan changes are expected to generate additional enrollees who wish to take advantage of new opportunities to enroll in the program. Without the extension, staff will need to focus on developing an RFP and possibly onboarding a new administrator while also making the ICI program changes.

- **Consistent administration:** Extending The Hartford's current contract with ETF through 2021 would provide stability to the administration of the current ICI plan during development of the new ICI plan. Once the legislation becomes law, a revised ICI administrative services contract can be procured under the redesigned program without forcing a new administrator to make extensive changes to their systems mid-stream.

- **Experienced customer service:** The Hartford maintains a strong working relationship with ETF in the administration of the ICI and LTDI programs and provides participants access to an experienced team. The Board and participants would be well served by retaining The Hartford's knowledge and proficiency during the transition to a new ICI program as their staff are very knowledgeable about the ICI program and its operation. Having an experienced business partner was a valuable component during the transition of the LTDI program from The Harford to ETF and contributed to its success.

- **Preserving contract savings:** No changes to The Hartford's current fee structure will result from this proposal. Per the current contract, The Hartford's administrative fee is adjusted annually to reflect changes in the average annual change in the Consumer Price Index for all urban consumers (CPI-U). The CPI-U adjustment was 1.3% in 2017 and 2.1% in 2018. Approval of two additional years will preserve the $864,000 annual contract savings with The Hartford that resulted from the closure of the LTDI program through 2021.

A disadvantage to amending and renewing the contract with The Hartford could be that locking in a specific administrative fee for two years, even though it is significantly lower than previous years, could prevent potential additional savings that might be obtained by proceeding with a new procurement in 2019 (Option 3). However, if a new vendor was put in place in 2020, knowing that the ICI program would be changing in the next year, it is likely that their cost proposal would reflect the additional costs of implementing that change. This could serve to reduce any potential additional savings that may be obtained.

**Alternatives**

Option 1 (Recommended): Amend the current administrative services contract with The Hartford to include one two-year contract extension and exercise that option to extend the contract from January 1, 2020, through December 31, 2021.

Option 2: Amend the current administrative services contract with The Hartford to include two one-year contract extensions and exercise the first extension to extend the contract from January 1, 2020, through December 31, 2020.

Option 3: Reject the proposal and direct ETF to issue a new RFP for administrative services beginning on January 1, 2020.

Extending the current contract with The Hartford would provide stable and consistent administration of ICI benefits and also ensure that ETF resources can be dedicated to successfully completing the transition to a redesigned ICI program, rather than be split between these efforts and the procurement process.

Staff will be at the Board meeting to answer any questions.

Attachment A: ICI Redesign Summary
Attachment B: ICI Program Redesign Letter

## Income Continuation Insurance (ICI) Program Redesign Recommendations

At the February 8, 2017, Group Insurance Board (Board) meeting, the Board approved a proposal to redesign the state and local ICI programs to help reduce complexity and confusion for employers and participants, address the actuarial deficit in the state ICI program and reduce state ICI plan liabilities, streamline the administration of disability benefits and reduce duplication of disability benefits. This action was part of an overall redesign of the disability programs administered by the Department of Employee Trust Funds.

ETF worked with Milliman Inc. to help develop a redesigned plan. Milliman is the current actuary for ETF's disability programs. The primary objective of redesigning the ICI program is to reduce the program's deficit and liabilities. A secondary objective was to encourage enrollment, which is necessary for the long-term financial sustainability of the program. Using the local ICI program as a model, the following program changes were approved by the Board:

- Replace the current accumulated sick leave based premium rate structure in the state ICI program with elimination-period (EP) based premiums. EPs of 30, 60, 90 and 180 days are proposed.
- Eliminate the requirement to exhaust sick leave prior to receipt of benefits in the state ICI program.
- Eliminate long-term benefits by reducing the maximum benefit period to 18 months following the employee-selected elimination period.
- Reduce the benefit to 70% of pre-disability earnings.
- Employers will pay the entire premium for the longest EP (180 days) with employees paying the premium differential for electing a shorter EP.
- Eliminate the $75 long-term disability add-on.
- Eliminate supplemental coverage and increase the maximum monthly benefit to $7,000 based on a monthly salary limit of $10,000.
- Eliminate the one-year service requirement before UW faculty and academic staff are eligible for employer premium contributions.
- Reduce the earnings offset to 70% for employees who return to work part-time with their former employer.
- Make effective January 1, 2021.

The proposed changes would convert the ICI program into a short-term disability income program that will pay a benefit that is 70% of a participant's salary for a period of 18 months after the expiration of the employee-selected elimination period. This change should significantly reduce the program liability going forward and eliminate the program deficit as early as 2023. The changes would also significantly reduce individual premiums charged to employees and employers. According to Milliman, these benefit changes are consistent with industry standards for income replacement insurance benefit levels and program structures which feature separate short-term and long-term programs.

**Attachment B**

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July 21, 2016

Ms. Deb Roemer
Director of the Benefit Services Bureau
Division of Retirement Services
Wisconsin Department of Employee Trust Funds
Madison, WI 53707

**RE: ICI Program Redesign Analysis – Revised July 21, 2016**

Dear Deb,

Thank you for the opportunity to assist you and your staff with estimating the financial impact of redesigning the Income Continuation Insurance (ICI) program. In our prior work on this project, we have performed experience studies, calculated expected claim costs, and developed sample premium contribution rates corresponding to a broad range of redesign options. Since then, ETF has identified several specific program features that it considers optimal for a redesigned ICI program, which include the following:

- 18-month maximum benefit period following the elimination period.
- Benefit amounts equal to either 65% of pre-disability earnings up to a $6,500 maximum monthly benefit, or 70% of pre-disability earnings up to a $7,000 maximum monthly benefit.
- 30, 60, 90, or 180-day elimination period options with no requirements to use accrued sick leave.
- The $75 long-term add-on benefit would be eliminated.
- Employers are expected to contribute premiums corresponding to plans with 180-day elimination period provisions for all employees, including employees who elect plans

with shorter elimination periods, employees who currently do not participate in the ICI program, and UW faculty members employed for fewer than 12 months.
- 70% maximum earnings offset for employees who return to work with their former employer and for rehabilitative earnings.

Based on these specifications, we have modeled expected future claim costs and calculated sample premium contribution rates for the redesigned ICI program. This pricing exercise took into consideration historical State ICI experience from 2011 through 2015, as described in our letter from April 13, 2016, and it took into account the current and expected future deficit funding levels. The tables in Appendix A of this letter contain the resulting sample premium rates. These rates are different for plans that feature a 70% benefit level (Table A1) and a 65% benefit level (Table A2).

The sample premiums provided in Appendix A are based on our best estimate of the premiums required to adequately fund the emerging claim costs and existing funding deficits. The pricing work has been complex due to the extent of the differences between the current plan and the proposed plans, the current and expected future funding issues, and the likely changes in employee behavior and decision-making resulting from the plan changes. Therefore, we think it would be best for the pricing to be reviewed (and likely revised) on a regular basis within the first few years of the new program. As experience emerges on the redesigned plan, the premiums should be reevaluated and adjusted if necessary. It is common for the pricing of short term disability plans to be assessed annually because short term disability claim experience becomes credible quickly and is considered reliable for estimating future pricing levels.

## Impact on Employers and Employees

We have estimated the premium impact on employers and employees by comparing expected annual contributions under the current and redesigned ICI programs. At your request, we have assumed that the redesigned program will become effective on January 1, 2019.

To calculate expected premium contributions in 2019 under the current program design, we assumed that the current contribution rates would increase by 20% each year until 2019 (because the board approved annual rate increases of 20% each year starting in 2016 until 2020). We used WRS census data from the 2015 insurance files provided to us by ETF, which contains demographic information that allowed us to compute expected premium contributions.

To calculate expected premium contributions under the redesigned program, we used WRS census data from the 2015 insurance files and assumed the following enrollment distribution by elimination period:

| **Table 1:** Assumed Enrollment Distribution in Redesigned ICI Program by Elimination Period | | |
|---|---|---|
| ICI Premium Category | EP Enrollment Scenario 1 | EP Enrollment Scenario 2 |
| 1 | 30 days | 30 days |
| 2 | 30 days | 30 days |
| 3 | 30 days | 30 days |
| 4 | 60 days | 60 days |
| 5 | 90 days | 90 days |
| 6 | 90 days | 180 days |
| 7 | 30 days | 30 days |
| 8 | 90 days | 90 days |
| 9 | 90 days | 90 days |
| 10 | 180 days | 180 days |
| Currently not participating | 180 days | 180 days |

The only difference between enrollment scenarios 1 and 2 shown above is that in scenario 1 we assumed that employees in category 6 (i.e. employees who have accrued 130 or more sick leave days) would elect plans with 90-day elimination periods, and in scenario 2 we assumed that these employees would elect plans with 180-day elimination periods.

In both scenarios, we assumed that employees in categories 1, 2, and 3 would elect coverage that features a 30-day elimination period, since these employees have accrued the least amount of sick leave. We also assumed that employees in category 4 would elect coverage featuring a 60-day elimination period, since these employees have accrued between 65 and 90 sick leave days. We assumed that the employees in category 5 would elect coverage that features a 90-day elimination period, since these employees have accrued between 91 and 129 sick leave days. We assumed that UW faculty members would elect the same elimination periods as their current coverage, which already varies by elimination period, except that we assumed UW faculty members who are enrolled in plans with 125-day elimination periods would elect the 90-day option under the redesigned program. Finally, we assumed that employees who do not currently participate in the State ICI program would choose to participate in plans that feature 180-day elimination periods, which will be fully funded by employers and thus have no cost for employees.

Table 2 below shows the estimated premium impact on employers and employees based on a redesigned ICI program that features a 70% benefit level, and based on the assumption that category 6 employees will choose plans featuring 90-day elimination period provisions.

| Table 2: Estimated Impact on Premium Contributions from Employers and Employees<br>Scenario 1: Category 6 Employees Choose Plan with 90-day EP<br>Benefit Percent: 70% | | | | |
|---|---|---|---|---|
| Current Premium Category | Number of Employees | Change in Employer Contributions | Change in Employee Contributions | Total Change in Contributions |
| 1 | 9,309 | $1,356,848 | ($6,299,755) | ($4,942,907) |
| 2 | 3,373 | $556,540 | ($1,585,346) | ($1,028,805) |
| 3 | 5,399 | ($1,219,357) | $942,857 | ($276,499) |
| 4 | 3,773 | ($651,178) | $521,667 | ($129,510) |
| 5 | 4,045 | ($559,321) | $336,374 | ($222,946) |
| 6 | 10,904 | ($2,212,778) | $1,577,722 | ($635,056) |
| 7 | 2,971 | ($553,399) | ($946,344) | ($1,499,742) |
| 8 | 4,808 | ($886,739) | ($377,541) | ($1,264,280) |
| 9 | 638 | ($112,980) | ($33,221) | ($146,200) |
| 10 | 4,908 | ($847,556) | ($424,653) | ($1,272,209) |
| Not Participating | 34,434 | $4,999,817 | $0 | $4,999,817 |
| Total | 84,562 | ($130,101) | ($6,288,237) | ($6,418,339) |

In Table 2, a negative change in contributions means the redesigned program is expected to generate savings for that segment, whereas a positive change in contributions represents additional costs that are expected. The following are some key observations from this analysis:

- Employer contributions are expected to increase for employees in categories 1 and 2, and for employees who do not currently participate in the ICI program, because we assumed that employers will contribute amounts equivalent to the premium for plans with 180-day elimination periods. On the other hand, employer contributions are expected to be lower for all other groups of employees.

- Employee contributions are expected to decrease significantly for employees in categories 1 and 2, because not only are the new 30-day premium rates lower than the category 1 and 2 premium rates expected in 2019, but also because new premiums will be partially subsidized by employers under the redesigned program.

- Employee contributions are expected to increase for employees in categories 3 – 6, with the largest impact being on category 6 employees who were assumed to choose plans with 90-day elimination periods in this scenario (Table 3 below shows the impact assuming category 6 employees choose plans with 180-day elimination periods instead). Employees in category 6 are not required to contribute to the cost of basic insurance coverage under the current plan, but they are required to contribute toward the cost of any supplemental coverage that they elect.

- Employee contributions are expected to decrease for UW faculty members whose plans and premium rates already vary by elimination period, because we assumed that they would choose plans with similar elimination period provisions as their existing coverage, and because the redesigned ICI program provides less generous benefits than the current program.

- The employers' total contributions under the redesigned program, shown in the last row of Table 2, are expected to be slightly lower than their contributions under the current plan (please note that the employers' expected savings are much greater when we modeled the redesigned program by assuming a 65% benefit level instead of 70%, as shown in tables 4 and 5 below). Total employee contributions are expected to decrease by approximately $6.3 million, resulting in total savings (i.e. employer plus employee) of approximately $6.4 million expected in 2019.

The following table shows the estimated premium impact on employers and employees by assuming that employees in category 6 choose plans with 180-day elimination periods.

**Table 3:**
Estimated Impact on Premium Contributions from Employers and Employees
Scenario 2: Category 6 Employees Choose Plan with 180-day EP
Benefit Percent: 70%

| Current Premium Category | Number of Employees | Change in Employer Contributions | Change in Employee Contributions | Total Change in Contributions |
|---|---|---|---|---|
| 1 | 9,309 | $1,356,848 | ($6,299,755) | ($4,942,907) |
| 2 | 3,373 | $556,540 | ($1,585,346) | ($1,028,805) |
| 3 | 5,399 | ($1,219,357) | $942,857 | ($276,499) |
| 4 | 3,773 | ($651,178) | $521,667 | ($129,510) |
| 5 | 4,045 | ($559,321) | $336,374 | ($222,946) |
| 6 | 10,904 | ($2,212,778) | ($608,365) | ($2,821,143) |
| 7 | 2,971 | ($553,399) | ($946,344) | ($1,499,742) |
| 8 | 4,808 | ($886,739) | ($377,541) | ($1,264,280) |
| 9 | 638 | ($112,980) | ($33,221) | ($146,200) |
| 10 | 4,908 | ($847,556) | ($424,653) | ($1,272,209) |
| Not Participating | 34,434 | $4,999,817 | $0 | $4,999,817 |
| Total | 84,562 | ($130,101) | ($8,474,325) | ($8,604,426) |

The results are similar to the results shown in Table 2, except for the expected savings to employees in category 6 which are greater. The impact on employer contributions is the same as in Table 2, because regardless of whether category 6 employees choose 90-day or 180-day plans, we assumed that employers would contribute amounts equivalent to 180-day premiums.

Table 3 shows an estimated savings of $608,365 for employees in category 6, which takes into consideration the savings to employees who currently elect supplemental benefits, who would no longer have to pay supplemental premium if they choose plans with 180-day elimination periods under the redesigned program.

We repeated this analysis by assuming that the redesigned program would include a 65% benefit level instead of 70%. The results are shown in tables 4 and 5 below – the results from Table 4 are based on the assumption that employees in category 6 will choose 90-day plans, whereas the results from Table 5 are based on the assumption that employees in category 6 will choose 180-day plans.

**Table 4:**
Estimated Impact on Premium Contributions from Employers and Employees
Scenario 1: Category 6 Employees Choose Plan with 90-day EP
Benefit Percent: 65%

| Current Premium Category | Number of Employees | Change in Employer Contributions | Change in Employee Contributions | Total Change in Contributions |
|---|---|---|---|---|
| 1 | 9,309 | $1,245,200 | ($6,576,503) | ($5,331,303) |
| 2 | 3,373 | $510,738 | ($1,698,874) | ($1,188,136) |
| 3 | 5,399 | ($1,292,221) | $762,283 | ($529,937) |
| 4 | 3,773 | ($705,797) | $434,902 | ($270,895) |
| 5 | 4,045 | ($620,348) | $276,585 | ($343,764) |
| 6 | 10,904 | ($2,396,761) | $1,397,586 | ($999,174) |
| 7 | 2,971 | ($611,354) | ($1,090,091) | ($1,701,445) |
| 8 | 4,808 | ($985,184) | ($474,161) | ($1,459,345) |
| 9 | 638 | ($126,956) | ($46,944) | ($173,899) |
| 10 | 4,908 | ($953,592) | ($424,653) | ($1,378,245) |
| Not Participating | 34,434 | $4,588,264 | $0 | $4,588,264 |
| Total | 84,562 | ($1,348,010) | ($7,439,870) | ($8,787,880) |

**Table 5:**
Estimated Impact on Premium Contributions from Employers and Employees
Scenario 2: Category 6 Employees Choose Plan with 180-day EP
Benefit Percent: 65%

| Current Premium Category | Number of Employees | Change in Employer Contributions | Change in Employee Contributions | Total Change in Contributions |
|---|---|---|---|---|
| 1 | 9,309 | $1,245,200 | ($6,576,503) | ($5,331,303) |
| 2 | 3,373 | $510,738 | ($1,698,874) | ($1,188,136) |
| 3 | 5,399 | ($1,292,221) | $762,283 | ($529,937) |
| 4 | 3,773 | ($705,797) | $434,902 | ($270,895) |
| 5 | 4,045 | ($620,348) | $276,585 | ($343,764) |
| 6 | 10,904 | ($2,396,761) | ($608,365) | ($3,005,126) |
| 7 | 2,971 | ($611,354) | ($1,090,091) | ($1,701,445) |
| 8 | 4,808 | ($985,184) | ($474,161) | ($1,459,345) |
| 9 | 638 | ($126,956) | ($46,944) | ($173,899) |
| 10 | 4,908 | ($953,592) | ($424,653) | ($1,378,245) |
| Not Participating | 34,434 | $4,588,264 | $0 | $4,588,264 |
| Total | 84,562 | ($1,348,010) | ($9,445,822) | ($10,793,832) |

We see more significant savings for both employers and employees when we assume the redesigned program will feature a 65% benefit level as opposed to 70%. The estimated savings to employers is over $1 million per year under this scenario.

Funding Analysis

We have performed an analysis of future State ICI funding levels by assuming that the redesigned program will become effective on January 1, 2019. In performing this analysis, we made the following assumptions:

- Future payroll is assumed to increase by 3.20% per year, which is consistent with the assumptions used by ETF for ICI, LTDI, and retirement fund projections.

- The current premiums are increased by 20% each year until 2019, then the premiums corresponding to the redesigned program are paid from 2019 through 2024. The premiums shown for 2019 and beyond are based on the premium rates provided in tables A1 and A2 at the end of this letter.

- Investment income is projected by assuming that assets earn 7.2% interest annually, an assumption specified by ETF.

- Annual paid insurance claims are the sum of projected payments on existing claims as of 12/31/2015, and of payments on expected future claims incurred after 12/31/2015.

- Administrative expenses are modeled as a constant percentage of paid insurance claims, based on actual values in 2015. This seems like a reasonable approach given that we do not know how the expense structure will change under the redesigned program.

- The ending fund balance equals the starting balance, plus premiums, plus investment earnings, less claims, and less expenses.

- The actuarial liability is modeled in a similar fashion to the insurance claims, and represents the sum of the liability on claims that existed as of 12/31/2015 and the liability for claims incurred after 12/31/2015.

- The projected surplus or deficit equals the ending balance less the actuarial liability.

The projections shown in tables 6 – 9 correspond to the following funding scenarios.

1. The redesigned program features a 70% benefit level, and employees in category 6 are assumed to choose plans with 90-day elimination periods.

2. The redesigned program features a 70% benefit level, and employees in category 6 are assumed to choose plans with 180-day elimination periods.

3. The redesigned program features a 65% benefit level, and employees in category 6 are assumed to choose plans with 90-day elimination periods.

4. The redesigned program features a 65% benefit level, and employees in category 6 are assumed to choose plans with 180-day elimination periods.

**Table 6:**

State ICI Redesign Funding Analysis

70% Benefit / Category 6 Employees Choose Plans with 90-day EP

| Calendar Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| BOY Fund Balance | $50,402,211 | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $76,457,385 | $79,788,788 | $85,427,206 | $93,490,474 | $103,970,877 |
| Premium Contributions | $16,788,715 | 19,376,865 | $23,996,310 | $29,717,030 | $32,645,623 | $33,690,283 | $34,768,372 | $35,880,960 | $37,029,150 | $38,214,083 |
| Investment Income | $3,554,831 | $3,613,159 | $3,735,071 | $4,145,527 | $4,944,592 | $5,504,932 | $5,744,793 | $6,150,759 | $6,731,314 | $7,485,903 |
| Total Revenues | $20,343,546 | $22,990,025 | $27,731,381 | $33,862,557 | $37,590,215 | $39,195,214 | $40,513,164 | $42,031,718 | $43,760,464 | $45,699,986 |
| Insurance Claims | $19,060,450 | $19,740,643 | $20,420,836 | $21,101,029 | $27,629,664 | $33,243,241 | $32,326,446 | $31,486,373 | $30,848,286 | $30,541,597 |
| Carrier Administrative Expenses | $1,258,495 | $1,303,406 | $1,348,317 | $1,393,227 | $1,824,290 | $2,194,935 | $2,134,402 | $2,078,935 | $2,036,805 | $2,016,555 |
| Administrative Expense | $244,044 | $252,753 | $261,462 | $270,171 | $353,761 | $425,636 | $413,898 | $403,142 | $394,972 | $391,045 |
| Total Operating Expenses | $20,562,989 | $21,296,802 | $22,030,615 | $22,764,427 | $29,807,716 | $35,863,812 | $34,874,746 | $33,968,450 | $33,280,062 | $32,949,197 |
| Net Change in Fund Balance | ($219,443) | $1,693,223 | $5,700,767 | $11,098,130 | $7,782,498 | $3,331,402 | $5,638,418 | $8,063,268 | $10,480,402 | $12,750,789 |
| EOY Fund Balance | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $76,457,385 | $79,788,788 | $85,427,206 | $93,490,474 | $103,970,877 | $116,721,666 |
| Incurred Claim Liability | $82,533,870 | $94,507,411 | $104,939,581 | $114,497,013 | $115,612,702 | $106,232,644 | $97,033,070 | $89,086,238 | $82,031,607 | $75,747,022 |
| Surplus / (Deficit) | ($32,351,102) | ($42,631,421) | ($47,362,824) | ($45,822,126) | ($39,155,317) | ($26,443,856) | ($11,605,864) | $4,404,236 | $21,939,269 | $40,974,643 |
| Incurred Claim Cost | | $20,473,787 | $21,340,238 | $22,243,357 | $15,594,895 | $16,254,871 | $16,942,778 | $17,659,796 | $18,407,158 | $19,186,149 |

**Table 7**:

State ICI Redesign Funding Analysis

70% Benefit / Category 6 Employees Choose Plans with 180-day EP

| Calendar Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| BOY Fund Balance | $50,402,211 | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $74,465,868 | $76,213,065 | $80,161,290 | $86,379,291 | $94,847,647 |
| Premium Contributions | $16,788,715 | 19,376,865 | $23,996,310 | $29,717,030 | $30,165,996 | $31,131,308 | $32,127,510 | $33,155,590 | $34,216,569 | $35,311,499 |
| Investment Income | $3,554,831 | $3,613,159 | $3,735,071 | $4,145,527 | $4,944,592 | $5,361,542 | $5,487,341 | $5,771,613 | $6,219,309 | $6,829,031 |
| Total Revenues | $20,343,546 | $22,990,025 | $27,731,381 | $33,862,557 | $35,110,588 | $36,492,850 | $37,614,850 | $38,927,203 | $40,435,878 | $42,140,530 |
| Insurance Claims | $19,060,450 | $19,740,643 | $20,420,836 | $21,101,029 | $27,177,222 | $32,206,786 | $31,206,603 | $30,319,138 | $29,631,653 | $29,273,477 |
| Carrier Administrative Expenses | $1,258,495 | $1,303,406 | $1,348,317 | $1,393,227 | $1,794,417 | $2,126,502 | $2,060,463 | $2,001,867 | $1,956,475 | $1,932,826 |
| Administrative Expense | $244,044 | $252,753 | $261,462 | $270,171 | $347,969 | $412,365 | $399,559 | $388,197 | $379,394 | $374,808 |
| Total Operating Expenses | $20,562,989 | $21,296,802 | $22,030,615 | $22,764,427 | $29,319,607 | $34,745,653 | $33,666,625 | $32,709,202 | $31,967,522 | $31,581,110 |
| Net Change in Fund Balance | ($219,443) | $1,693,223 | $5,700,767 | $11,098,130 | $5,790,981 | $1,747,197 | $3,948,225 | $6,218,001 | $8,468,356 | $10,559,419 |
| EOY Fund Balance | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $74,465,868 | $76,213,065 | $80,161,290 | $86,379,291 | $94,847,647 | $105,407,066 |
| Incurred Claim Liability | $82,533,870 | $94,507,411 | $104,939,581 | $114,497,013 | $114,567,603 | $105,036,722 | $95,786,537 | $87,786,951 | $80,677,334 | $74,335,437 |
| Surplus / (Deficit) | ($32,351,102) | ($42,631,421) | ($47,362,824) | ($45,822,126) | ($40,101,736) | ($28,823,657) | ($15,625,247) | ($1,407,660) | $14,170,312 | $31,071,629 |
| Incurred Claim Cost | | $20,473,787 | $21,340,238 | $22,243,357 | $14,595,757 | $15,213,449 | $15,857,282 | $16,528,362 | $17,227,843 | $17,956,925 |

**Table 8:**
State ICI Redesign Funding Analysis
65% Benefit / Category 6 Employees Choose Plans with 90-day EP

| Calendar Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| BOY Fund Balance | $50,402,211 | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $74,396,367 | $76,232,753 | $80,290,881 | $86,633,576 | $95,242,846 |
| | | | | | | | | | | |
| Premium Contributions | $16,788,715 | 19,376,865 | $23,996,310 | $29,717,030 | $29,957,908 | $30,916,562 | $31,905,892 | $32,926,880 | $33,980,540 | $35,067,917 |
| Investment Income | $3,554,831 | $3,613,159 | $3,735,071 | $4,145,527 | $4,944,592 | $5,356,538 | $5,488,758 | $5,780,943 | $6,237,617 | $6,857,485 |
| Total Revenues | $20,343,546 | $22,990,025 | $27,731,381 | $33,862,557 | $34,902,500 | $36,273,100 | $37,394,650 | $38,707,823 | $40,218,158 | $41,925,402 |
| | | | | | | | | | | |
| Insurance Claims | $19,060,450 | $19,740,643 | $20,420,836 | $21,101,029 | $27,048,761 | $31,920,421 | $30,900,620 | $30,000,206 | $29,299,224 | $28,926,979 |
| Carrier Administrative Expenses | $1,258,495 | $1,303,406 | $1,348,317 | $1,393,227 | $1,785,935 | $2,107,594 | $2,040,260 | $1,980,809 | $1,934,526 | $1,909,948 |
| Administrative Expense | $244,044 | $252,753 | $261,462 | $270,171 | $346,324 | $408,699 | $395,642 | $384,113 | $375,138 | $370,372 |
| Total Operating Expenses | $20,562,989 | $21,296,802 | $22,030,615 | $22,764,427 | $29,181,020 | $34,436,714 | $33,336,522 | $32,365,128 | $31,608,888 | $31,207,299 |
| | | | | | | | | | | |
| Net Change in Fund Balance | ($219,443) | $1,693,223 | $5,700,767 | $11,098,130 | $5,721,480 | $1,836,386 | $4,058,128 | $6,342,695 | $8,609,270 | $10,718,104 |
| EOY Fund Balance | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $74,396,367 | $76,232,753 | $80,290,881 | $86,633,576 | $95,242,846 | $105,960,950 |
| Incurred Claim Liability | $82,533,870 | $94,507,411 | $104,939,581 | $114,497,013 | $114,269,719 | $104,703,475 | $95,439,186 | $87,424,901 | $80,299,962 | $73,942,094 |
| Surplus / (Deficit) | ($32,351,102) | ($42,631,421) | ($47,362,824) | ($45,822,126) | ($39,873,352) | ($28,470,722) | ($15,148,306) | ($791,325) | $14,942,883 | $32,018,855 |
| Incurred Claim Cost | | $20,473,787 | $21,340,238 | $22,243,357 | $14,310,972 | $14,916,613 | $15,547,884 | $16,205,870 | $16,891,703 | $17,606,559 |

**Table 9**:
State ICI Redesign Funding Analysis
65% Benefit / Category 6 Employees Choose Plans with 180-day EP

| Calendar Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| BOY Fund Balance | $50,402,211 | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $72,568,978 | $72,952,304 | $75,460,447 | $80,110,967 | $86,875,139 |
| Premium Contributions | $16,788,715 | 19,376,865 | $23,996,310 | $29,717,030 | $27,682,605 | $28,568,449 | $29,482,639 | $30,426,084 | $31,399,718 | $32,404,509 |
| Investment Income | $3,554,831 | $3,613,159 | $3,735,071 | $4,145,527 | $4,944,592 | $5,224,966 | $5,252,566 | $5,433,152 | $5,767,990 | $6,255,010 |
| Total Revenues | $20,343,546 | $22,990,025 | $27,731,381 | $33,862,557 | $32,627,197 | $33,793,415 | $34,735,205 | $35,859,236 | $37,167,708 | $38,659,519 |
| Insurance Claims | $19,060,450 | $19,740,643 | $20,420,836 | $21,101,029 | $26,633,577 | $30,968,811 | $29,872,229 | $28,928,293 | $28,181,948 | $27,762,420 |
| Carrier Administrative Expenses | $1,258,495 | $1,303,406 | $1,348,317 | $1,393,227 | $1,758,522 | $2,044,763 | $1,972,359 | $1,910,034 | $1,860,756 | $1,833,056 |
| Administrative Expense | $244,044 | $252,753 | $261,462 | $270,171 | $341,008 | $396,515 | $382,475 | $370,389 | $360,833 | $355,461 |
| Total Operating Expenses | $20,562,989 | $21,296,802 | $22,030,615 | $22,764,427 | $28,733,107 | $33,410,088 | $32,227,062 | $31,208,716 | $30,403,536 | $29,950,936 |
| Net Change in Fund Balance | ($219,443) | $1,693,223 | $5,700,767 | $11,098,130 | $3,894,090 | $383,327 | $2,508,143 | $4,650,520 | $6,764,172 | $8,708,583 |
| EOY Fund Balance | $50,182,768 | $51,875,991 | $57,576,757 | $68,674,887 | $72,568,978 | $72,952,304 | $75,460,447 | $80,110,967 | $86,875,139 | $95,583,722 |
| Incurred Claim Liability | $82,533,870 | $94,507,411 | $104,939,581 | $114,497,013 | $113,310,757 | $103,605,632 | $94,294,883 | $86,232,171 | $79,056,756 | $72,646,275 |
| Surplus / (Deficit) | ($32,351,102) | ($42,631,421) | ($47,362,824) | ($45,822,126) | ($40,741,779) | ($30,653,328) | ($18,834,436) | ($6,121,204) | $7,818,383 | $22,937,446 |
| Incurred Claim Cost | | $20,473,787 | $21,340,238 | $22,243,357 | $13,394,183 | $13,961,024 | $14,551,855 | $15,167,689 | $15,809,586 | $16,478,648 |

In each of the funding scenarios shown above, annual insurance claim payments increase significantly in 2019 because we assumed that many more employees will participate in the redesigned program, resulting in a greater volume of claims and higher annual benefit payments. Conversely, we notice the incurred claim liability levelling off in 2019 in each of the funding scenarios, and then decreasing in subsequent years. This is because benefit payments under the redesigned program are limited to 18 months, and therefore WRS would not have to set aside large sums to fund benefit payments extending many years, possibly decades, into the future.

The State ICI plan deficit is expected to be eliminated by either 2022 or 2023 according to the funding scenarios shown above, at which time it may be possible to adjust premiums in a manner that is designed to preserve then-current surplus levels rather than recovering from a deficit. As mentioned earlier in this letter, however, we also think it is essential to revisit the pricing on a regular basis within the first few years of the effective date of the new program.

Implications on Accumulated Sick Leave Credits

The following table shows the average number of sick leave hours used by WRS members in 2013 and 2014, based on data reported in the field "Annual Sick Leave Usage" from the 2014 and 2015 insurance files.

**Table 10**:
Average Number of Sick Leave Hours Used in 2013 and 2014
By ICI Premium Category

| Premium Category | 2013 | 2014 |
|---|---|---|
| 1 | 92 | 89 |
| 2 | 88 | 90 |
| 3 | 31 | 33 |
| 4 | 72 | 75 |
| 5 | 60 | 64 |
| 6 | 33 | 35 |
| 7 | 24 | 26 |
| 8 | 20 | 22 |
| 9 | 19 | 19 |
| 10 | 18 | 19 |
| Not Participating | 21 | 26 |
| Total | 37 | 40 |

When we performed experience studies in the fall of 2015, we computed the average length of time before the first benefit payment was received by ICI claimants, using claim experience data from 2010 – 2014. The following table shows these average historical lags by premium category.

| Table 11:<br>Historical Lag (in Months) Before First ICI Benefit Payment is Received | |
|---|---|
| Premium Category | Average Lag from 2010 - 2014 |
| 1 | 2.1 |
| 2 | 3.0 |
| 3 | 2.3 |
| 4 | 3.9 |
| 5 | 5.1 |
| 6 | 6.3 |
| 7 | 3.0 |
| 8 | 6.4 |
| 9 | 6.1 |
| 10 | 7.0 |
| Not Participating | N/A |
| Total | 2.5 |

The average lag times before benefits are paid, shown in Table 11, are longer than the average annual sick leave utilization reported in the insurance files, as shown in table 10. This suggests that decoupling the sick leave requirement from the ICI program may result in WRS members accruing more sick leave time under the redesigned program.

We have estimated the disability incidence rate for ICI participants to be approximately 3% per year, based on our annual valuation work for the State ICI program in which we calculate annual incurred claims and tabulate the number of new claims incurred annually.

Assuming an annual disability incidence rate of 3%, and assuming that disabled employees will continue to use sick leave days to satisfy their elimination period under the redesigned program (i.e. employees in categories 1, 2 and 3 will use 30 days, employees in category 4 will use 60 days, etc.), we have estimated that current ICI participants will accrue approximately one half of one extra sick leave day per member per year under the redesigned program. The following tables show our calculation methods for the estimated number of sick leave days gained by decoupling sick leave from the redesigned ICI program. The results in Table 12 are based on an assumption that category 6 employees will choose plans with 90-day elimination periods, whereas results in Table 13 are based on an assumption that category 6 employees will choose plans with 180-day elimination periods.

| Table 12: Estimated Number of Sick Leave Days Gained from Decoupling Sick Leave from ICI Program Scenario 1: Category 6 Employees Choose Plan with 90-day EP | | | | | |
|---|---|---|---|---|---|
| Current Premium Category | Number of Employees (A) | Expected Annual New Claims (B) = (A) x 3% | SL Used Current Plan (C) | Elim. Period Redesigned Plan (D) | Expected SL Days Gained (E) = (B) x (C – D) |
| 1 | 9,309 | 279 | 22 | 30 | 0 |
| 2 | 3,373 | 101 | 64 | 30 | 3,440 |
| 3 | 5,399 | 162 | 64 | 30 | 5,507 |
| 4 | 3,773 | 113 | 90 | 60 | 3,396 |
| 5 | 4,045 | 121 | 130 | 90 | 4,854 |
| 6 | 10,904 | 327 | 130 | 90 | 13,085 |
| 7 | 2,971 | 89 | 30 | 30 | 0 |
| 8 | 4,808 | 144 | 90 | 90 | 0 |
| 9 | 638 | 19 | 125 | 90 | 670 |
| 10 | 4,908 | 147 | 130 | 180 | 0 |
| Total | 50,128 | 1,504 | N/A | N/A | 30,952 |

| Table 13: Estimated Number of Sick Leave Days Gained from Decoupling Sick Leave from ICI Program Scenario 2: Category 6 Employees Choose Plan with 180-day EP | | | | | |
|---|---|---|---|---|---|
| Current Premium Category | Number of Employees (A) | Expected Annual New Claims (B) = (A) x 3% | SL Used Current Plan (C) | Elim. Period Redesigned Plan (D) | Expected SL Days Gained (E) = (B) x (C – D) |
| 1 | 9,309 | 279 | 22 | 30 | 0 |
| 2 | 3,373 | 101 | 64 | 30 | 3,440 |
| 3 | 5,399 | 162 | 64 | 30 | 5,507 |
| 4 | 3,773 | 113 | 90 | 60 | 3,396 |
| 5 | 4,045 | 121 | 130 | 90 | 4,854 |
| 6 | 10,904 | 327 | 130 | 180 | 0 |
| 7 | 2,971 | 89 | 30 | 30 | 0 |
| 8 | 4,808 | 144 | 90 | 90 | 0 |
| 9 | 638 | 19 | 125 | 90 | 670 |
| 10 | 4,908 | 147 | 130 | 180 | 0 |
| Total | 50,128 | 1,504 | N/A | N/A | 17,867 |

The values in the columns labeled (C) in tables 12 and 13 represent estimated sick leave days used before benefits begin under the current program. They are based on the ICI premium category definitions, and the plan's elimination period provision.

In the scenario that assumes category 6 employees will choose plans with 90-day elimination periods, we estimated that disabled employees will use approximately 31,000 fewer sick leave days; and in the scenario that assumes category 6 employees will choose plans with 180-day elimination periods, we estimated that disabled employees will use approximately 18,000 fewer sick leave days. Therefore, on average based upon these two scenarios, we have estimated that disabled employees will use approximately 25,000 fewer sick leave days to satisfy the elimination period under the redesigned program versus the current program. Given that there are approximately 50,000 ICI participants, then we assume that on average they will gain approximately one half of one extra sick leave day per employee per year.

For WRS members who do not currently participate in the ICI program, who we assumed would participate in the 180-day option under the redesigned program, they would likely use sick leave to satisfy some or all of the 180-day elimination period if they become disabled from work. This may be similar to their current behavior – i.e., it is reasonable to assume that these employees would use sick leave if they became disabled from work, even without ICI coverage. Therefore, we did not estimate sick leave gained (or lost) resulting from decoupling sick leave from the ICI program for these employees.

*General*

This letter has been developed for the internal use of Wisconsin ETF and may not be distributed to other parties without the written consent of Milliman. In preparing this information, we have relied on data provided to us by Wisconsin ETF, including historical claim data, plan documents, historical payroll data and other information. To the extent this information is inaccurate or incomplete, the results of our work may be materially affected.

In order to provide the information requested by Wisconsin ETF, we have constructed several projection models. Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is almost certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

I, Paul Correia, am a consulting actuary with Milliman and a member of the American Academy of Actuaries. I meet the qualification standards of the Academy to render the actuarial opinion contained herein.

Please let me know if you have any questions on the information in this letter. Thank you.

Sincerely,

Paul Correia

Paul Correia, FSA, MAAA
Consulting Actuary

cc: Jim Guidry, Ann Suchomel, Gina Fischer, Matt Nelson (ETF)
Dan Skwire (Milliman)

## Appendix A

Estimated Contribution Rates for Redesigned ICI Program

| Table A1: Estimated Monthly Contribution Rates Benefit Amount: 70% of Pre-Disability Earnings up to a $7,000 Maximum Monthly Benefit | | | | | |
|---|---|---|---|---|---|
| Monthly Salary Range | | Elimination Period | | | |
| Minimum | Maximum | 30 Days | 60 Days | 90 Days | 180 Days |
| $1.00 | $500.99 | $5.56 | $4.13 | $3.17 | $1.61 |
| $501.00 | $600.99 | $6.12 | $4.55 | $3.48 | $1.76 |
| $601.00 | $700.99 | $7.24 | $5.37 | $4.11 | $2.09 |
| $701.00 | $800.99 | $8.34 | $6.21 | $4.74 | $2.40 |
| $801.00 | $900.99 | $9.46 | $7.04 | $5.37 | $2.72 |
| $901.00 | $1,000.99 | $10.56 | $7.86 | $6.00 | $3.05 |
| $1,001.00 | $1,100.99 | $11.68 | $8.68 | $6.65 | $3.36 |
| $1,101.00 | $1,200.99 | $12.80 | $9.52 | $7.28 | $3.68 |
| $1,201.00 | $1,300.99 | $13.90 | $10.34 | $7.91 | $4.01 |
| $1,301.00 | $1,400.99 | $15.02 | $11.17 | $8.54 | $4.32 |
| $1,401.00 | $1,500.99 | $16.14 | $12.01 | $9.17 | $4.64 |
| $1,501.00 | $1,600.99 | $17.24 | $12.83 | $9.80 | $4.97 |
| $1,601.00 | $1,700.99 | $18.36 | $13.65 | $10.45 | $5.28 |
| $1,701.00 | $1,800.99 | $19.46 | $14.47 | $11.08 | $5.60 |
| $1,801.00 | $1,900.99 | $20.58 | $15.31 | $11.71 | $5.93 |
| $1,901.00 | $2,000.99 | $21.70 | $16.14 | $12.34 | $6.24 |
| $2,001.00 | $2,100.99 | $22.80 | $16.96 | $12.97 | $6.56 |
| $2,101.00 | $2,200.99 | $23.92 | $17.80 | $13.60 | $6.87 |
| $2,201.00 | $2,300.99 | $25.04 | $18.62 | $14.23 | $7.20 |
| $2,301.00 | $2,400.99 | $26.14 | $19.44 | $14.88 | $7.52 |
| $2,401.00 | $2,500.99 | $27.26 | $20.27 | $15.51 | $7.83 |
| $2,501.00 | $2,600.99 | $28.36 | $21.11 | $16.14 | $8.16 |
| $2,601.00 | $2,700.99 | $29.48 | $21.93 | $16.77 | $8.48 |
| $2,701.00 | $2,800.99 | $30.60 | $22.75 | $17.40 | $8.79 |
| $2,801.00 | $2,900.99 | $31.70 | $23.57 | $18.03 | $9.12 |
| $2,901.00 | $3,000.99 | $32.82 | $24.41 | $18.67 | $9.44 |
| $3,001.00 | $3,100.99 | $33.92 | $25.24 | $19.30 | $9.75 |
| $3,101.00 | $3,200.99 | $35.04 | $26.06 | $19.93 | $10.08 |
| $3,201.00 | $3,300.99 | $36.16 | $26.90 | $20.56 | $10.40 |
| $3,301.00 | $3,400.99 | $37.26 | $27.72 | $21.19 | $10.71 |
| $3,401.00 | $3,500.99 | $38.38 | $28.54 | $21.82 | $11.04 |
| $3,501.00 | $3,600.99 | $39.50 | $29.37 | $22.45 | $11.36 |
| $3,601.00 | $3,700.99 | $40.60 | $30.21 | $23.10 | $11.67 |
| $3,701.00 | $3,800.99 | $41.72 | $31.03 | $23.73 | $12.00 |
| $3,801.00 | $3,900.99 | $42.82 | $31.85 | $24.36 | $12.32 |
| $3,901.00 | $4,000.99 | $43.94 | $32.69 | $24.99 | $12.63 |
| $4,001.00 | $4,100.99 | $45.06 | $33.51 | $25.62 | $12.96 |
| $4,101.00 | $4,200.99 | $46.16 | $34.34 | $26.25 | $13.28 |
| $4,201.00 | $4,300.99 | $47.28 | $35.16 | $26.90 | $13.59 |
| $4,301.00 | $4,400.99 | $48.40 | $36.00 | $27.53 | $13.92 |

| Table A1 (Continued): Estimated Monthly Contribution Rates Benefit Amount: 70% of Pre-Disability Earnings up to a $7,000 Maximum Monthly Benefit | | | | | |
|---|---|---|---|---|---|
| Monthly Salary Range | | Elimination Period | | | |
| Minimum | Maximum | 30 Days | 60 Days | 90 Days | 180 Days |
| $4,401.00 | $4,500.99 | $49.50 | $36.82 | $28.16 | $14.24 |
| $4,501.00 | $4,600.99 | $50.62 | $37.64 | $28.79 | $14.55 |
| $4,601.00 | $4,700.99 | $51.72 | $38.47 | $29.42 | $14.88 |
| $4,701.00 | $4,800.99 | $52.84 | $39.31 | $30.05 | $15.20 |
| $4,801.00 | $4,900.99 | $53.96 | $40.13 | $30.70 | $15.51 |
| $4,901.00 | $5,000.99 | $55.06 | $40.95 | $31.33 | $15.84 |
| $5,001.00 | $5,100.99 | $56.18 | $41.79 | $31.96 | $16.16 |
| $5,101.00 | $5,200.99 | $57.30 | $42.61 | $32.59 | $16.47 |
| $5,201.00 | $5,300.99 | $58.40 | $43.44 | $33.22 | $16.80 |
| $5,301.00 | $5,400.99 | $59.52 | $44.26 | $33.85 | $17.12 |
| $5,401.00 | $5,500.99 | $60.62 | $45.10 | $34.48 | $17.43 |
| $5,501.00 | $5,600.99 | $61.74 | $45.92 | $35.12 | $17.76 |
| $5,601.00 | $5,700.99 | $62.86 | $46.74 | $35.75 | $18.08 |
| $5,701.00 | $5,800.99 | $63.96 | $47.58 | $36.38 | $18.39 |
| $5,801.00 | $5,900.99 | $65.08 | $48.41 | $37.01 | $18.72 |
| $5,901.00 | $6,000.99 | $66.20 | $49.23 | $37.64 | $19.04 |
| $6,001.00 | $6,100.99 | $67.30 | $50.05 | $38.27 | $19.35 |
| $6,101.00 | $6,200.99 | $68.42 | $50.89 | $38.92 | $19.68 |
| $6,201.00 | $6,300.99 | $69.52 | $51.71 | $39.55 | $20.00 |
| $6,301.00 | $6,400.99 | $70.64 | $52.54 | $40.18 | $20.31 |
| $6,401.00 | $6,500.99 | $71.76 | $53.38 | $40.81 | $20.63 |
| $6,501.00 | $6,600.99 | $72.86 | $54.20 | $41.44 | $20.96 |
| $6,601.00 | $6,700.99 | $73.98 | $55.02 | $42.07 | $21.27 |
| $6,701.00 | $6,800.99 | $75.10 | $55.84 | $42.70 | $21.59 |
| $6,801.00 | $6,900.99 | $76.20 | $56.68 | $43.35 | $21.92 |
| $6,901.00 | $7,000.99 | $77.32 | $57.51 | $43.98 | $22.23 |
| $7,001.00 | $7,100.99 | $78.42 | $58.33 | $44.61 | $22.55 |
| $7,101.00 | $7,200.99 | $79.54 | $59.15 | $45.24 | $22.88 |
| $7,201.00 | $7,300.99 | $80.66 | $59.99 | $45.87 | $23.19 |
| $7,301.00 | $7,400.99 | $81.76 | $60.81 | $46.50 | $23.51 |
| $7,401.00 | $7,500.99 | $82.88 | $61.64 | $47.15 | $23.84 |
| $7,501.00 | $7,600.99 | $84.00 | $62.48 | $47.78 | $24.15 |
| $7,601.00 | $7,700.99 | $85.10 | $63.30 | $48.41 | $24.47 |
| $7,701.00 | $7,800.99 | $86.22 | $64.12 | $49.04 | $24.80 |
| $7,801.00 | $7,900.99 | $87.32 | $64.94 | $49.67 | $25.11 |
| $7,901.00 | $8,000.99 | $88.44 | $65.78 | $50.30 | $25.43 |
| $8,001.00 | $8,100.99 | $89.56 | $66.61 | $50.93 | $25.76 |
| $8,101.00 | $8,200.99 | $90.66 | $67.43 | $51.57 | $26.07 |
| $8,201.00 | $8,300.99 | $91.78 | $68.27 | $52.20 | $26.39 |
| $8,301.00 | $8,400.99 | $92.88 | $69.09 | $52.83 | $26.72 |

| Table A1 (Continued):<br>Estimated Monthly Contribution Rates<br>Benefit Amount: 70% of Pre-Disability Earnings up to a $7,000 Maximum Monthly Benefit | | | | | |
|---|---|---|---|---|---|
| Monthly Salary Range | | Elimination Period | | | |
| Minimum | Maximum | 30 Days | 60 Days | 90 Days | 180 Days |
| $8,401.00 | $8,500.99 | $94.00 | $69.91 | $53.46 | $27.03 |
| $8,501.00 | $8,600.99 | $95.12 | $70.74 | $54.09 | $27.35 |
| $8,601.00 | $8,700.99 | $96.22 | $71.58 | $54.72 | $27.68 |
| $8,701.00 | $8,800.99 | $97.34 | $72.40 | $55.37 | $27.99 |
| $8,801.00 | $8,900.99 | $98.46 | $73.22 | $56.00 | $28.31 |
| $8,901.00 | $9,000.99 | $99.56 | $74.04 | $56.63 | $28.64 |
| $9,001.00 | $9,100.99 | $100.68 | $74.88 | $57.26 | $28.95 |
| $9,101.00 | $9,200.99 | $101.78 | $75.71 | $57.89 | $29.27 |
| $9,201.00 | $9,300.99 | $102.90 | $76.53 | $58.52 | $29.60 |
| $9,301.00 | $9,400.99 | $104.02 | $77.37 | $59.15 | $29.91 |
| $9,401.00 | $9,500.99 | $105.12 | $78.19 | $59.80 | $30.23 |
| $9,501.00 | $9,600.99 | $106.24 | $79.01 | $60.43 | $30.56 |
| $9,601.00 | $9,700.99 | $107.36 | $79.84 | $61.06 | $30.87 |
| $9,701.00 | $9,800.99 | $108.46 | $80.68 | $61.69 | $31.19 |
| $9,801.00 | $9,900.99 | $109.58 | $81.50 | $62.32 | $31.52 |
| $9,901.00 | $10,000.99 | $110.68 | $82.32 | $62.95 | $31.83 |
| $10,001.00 | Or More | $111.80 | $83.16 | $63.60 | $32.15 |

| Table A2:<br>Estimated Monthly Contribution Rates<br>Benefit Amount: 65% of Pre-Disability Earnings up to a $6,500 Maximum Monthly Benefit | | | | | |
|---|---|---|---|---|---|
| Monthly Salary Range | | Elimination Period | | | |
| Minimum | Maximum | 30 Days | 60 Days | 90 Days | 180 Days |
| $1.00 | $500.99 | $5.10 | $3.80 | $2.91 | $1.47 |
| $501.00 | $600.99 | $5.62 | $4.18 | $3.19 | $1.62 |
| $601.00 | $700.99 | $6.64 | $4.94 | $3.78 | $1.91 |
| $701.00 | $800.99 | $7.66 | $5.69 | $4.36 | $2.21 |
| $801.00 | $900.99 | $8.68 | $6.46 | $4.94 | $2.49 |
| $901.00 | $1,000.99 | $9.70 | $7.21 | $5.51 | $2.79 |
| $1,001.00 | $1,100.99 | $10.72 | $7.98 | $6.09 | $3.08 |
| $1,101.00 | $1,200.99 | $11.74 | $8.73 | $6.69 | $3.38 |
| $1,201.00 | $1,300.99 | $12.76 | $9.49 | $7.26 | $3.68 |
| $1,301.00 | $1,400.99 | $13.78 | $10.26 | $7.84 | $3.96 |
| $1,401.00 | $1,500.99 | $14.80 | $11.01 | $8.42 | $4.26 |
| $1,501.00 | $1,600.99 | $15.82 | $11.76 | $9.00 | $4.55 |
| $1,601.00 | $1,700.99 | $16.84 | $12.53 | $9.57 | $4.85 |
| $1,701.00 | $1,800.99 | $17.86 | $13.28 | $10.17 | $5.13 |
| $1,801.00 | $1,900.99 | $18.88 | $14.05 | $10.75 | $5.43 |
| $1,901.00 | $2,000.99 | $19.90 | $14.81 | $11.32 | $5.73 |
| $2,001.00 | $2,100.99 | $20.92 | $15.56 | $11.90 | $6.02 |
| $2,101.00 | $2,200.99 | $21.94 | $16.33 | $12.48 | $6.32 |
| $2,201.00 | $2,300.99 | $22.96 | $17.08 | $13.06 | $6.60 |
| $2,301.00 | $2,400.99 | $24.00 | $17.85 | $13.65 | $6.90 |
| $2,401.00 | $2,500.99 | $25.02 | $18.60 | $14.23 | $7.19 |
| $2,501.00 | $2,600.99 | $26.04 | $19.36 | $14.81 | $7.49 |
| $2,601.00 | $2,700.99 | $27.06 | $20.13 | $15.38 | $7.79 |
| $2,701.00 | $2,800.99 | $28.08 | $20.88 | $15.96 | $8.07 |
| $2,801.00 | $2,900.99 | $29.10 | $21.65 | $16.56 | $8.37 |
| $2,901.00 | $3,000.99 | $30.12 | $22.40 | $17.13 | $8.66 |
| $3,001.00 | $3,100.99 | $31.14 | $23.15 | $17.71 | $8.96 |
| $3,101.00 | $3,200.99 | $32.16 | $23.92 | $18.29 | $9.24 |
| $3,201.00 | $3,300.99 | $33.18 | $24.68 | $18.87 | $9.54 |
| $3,301.00 | $3,400.99 | $34.20 | $25.43 | $19.44 | $9.84 |
| $3,401.00 | $3,500.99 | $35.22 | $26.20 | $20.04 | $10.13 |
| $3,501.00 | $3,600.99 | $36.24 | $26.95 | $20.62 | $10.43 |
| $3,601.00 | $3,700.99 | $37.26 | $27.72 | $21.19 | $10.71 |
| $3,701.00 | $3,800.99 | $38.28 | $28.47 | $21.77 | $11.01 |
| $3,801.00 | $3,900.99 | $39.30 | $29.23 | $22.35 | $11.30 |
| $3,901.00 | $4,000.99 | $40.32 | $30.00 | $22.94 | $11.60 |
| $4,001.00 | $4,100.99 | $41.34 | $30.75 | $23.52 | $11.90 |
| $4,101.00 | $4,200.99 | $42.36 | $31.52 | $24.10 | $12.18 |
| $4,201.00 | $4,300.99 | $43.38 | $32.27 | $24.68 | $12.48 |
| $4,301.00 | $4,400.99 | $44.40 | $33.02 | $25.25 | $12.77 |

| Table A2 (Continued): Estimated Monthly Contribution Rates Benefit Amount: 65% of Pre-Disability Earnings up to a $6,500 Maximum Monthly Benefit | | | | | |
|---|---|---|---|---|---|
| Monthly Salary Range | | Elimination Period | | | |
| Minimum | Maximum | 30 Days | 60 Days | 90 Days | 180 Days |
| $4,401.00 | $4,500.99 | $45.42 | $33.79 | $25.83 | $13.07 |
| $4,501.00 | $4,600.99 | $46.44 | $34.55 | $26.43 | $13.35 |
| $4,601.00 | $4,700.99 | $47.46 | $35.30 | $27.00 | $13.65 |
| $4,701.00 | $4,800.99 | $48.50 | $36.07 | $27.58 | $13.95 |
| $4,801.00 | $4,900.99 | $49.52 | $36.82 | $28.16 | $14.24 |
| $4,901.00 | $5,000.99 | $50.54 | $37.59 | $28.74 | $14.54 |
| $5,001.00 | $5,100.99 | $51.56 | $38.34 | $29.31 | $14.82 |
| $5,101.00 | $5,200.99 | $52.58 | $39.10 | $29.91 | $15.12 |
| $5,201.00 | $5,300.99 | $53.60 | $39.87 | $30.49 | $15.41 |
| $5,301.00 | $5,400.99 | $54.62 | $40.62 | $31.06 | $15.71 |
| $5,401.00 | $5,500.99 | $55.64 | $41.39 | $31.64 | $16.01 |
| $5,501.00 | $5,600.99 | $56.66 | $42.14 | $32.22 | $16.29 |
| $5,601.00 | $5,700.99 | $57.68 | $42.89 | $32.81 | $16.59 |
| $5,701.00 | $5,800.99 | $58.70 | $43.66 | $33.39 | $16.88 |
| $5,801.00 | $5,900.99 | $59.72 | $44.42 | $33.97 | $17.18 |
| $5,901.00 | $6,000.99 | $60.74 | $45.17 | $34.55 | $17.46 |
| $6,001.00 | $6,100.99 | $61.76 | $45.94 | $35.12 | $17.76 |
| $6,101.00 | $6,200.99 | $62.78 | $46.69 | $35.70 | $18.06 |
| $6,201.00 | $6,300.99 | $63.80 | $47.46 | $36.30 | $18.35 |
| $6,301.00 | $6,400.99 | $64.82 | $48.21 | $36.87 | $18.65 |
| $6,401.00 | $6,500.99 | $65.84 | $48.97 | $37.45 | $18.93 |
| $6,501.00 | $6,600.99 | $66.86 | $49.74 | $38.03 | $19.23 |
| $6,601.00 | $6,700.99 | $67.88 | $50.49 | $38.61 | $19.52 |
| $6,701.00 | $6,800.99 | $68.90 | $51.26 | $39.18 | $19.82 |
| $6,801.00 | $6,900.99 | $69.92 | $52.01 | $39.78 | $20.12 |
| $6,901.00 | $7,000.99 | $70.94 | $52.76 | $40.36 | $20.40 |
| $7,001.00 | $7,100.99 | $71.98 | $53.53 | $40.93 | $20.70 |
| $7,101.00 | $7,200.99 | $73.00 | $54.29 | $41.51 | $20.99 |
| $7,201.00 | $7,300.99 | $74.02 | $55.06 | $42.09 | $21.29 |
| $7,301.00 | $7,400.99 | $75.04 | $55.81 | $42.68 | $21.57 |
| $7,401.00 | $7,500.99 | $76.06 | $56.56 | $43.26 | $21.87 |
| $7,501.00 | $7,600.99 | $77.08 | $57.33 | $43.84 | $22.17 |
| $7,601.00 | $7,700.99 | $78.10 | $58.08 | $44.42 | $22.46 |
| $7,701.00 | $7,800.99 | $79.12 | $58.84 | $44.99 | $22.76 |
| $7,801.00 | $7,900.99 | $80.14 | $59.61 | $45.57 | $23.04 |
| $7,901.00 | $8,000.99 | $81.16 | $60.36 | $46.17 | $23.34 |
| $8,001.00 | $8,100.99 | $82.18 | $61.13 | $46.74 | $23.63 |
| $8,101.00 | $8,200.99 | $83.20 | $61.88 | $47.32 | $23.93 |
| $8,201.00 | $8,300.99 | $84.22 | $62.63 | $47.90 | $24.21 |
| $8,301.00 | $8,400.99 | $85.24 | $63.40 | $48.48 | $24.51 |

| Table A2 (Continued):<br>Estimated Monthly Contribution Rates<br>Benefit Amount: 65% of Pre-Disability Earnings up to a $6,500 Maximum Monthly Benefit | | | | | |
|---|---|---|---|---|---|
| Monthly Salary Range | | Elimination Period | | | |
| Minimum | Maximum | 30 Days | 60 Days | 90 Days | 180 Days |
| $8,401.00 | $8,500.99 | $86.26 | $64.16 | $49.07 | $24.81 |
| $8,501.00 | $8,600.99 | $87.28 | $64.93 | $49.65 | $25.10 |
| $8,601.00 | $8,700.99 | $88.30 | $65.68 | $50.23 | $25.40 |
| $8,701.00 | $8,800.99 | $89.32 | $66.43 | $50.80 | $25.68 |
| $8,801.00 | $8,900.99 | $90.34 | $67.20 | $51.38 | $25.98 |
| $8,901.00 | $9,000.99 | $91.36 | $67.95 | $51.96 | $26.27 |
| $9,001.00 | $9,100.99 | $92.38 | $68.71 | $52.55 | $26.57 |
| $9,101.00 | $9,200.99 | $93.40 | $69.48 | $53.13 | $26.87 |
| $9,201.00 | $9,300.99 | $94.42 | $70.23 | $53.71 | $27.15 |
| $9,301.00 | $9,400.99 | $95.44 | $71.00 | $54.29 | $27.45 |
| $9,401.00 | $9,500.99 | $96.48 | $71.75 | $54.86 | $27.74 |
| $9,501.00 | $9,600.99 | $97.50 | $72.50 | $55.44 | $28.04 |
| $9,601.00 | $9,700.99 | $98.52 | $73.27 | $56.04 | $28.32 |
| $9,701.00 | $9,800.99 | $99.54 | $74.03 | $56.61 | $28.62 |
| $9,801.00 | $9,900.99 | $100.56 | $74.80 | $57.19 | $28.92 |
| $9,901.00 | $10,000.99 | $101.58 | $75.55 | $57.77 | $29.21 |
| $10,001.00 | Or More | $102.60 | $76.30 | $58.35 | $29.51 |