

# State of Wisconsin Department of Employee Trust Funds

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## Correspondence Memorandum

**Date:** January 19, 2017

**To:** Group Insurance Board

From: Deb Roemer, Director

Benefit Services Bureau

Division of Retirement Services

**Subject:** Disability Program Redesign-Income Continuation Insurance Program (ICI)

## ETF requests that the Group Insurance Board (GIB) take action on the proposal to redesign the ICI Program at an upcoming Board meeting.

Attached is an ETF proposal recommending a redesign of the ICI program, as well as, supporting actuarial analysis.

At the February 8, 2017 meeting, ETF staff and Milliman, the Board's actuary for all the disability programs administered by ETF, will present these recommended changes to the ICI program. As you will see from the memo about the Long-Term Disability Program, the Department's goal is to make the disability programs easier for members to understand and more efficient for employers and ETF to administer. In addition, the state ICI program has had to increase premiums the last couple of years because the program is not fully funded. Therefore, these changes to the state ICI program are intended to help with the long-term sustainability of the program as well as make it easier to understand and administer.

Please contact Deb Roemer at (608) 266-5387 or <a href="mailto:deb.roemer@etf.wi.gov">deb.roemer@etf.wi.gov</a> if you have comments or questions.

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

Attachment A: Proposal to Redesign ICI Program

Attachment B: Letter on ICI Experience and Plan Design Analysis – Milliman

Attachment C: Letter on ICI Program Redesign – Milliman

Attachment D: Presentation – Disability Benefit Programs Redesign

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

Matt Stol

Electronically Signed 2/1/17

| Board | Mtg Date | Item # |
|-------|----------|--------|
| GIB   | 2.8.17   | 9B     |

## Benefit Services Bureau

## Proposal to Redesign the Income Continuation Insurance Program



January 17, 2017

## **Executive Summary**

The Division of Retirement Services (DRS) has been evaluating the disability programs currently offered to State of Wisconsin and local government employees. The goal of this analysis is to reduce the number of disability program offerings, but to reduce them in a manner that produces the least impact on members, employers, the Trust, and the agency. The focus has been to redesign the disability benefit offerings in a way that is at a minimum cost-neutral, reduces duplication, and reduces complexity.

The first phase of this project included a technical clean-up of the voluntary Income Continuation Insurance (ICI) program plan language, which was completed in 2013. The second phase of this evaluation was a review of the ICI and Long-Term Disability Insurance (LTDI) programs.

One result of this evaluation has been a recommendation to reduce the number of long-term disability programs administered by ETF. The decision was made to recommend closure of the LTDI program to new claims and reopen the 40.63 Disability Annuity program (40.63). At their September 29, 2016 meeting, the Employee Trust Funds Board approved the closure of the LTDI program effective January 1, 2018. Approval of the necessary administrative rule changes is still pending. Once that process is successfully completed the 40.63 program will be the sole long-term disability program available for most WRS participants.

Also part of the second phase of the disability program review and working with ETF's group insurance actuaries, Milliman, Inc. (Milliman), ETF explored the existing status of the ICI program and evaluated a number of possible program changes. This proposal is the product of that evaluation process.

The second phase of the disability program review also included an assessment of the current status of the ICI program. Working with our group insurance actuaries, Milliman, Inc. (Milliman), ETF evaluated a number of possible program changes. This proposal is the product of that evaluation process.

It is ETF's proposal to streamline the state and local ICI benefit programs in order to reduce variation between the programs, increase program participation in the state plan, and to ultimately reduce the state ICI program actuarial deficit. The goal is to redesign the program in a way that is cost-neutral and will increase efficiency while at the same time simplifying the ICI program to reduce confusion for employees, staff and employers.

The state ICI program has been operating with an actuarial deficit since 2006. This deficit has grown substantially since 2008 due to various factors. Such factors include declining enrollment and growth in long-term disability claims payments. The Group Insurance Board (GIB) has authorized numerous premium increases, however, premium growth has not been sufficient to address the actuarial deficit. Continued premium increases along with other

external pressures may have already begun to erode enrollment in the program. The program appears to be in an unsustainable position and risks even greater growth in the deficit.

The local ICI program, on the other hand, has experienced outstanding performance results. The local ICI program, funded at nearly 800% of its actuarial liability, is virtually self-sustaining. From 2013 – 2015, the local ICI program has been able to pay claims and grow its fund balance despite being on a premium holiday over the same time period.

As a result of this analysis, DRS makes the following recommendations for the state and local ICI programs:

- 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 up to a maximum monthly benefit of \$7,000 based on a maximum monthly salary of \$10,000.
- Replace the current premium rate structure with elimination-period (EP) based premiums. EPs of 30, 60, 90, and 180 days are proposed.
- Employers will pay the entire premium for the longest EP (180 days) with employees paying the premium differential for electing a shorter EP.
- Elimination of the \$75 long-term disability add-on.
- Elimination of supplemental coverage.
- Elimination of the one-year service requirement before UW faculty and academic staff are eligible for employer premium contributions.
- The earnings offset for employees who return to work part-time with their former employer is reduced to 70%.
- Eliminate the requirement to exhaust sick leave prior to receipt of benefits.
- New program effective beginning January 1, 2019 or 2020.

Long-term disability benefits will still be available for WRS members through the LTDI or the §40.63 Disability Annuity program (40.63).

These reforms will require statutory changes once GIB approval is obtained in order to amend certain requirements related to premium calculations, benefit durations, and waiting periods.

The effect of these reforms will be a leaner, more streamlined program that will be less complicated to administer, encourage greater enrollment, address the growing actuarial liability, and result in premium savings for employees as well as being, at a minimum, costneutral for employers. These reforms will also reduce the number of duplicative disability benefits offered to Wisconsin Retirement System (WRS) employees, thus reducing complexity in the administration and coordination of benefits as well as reducing confusion for WRS members. Streamlining benefits will reduce the complexity of the program as it relates to BAS design as well.

#### **Background**

ICI is an optional disability income insurance benefit that provides replacement income for short-term and long-term disabilities. The program is a self-insured plan financed by employer and employee premium contributions. All state employers are required to participate while participation is optional for local employers.

The ICI program will pay benefits to any insured individual who becomes disabled while employed by a WRS participating employer. ICI will pay 75% of average monthly earnings and offers Standard and Supplemental coverage:

- **Standard Coverage**—Covers up to \$64,000 of annual earnings. The maximum benefit is \$4,000 per month. The premiums are shared by employers and employees.
- **Supplemental Coverage**—Available to employees whose annual salary exceeds \$64,000. Covers between \$64,000 and \$120,000 of annual earnings. The maximum benefit is \$7,500 per month. The premiums are paid entirely by the employee.

The benefit lasts until age 65 (with some exceptions), or until the employee is no longer disabled whichever is sooner. A \$75 supplemental benefit is added to the normal monthly benefit amount, when the benefit transitions to long-term ICI.

Before the benefit begins, state employees must serve an elimination period or use sick leave up to a maximum of 130 working days, whichever is longer. University of Wisconsin faculty and academic staff may select an elimination period of up to 180 calendar days. All other state employees have a 30-day elimination period.

Local employees, like UW faculty and academic staff, select their own elimination period, up to 180 calendar days. Local employees are not required by the ICI plan to exhaust sick leave prior to receiving benefits.

In the state ICI plan, employee premiums are determined by an employee's level of accumulated sick leave and fit into one of six categories. ICI premiums for UW faculty and academic staff are determined by the employee-selected elimination period, as are premiums for local employees. Employer contributions to the state ICI program are based on a percentage established in statute (§40.05 (5) Wis. Stat.) which establishes the program's premium categories. For UW faculty and academic staff and local employees, employers pay 100% of the premium for a 180-day elimination period. If an employee wishes to enroll with a shorter elimination period, they will pay the premium differential. Additionally, there is no employer contribution for UW faculty and academic staff until they have 12 months of state employment under the WRS.

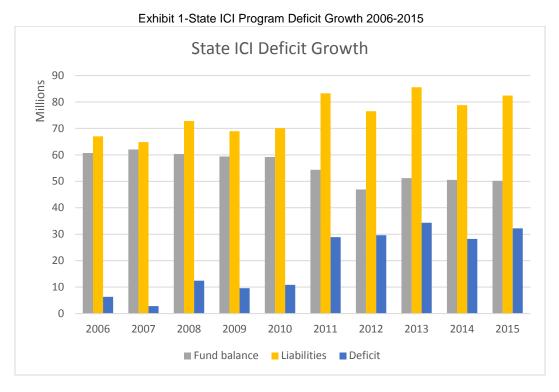
ICI benefits continue until the recipient turns age 65 (with some exceptions), recovers, returns to full-time work, or dies, whichever occurs first.

ICI benefits will not duplicate certain benefits available from other sources, including the WRS, Social Security Administration, workers' compensation, and unemployment compensation. Duplicate benefits must be paid back to the ICI program.

The ICI program is authorized by Wisconsin Statute §40.62 and is currently administered by Aetna Life Insurance Company.

## **ICI Program Financial Condition**

As of December 31, 2006, the actuarial valuation for the State ICI program highlighted a deficit of \$6.3 million and a total liability of \$67 million. Ten years later, the deficit has grown 411% to \$32 million, and the liability has risen 23% to \$82.4 million (Exhibit 1). In order to counter the program deficit, ETF's actuaries have recommended continued premium rate increases over the years (Exhibit 2). Significant rate increases were proposed and approved at the May 2015 GIB meeting. At that meeting the GIB approved increases of 20% annually from 2016 to 2020, which are projected to eliminate the program deficit by 2022. The GIB affirmed these increases at the May 2016 meeting.



The local ICI program, on the other hand, has an actuarial surplus of \$31.6 million as of the December 31, 2015 valuation. This surplus is significant when one considers that the local ICI program averages claim payments of approximately \$1 million per year. The local program has been on a premium holiday since 2012 and is virtually self-sustaining as investment income has exceeded program expenses by at least \$1 to \$2 million annually since 2013.

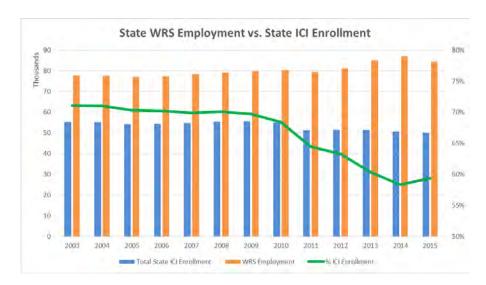
Continued premium rate increases alone have not been able to adequately address the growing deficit in the state ICI program. Additionally, the concern is that continuing increases will eventually cause adverse selection and result in further enrollment declines, assuming that this has not already begun. In addition to premium increases for the state ICI program, Milliman has advised that program changes should be considered in order to stabilize the funding for the State ICI program more long-term.

Exhibit 2-State ICI Premium Rate History 2006-2016

|                | State                |                   | um Rate Increase |                   |                              |
|----------------|----------------------|-------------------|------------------|-------------------|------------------------------|
| Actuary        | Plan Year            |                   | Premium Increa   | ases              |                              |
| Report<br>Year | (Ending<br>12/31/xx) | Effective<br>Year | Recommended      | Board<br>Approved | Anticipated Future Increases |
| 2006           | 2005                 | 2007              | 7.0%             | 7.0%              | N/A                          |
| 2007           | 2006                 | 2008              | 0.0%             | 0.0%              | N/A                          |
| 2008           | 2007                 | 2009              | 0.0%             | 0.0%              | N/A                          |
| 2009           | 2008                 | 2010              | 7.0%             | 7.0%              | 7% / 2012 & 2014             |
| 2010           | 2009                 | 2011              | 0.0%             | 0.0%              | 7% / 2012 & 2014             |
| 2011           | 2010                 | 2012              | 7.0%             | 7.0%              | 7% / 2014 & 2016             |
| 2012           | 2011                 | 2013              | 0.0%             | 4.5%              | 9% / 2014 & 2016             |
| 2013           | 2012                 | 2014              | 4.5%             | 4.5%              | 4% / 2015-2018               |
| 2014           | 2013                 | 2015              | 7.0%             | 7.0%              | 7% / 2016 & 2017             |
| 2015           | 2014                 | 2016              | 20%              | 20%               | 20%/2017-2020                |
| 2016           | 2015                 | 2017              | 20%              | 20%               | 20%/2018-2020                |

#### **Enrollment**

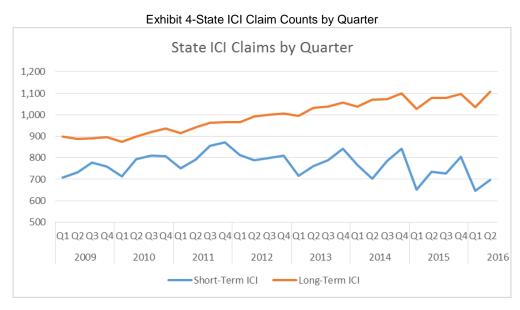
The state ICI program has been experiencing declining enrollment since 2010 both in real numbers and as a percentage of total eligible employees (Exhibit 3). State ICI enrollment has declined 9.3% since 2003, while the number of state WRS employees has risen 8.6%. In 2003, 71.1% of employees were enrolled in state ICI. This number has fallen to 59.4% in 2015.



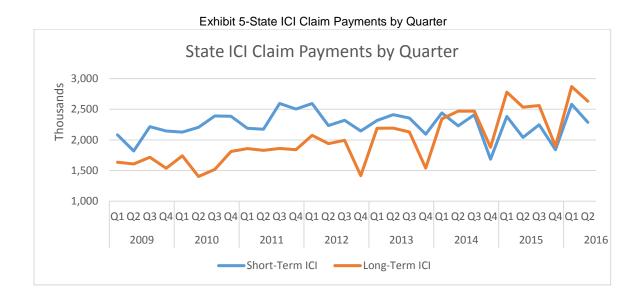
It is interesting to note that the local ICI plan requires 65% employee enrollment for a local employer to participate in the plan. This means that if the state wanted to participate in the local plan it would not meet the enrollment requirement.

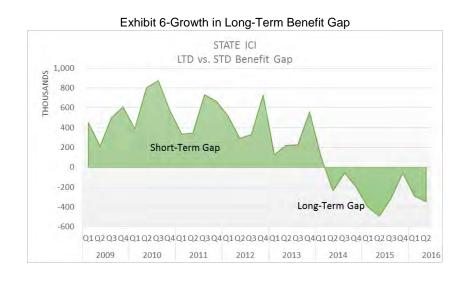
## **Long-Term Claim Growth**

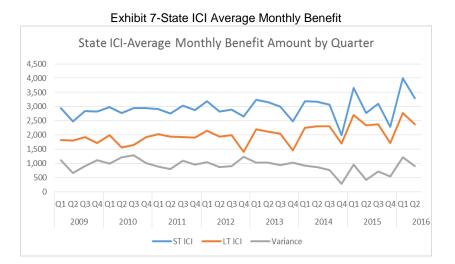
The state ICI plan has experienced growth in the number and amount of long-term claims (Exhibit 4). Between 2009 and 2011, the number of long-term claims have averaged 100-200 more claims than short-term claims. In 2012, the gap between long-term and short term claims began growing and has reached 400 more long-term claims over short-term claims in the 2<sup>nd</sup> quarter of 2016.



Average monthly long-term ICI benefit payments tend to be less than short-term payments because long-term benefits are typically offset by other long-term disability benefits such as Social Security Disability Insurance (SSDI), LTDI, and 40.63. However, due to the rapid growth in long-term claims, the state ICI program is paying out more in long-term benefits than short-term benefits (Exhibits 5, 6) in spite of very little change in the difference between average short-term and long-term benefit amounts (Exhibit 7). Due to the long-term component of the ICI program, this gap is expected to continue growing.







#### **Discussion**

As part of their analysis, Milliman conducted an exhaustive experience study of the state ICI program (Attachment B). This work confirmed that the current premium rates were not adequate for program funding. Milliman performed an interest adjusted loss ratio (IALR) review of the state ICI program and discovered that while the preferred IALR is 70-80%, only three state agencies met this target. The remaining agencies exceeded this target, one by a factor of eight. When Milliman examined state ICI experience by occupation, similar results were found, though some of these were in occupations where it is expected that disability rates would be higher, such as protective occupations. Not surprisingly, teachers, and by extension, the University of Wisconsin faculty and academic staff, had the lowest IALR (40%). This is significant when one takes into consideration that the UW has roughly half the experience and the largest enrollment of any employer in the state ICI program. Without the UW's participation, the ICI program would be in a more difficult situation than it currently is. Coincidentally, like the local ICI program, ICI premiums for UW faculty and academic staff are based on employee selected elimination periods rather than accumulated sick leave.

The inadequacy of the ICI premium rates lead Milliman to recommend and the GIB to approve, successive 20% annual increases for the period of 2016 through 2020. However, these increases themselves cause additional pressures on the state ICI program. Because of this, Milliman also recommended that ETF evaluate the possibility of making changes to the program itself.

The state ICI premium rates themselves are tied to an employee's accumulated sick leave balance. The premium structure is intended to encourage sick leave accumulation by reducing employee premiums after an employee reaches a certain level of sick leave accrual. The breakdown of the premium categories is shown in Exhibit 9.

Premium Categories 4-6 are classified as permanent categories. When an employee accumulates the required number of sick leave hours to enter into one of those categories,

they will stay in that category (unless eligible to move to a higher category) even if their accumulated sick leave falls below the required threshold. Category 3 is a special category that allows employees to obtain a state contribution if they are able to accumulate 80 sick leave hours in a calendar year. Category 3 is not a permanent category.

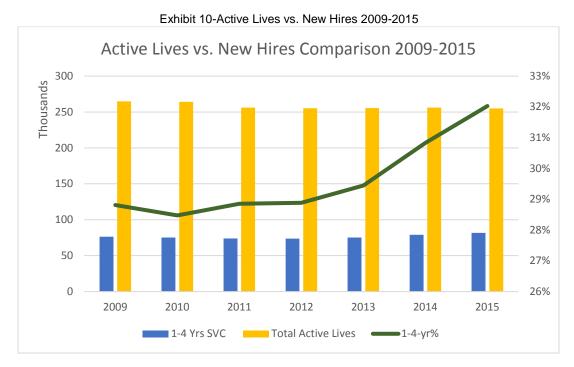
Exhibit 9-State ICI Premium Categories

|          | Exhibit o State for Frontian Sategories                                                                                                                                                                                                                                                                                                                                             |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | State ICI Premium Categories                                                                                                                                                                                                                                                                                                                                                        |
| Category | Sick Leave Accumulation                                                                                                                                                                                                                                                                                                                                                             |
| 1        | Less than 10 working days (80 hours) in the preceding calendar year and less than 23 working days (184 hours) total accumulation.                                                                                                                                                                                                                                                   |
| 2        | Less than 10 working days (80) hours in the preceding calendar year and 23 to 64 working days (184 to 520 hours) of total accumulation.                                                                                                                                                                                                                                             |
| 3        | At least 10 working days (80 hours) in the preceding calendar year but less than 65 working days (520 hours) total accumulation. For purposes of this category only, one day equals 8 hours of sick leave for a full time employee. For a part time employee, the daily equivalent shall be prorated as a percentage of full time, based on the employee's most recent appointment. |
| 4        | 65 working days (520 hours) but less than 91 working days (728 hours) total accumulation.                                                                                                                                                                                                                                                                                           |
| 5        | 91 working days (728 hours) through 130 working days (1040 hours) total accumulation.                                                                                                                                                                                                                                                                                               |
| 6        | More than 130 working days (1040 hours) total accumulated sick leave.                                                                                                                                                                                                                                                                                                               |

Basing premiums on sick leave adds a degree of instability to the program, as sick leave levels fluctuate from year to year. It does not appear to be coincidental that the local ICI program, as well as the UW faculty and staff portion of the state ICI program have the best experience. This is likely owing to a more stable risk exposure that comes from elimination period based premiums.

The decline in enrollment cannot be attributed to a specific cause. The first of the 20% ICI premium increases began in 2016, so the impact of these increases is not yet measurable. However, successive large premium increases will cause employees to evaluate the cost of the coverage vs. the likelihood of filing a claim to determine whether or not purchasing coverage is worth it for them. Frequent increases in premiums will result in adverse selection, where only those employees most likely to use the benefit enroll in the program. This in turn will put greater upward pressure on premium rates and drive out more enrollees in this voluntary program.

Changes in the state's workforce also have implications for ICI enrollment. Beginning in 2010, many employees left the state workforce in above average numbers. These employees retired for the most part and were replaced by new employees with little to no accumulated service. From 2009 to 2015, the total number of active lives in the WRS system declined by 3.7% while over the same period the number of employees with 1-4 years of accumulated service increased by 7.1%. As a result of this shift, the percentage of employees with 1-4 years of accumulated service has risen from 28.8% of WRS active lives in 2009 to 32% in 2015 (Exhibit 10). As was pointed out earlier, state WRS enrollment has grown 8.6% so the majority of the growth in the number of employees with 1-4 years of service can be assumed to be state rather than local employees. This is important for the state ICI program because people with little accumulated service also have little accumulated sick leave and pay higher ICI premiums than employees with greater sick leave accumulation. This group of employees typically does not purchase ICI right away and wait until they qualify for Category 3 which offers a special reduced premium for employees and an employer contribution.



Over the same period (2009-2015), total state ICI enrollment declined 10%, while the number of state WRS employees grew 5.7%.

On a similar note, the number of employees aged 15-30 has increased 6% and make up 10.6% of total active lives. This age group is another segment that typically does not enroll in ICI coverage and could also be having an effect on declining enrollment.

Lastly, DRS has heard anecdotally that employees are dropping ICI coverage because of increases in other employee benefit obligations, specifically health insurance premiums and retirement contributions. When employees assumed increased payroll deduction obligations

for these benefits, they began to cancel other lower priority voluntary benefits, such as ICI coverage, to make up for the loss of take home pay.

It is most likely a combination of all of these factors (premiums, workforce, and external financial pressures) that are contributing to the downward trend in ICI enrollment.

Since premium increases alone are not likely to solve the state ICI program's funding issues, the next logical option was a review of benefits. Using a holistic approach, changes to the ICI program were viewed in the context of all of ETF's disability benefit options.

The ICI program has multiple variations, including both short and long-term components, separate rules for University of Wisconsin faculty and academic staff, and a program for local employers with EPs that differ from the UW faculty and academic staff EPs. These variations "within the program" have different rules that cause confusion for employees, employers, the third party administrator (TPA), and ETF staff alike. In addition to the long-term benefits offered by the ICI program, ETF also currently administers the Long-Term Disability Program (LTDI), the §40.63 Disability Annuity Program (40.63), and the §40.65 Duty Disability Program (40.65) which is limited to protective occupation participants who become disabled in the line of duty. Depending upon a member's occupation, multiple combinations of these benefit programs can be available to them.

Using this holistic view, there does not appear to be a compelling reason to offer the number of disability programs, particularly long-term disability, that are currently offered by the WRS. Ideally, one short-term and one long-term disability plan is all that should be required (not including 40.65). Since ICI is the only short-term disability plan offered to WRS participants it makes sense to retain the short-term component and to strip away the long-term component of this plan in favor LTDI or 40.63, which are long-term disability programs. Additionally, the growth in long-term ICI claims is also putting upward pressure on ICI premium rates and raises the question of whether it is fair for current enrollees to be paying premiums to fund current long-term claims.

Another consideration is how generous the ICI benefit is. ICI pays claimants 75% of average monthly earnings for both short-term and long-term benefits, until a claimant reaches age 65, which, depending on the recipient's current age can stretch decades into the future. Milliman indicates that 75% of monthly earnings is unusual compared to industry standards, as is the additional long-term \$75 add-on benefit. Typical disability plans have benefit levels of 60%, with 65-70% benefit levels considered as "generous." Another point of consideration is that at 75%, a claimant can match or exceed their actual after tax income, depending on the taxability rate of the ICI benefit. ICI benefits are taxable based on the level of employer contribution that occurs. Employees on a disability benefit who are able to match their take-home pay have less of an incentive to return to work.

The current state ICI program will be developed as a part of the BAS project with the potential to be administered in-house. While it is not anticipated that this change will occur right away, by streamlining the program now, BAS development in the future should benefit from the

removal of many of the program nuances highlighted above that would need to be incorporated during BAS programming. The redesign of the ICI program will make the state and local plans nearly identical.

#### **Proposal**

After evaluating the analysis provided by Milliman, BSB developed a program structure that achieves the stated goals and addresses the financial and enrollment issues facing the state ICI program. The primary methods for achieving these objectives are decoupling sick leave from the state ICI program and converting ICI to a short-term disability benefit along with other benefit changes. Specifically:

#### Decoupling sick leave:

- Eliminate state ICI premium rate categories based on accumulated sick leave and replace them with elimination period (EP) based premiums instead – 30, 60, 90, and 180 day. Employers will pay the entire premium for 180-day EP and employees will "buy up" to a shorter elimination period if desired.
- Eliminate the requirement to exhaust sick leave before benefits can be paid in the state ICI program.

#### Eliminating long-term ICI:

- Eliminate long-term ICI benefits
- Increase short-term ICI benefit duration to 18 months after completion of employeeselected EP.
- Eliminate the \$75 long-term add-on.

#### Other benefit changes:

- Reduce the benefit amount from 75% of salary to 70%.
- Eliminate supplemental coverage and increase the maximum monthly benefit for standard coverage to \$7,000, which is 70% of \$120,000 of annual earnings.
- Eliminate requirement for UW employees to be employed 12 months before eligibility of coverage.
- Change return to work/rehabilitative income offset from 75% to 70%.

Decoupling sick leave from the state ICI program is one aspect of streamlining the ICI program by adopting provisions from the local ICI program and the UW portion of the state ICI program. Decoupling sick leave, combined with eliminating supplemental coverage, also has the additional administrative effect of eliminating the annual deferred enrollment/supplemental open enrollment periods in the ICI plan. Under the proposed plan, employers, particularly state ICI employers, will no longer have to review their employee's sick leave balances for ICI premium category determinations at the end of each calendar year in order to determine the correct premium category each of their employees is eligible for. Under this proposal, an

employee will choose their EP when hired. If an employee wishes to shorten their EP, they will be able to achieve this by filing an evidence of insurability application as employees in the local ICI program are currently required to do. By eliminating these two program elements, there will no longer be any annual enrollment processes necessary for employers or employees.

The elimination of long-term ICI benefits is proposed for three reasons. Primarily, the current structure of the state ICI program is not sustainable given the level of premiums charged. On the other hand, increasing premiums by an amount sufficient to address the funding imbalance will likely add more downward pressure on state ICI enrollment, leading to adverse selection. The growth in long-term claims payments is likely to continue given the duration of long-term disability payments in the ICI program. By eliminating long-term ICI benefits, ETF will be eliminating one of three long-term disability programs.

Eliminating long-term benefits will help address the deficit problems by providing greater certainty in premium development due to the limited benefit period and set elimination periods rather than using accumulated sick-leave levels which fluctuate from year to year.

Long-term ICI benefits were originally designed to provide continuity for disability claimants who were totally disabled, beyond short-term ICI. The approval process for other long-term disability benefits can take some time. While ICI claimants are encouraged to apply for long-term disability benefits while they are still receiving short-term benefits, 12 months may not be sufficient for them to get long-term benefits approved. By extending short-term benefits to 18 months, employees will be much less likely to find themselves in a position of financial hardship if their long-term benefits are not approved prior to the current 12 month expiration period of their short-term benefit.

In addition to assisting with addressing the program deficit, reducing the payable benefit from 75% to 70% is also intended to encourage employees to return to work. As previously discussed, Milliman indicates that a 75% benefit is considered a rich benefit that is outside industry averages for disability benefits and could result in a claimant earning more in disability benefits than take home pay. This creates a tremendous disincentive to return to work. To further encourage disabled employees to return to part-time work, this proposal also reduces the earnings offset from 75% to 70%.

The proposal eliminates supplemental coverage. Currently, an employee can enroll in standard coverage, which provides a benefit based on annual earnings up to \$64,000. If their income exceeds \$64,000, they can also enroll in supplemental coverage, which provides a benefit based on annual earnings up to \$120,000. The employee pays the cost of the additional supplemental coverage. This proposal eliminates supplemental coverage and increases the maximum annual earnings associated with the basic benefit to \$120,000, the current maximum income limit for supplemental coverage. Eliminating supplemental coverage helps with administrative efficiency by contributing to the elimination of the annual enrollment process. Currently, eligible employees can enroll in supplemental coverage annually. However, this means that employers (including local employers) must identify and reach out to

those employees eligible to enroll in supplemental coverage each year. Eliminating supplemental coverage, along with decoupling sick leave from the state ICI program, will eliminate the need for annual enrollment periods.

## **Analysis**

Milliman estimated the impact of a restructured ICI program on employer and employee premiums, the incurred claim liability, and enrollment (Attachment C). Under this proposal individual premiums decline overall due to the new limitations on benefit duration and the reduction to a 70% benefit. These decreases occur even though the maximum income level was increased to \$120,000. Employees will see the greatest premium impact due to increased enrollment and changes to the employer contribution structure. Milliman estimates that the state ICI program enrollees could see potential decreases of \$6.2 to \$8.4 million in premium savings for a redesigned program with a 70% benefit and 18-month benefit duration.

Employers are estimated to experience a slight decrease in overall premiums. The significance of the decrease in employer premiums is mitigated by the substantial increase in enrollment that is expected under the redesigned program. However, even under Milliman's most conservative projection, overall employer contributions would decrease by \$130,000.

Redesigning the ICI program significantly impacts the estimated incurred claim liability for the state ICI plan. The annual state ICI valuation, dated April 18, 2016 projected a liability of approximately \$164 million by the end of 2024. Under the proposed 70% benefit amount and 18-month benefit duration, Milliman estimates that the incurred claim liability for the state ICI plan would fall in a range of \$74 to \$76 million. The April 2016 state ICI valuation reported a December 31, 2015 liability of \$82.4 million.

Staff anticipates that this redesign of how premiums are determined under the state ICI program will substantially increase enrollment. Under the current premium structure employees must accumulate sick leave before becoming eligible for an employer contribution. Under the proposed redesign, premiums and employer contributions are no longer dependent on sick leave accumulation. Instead, employees choose from one of four EPs, with the employer paying the entire premium for the lowest cost EP of 180 days. This shift is likely to provide enough incentive for any employee not participating in the ICI program to enroll in at least the 180 day EP because they can do so at no cost to them. There are approximately 34,000 people who are currently not enrolled in the state ICI program. Milliman's analysis assumes that all of these people will enroll in the redesigned program.

It is this substantial growth in enrollment that mitigates the amount of anticipated savings that employers will experience. Milliman estimates that under a 70% benefit level, employers will pay an additional \$4.9 million for new enrollees. Also, those employees who are currently in ICI Categories 1 and 2, and pay 100% of the premium, will also benefit from an employer match. Employers will pay a premium contribution of \$1.9 million for those employees. These

increases, however, are completely offset by substantial decreases in the employer contribution for their employees in the remaining premium categories.

It is important to note that while these structural changes will also occur to the local program (where applicable), the local program will remain a separate program. This proposal will result in the two programs being virtually identical. This is important on two aspects. First, matching the programs up will greatly aid ease of administration, with only one set of rules to govern both plans. This reduces confusion and error. Secondly, BAS development of the ICI program becomes easier if both plans are administered identically.

### **Next Steps**

Redesigning the ICI program will require changes to current law. Specifically, §40.05 (5), 40.61, and 40.62, Wis. Stats. will require amendments to decouple sick leave and associated references to deferred enrollment.

A substantial communication effort will need to occur so that all ETF stakeholders including employers and employees are aware of the changes and impacts. Additionally, a reenrollment effort will need to occur to shift current enrollees from their current rate category and into an EP of their choosing. Most program materials will need to be updated. A third party administrator (TPA) will continue to administer the ICI benefits for ETF until such time as BAS is able to bring the program in house.

Once approved, benefit changes would go into effect January 1, 2019 or 2020.

#### Conclusion

The ICI program is an important benefit for WRS employees. The proposed changes will allow employees to continue to utilize the benefit while simplifying and allowing for more choices. Employers and employees could see substantial premium savings and at the same time enrollment can be enhanced significantly. These changes will reduce the actuarial liability of the state ICI program and allow ETF to eliminate the program deficit by 2022 or 2023.

ETF currently offers multiple long-term disability programs for WRS employees. Closing the long-term component of the ICI program will help ETF eliminate duplicative long-term disability benefit programs and, along with other efforts, help achieve the goal of one short-term and one long-term disability program for all WRS employees.

#### Attachment B



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November 11, 2015

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

#### **RE:** Disability Experience and Plan Design Analysis

#### Dear Deb,

Thank you for asking Milliman to perform an analysis of potential issues with the disability programs sponsored by the State of Wisconsin Department of Employee Trust Funds (ETF). As the first phase of this work, we have performed experience studies to help identify specific issues with the current ICI program, which was in a deficit as of 12/31/2014 and is expected to remain in deficit unless significant premium increases and/or future plan design changes are made. This letter provides a detailed discussion of the study methods and results as well as our thoughts on potential issues and potential future plan design changes. We have organized this information in the following sections of this letter:

- 1. Executive Summary
- 2. Analytical Methods
- 3. Restatement of Historical Experience for Different Benefit Designs
- 4. Interest Adjusted Loss Ratio Studies
- 5. Average Lag Before First Benefit Payment
- 6. Integration with LTDI Benefits or 40.63 Disability Retirement Benefits
- 7. Employee Participation Levels
- 8. Conclusions from Experience Studies
- 9. Additional Considerations

We have also included appendices providing further details of the ICI experience studies across many different segments of the insured population.

Please review the information in this letter and let us know if you have any questions, comments, or concerns.

#### 1. Executive Summary

We have analyzed several different aspects of the State ICI program in order to identify potential plan design issues, and to identify specific areas where the experience has been unfavorable over the past few years. As part of this analysis, we studied the potential impact of reducing the ICI benefit from 75% of an employee's pre-disability earnings to 70% or 65%. Based on this analysis, we believe ICI claim costs could be reduced by 10% or more if the benefit percent were reduced to 70%, and that they could be reduced by 20% or more if the benefit percent were reduced to 65%. We also studied the potential impact of eliminating the \$75 additional monthly benefit for disabled employees whose disability lasts longer than 12 months. This analysis suggests a savings of roughly 3% if the additional benefit is eliminated.

We performed loss ratio studies using historical premium and claim experience from 2010-2014. These studies relate the total cost of claims incurred in a given year (including both actual and estimated future benefit payments) to the premium contributions in that year, and are therefore useful in spotting premium adequacy issues. The study results show that experience varies widely by employer group and specific occupation. The most favorable experience (i.e. where incurred claims were less than premiums) was from the UW System and the Department of Natural Resources and the least favorable experience (i.e. where incurred claims exceeded premiums) was from the Department of Corrections, the Department of Health Services, Department of Veterans Affairs, and the Department of Workforce Development. Furthermore, the historical experience from teachers has been favorable whereas Protective Employees with Social Security and General Employees have had poor experience. The current rate structure does not capture this variation in experience by segment.

The results from the experience studies also suggest potential issues with the State ICI plan's elimination period requirements and premium rate structure, which are closely connected since premium contributions by employees vary by their number of accumulated sick leave days. For example, historical experience from ICI premium category 1 (i.e. employees with fewer than 23 accumulated sick leave days and who pay for premiums in full) has been significantly worse than the experience from ICI premium category 6 (i.e. employees with over 130 days of accumulated sick leave and whose premiums are paid for in full by the State).

We noticed that members with basic coverage only have had worse claim experience than members with supplemental coverage. This is interesting because adverse selection risk is often more prominent in disability buy-up plans which allow employees to purchase higher levels of coverage, but this does not seem to be the case with the ICI plan.

We analyzed the correlation between ICI and LTDI/40.63 experience, and noticed that the segments with higher proportions of claimants receiving LTDI/40.63 benefits typically have more favorable experience, and vice versa. The current pricing of the plan does not take into consideration differences in cost between short-term and long-term disabilities; however, the analysis suggests that this could be an issue.

Finally, we studied employee participation in the State ICI plan and noticed a decreasing trend in participation levels from 2010-2014. Although current overall participation is still relatively high at around 63%, if participation continues to drop it could have adverse effects on the plan since higher levels of participation provide a better spread of risk.

#### Attachment C



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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:

| Assumed Enrollment Distr    | Table 1:<br>ribution in Redesign<br>mination Period | ed ICI Program              |
|-----------------------------|-----------------------------------------------------|-----------------------------|
| ICI Premium<br>Category     | EP Enrollment<br>Scenario 1                         | EP Enrollment<br>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.

| Est                         |                        |                                     | ns from Employers and Emp<br>Choose Plan with 90-day EF |                                  |
|-----------------------------|------------------------|-------------------------------------|---------------------------------------------------------|----------------------------------|
| Current Premium<br>Category | Number of<br>Employees | Change in Employer<br>Contributions | Change in Employee<br>Contributions                     | Total Change in<br>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.

| Est                         |                        |                                     | ns from Employers and Employers Plan with 180-day E |                                  |
|-----------------------------|------------------------|-------------------------------------|-----------------------------------------------------|----------------------------------|
| Current Premium<br>Category | Number of<br>Employees | Change in Employer<br>Contributions | Change in Employee<br>Contributions                 | Total Change in<br>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.

| Est                         |                        |                                     | ns from Employers and Emp<br>Choose Plan with 90-day EF |                                  |
|-----------------------------|------------------------|-------------------------------------|---------------------------------------------------------|----------------------------------|
| Current Premium<br>Category | Number of<br>Employees | Change in Employer<br>Contributions | Change in Employee<br>Contributions                     | Total Change in<br>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)                    |

| Est                         |                        |                                     | ns from Employers and Emp<br>Choose Plan with 180-day E |                                  |
|-----------------------------|------------------------|-------------------------------------|---------------------------------------------------------|----------------------------------|
| Current Premium<br>Category | Number of<br>Employees | Change in Employer<br>Contributions | Change in Employee<br>Contributions                     | Total Change in<br>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          |
|--------------------------------------------|---------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------|------------------------------|---------------|
|                                            | \$50,402,211 \$50,182,768 | \$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  |
| Camer 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  |
| BOY 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)<br>Incurred Claim Cost | (\$32,351,102)            | (\$42,631,421)<br>\$20,473,787 | (\$47,362,824)<br>\$21,340,238 | (\$45,822,126)<br>\$22,243,357 | (\$39,155,317)<br>\$15,594,895 | (\$26,443,856)<br>\$16,254,871 | (\$11,605,864)<br>\$16,942,778 | \$4,404,236  | \$21,939,269<br>\$18,407,158 | \$40,974,643  |
|                                            |                           |                                |                                |                                |                                |                                |                                |              |                              |               |

10

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   | \$50,402,211 \$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                   | \$74,465,858                   | \$76,213,065                   | \$80,161,290                   | \$86,379,291                  | \$94,847,647 | \$105,407,086 |
| 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)<br>Incurred Claim Cost \$20,473,787 | (\$32,351,102) | (\$42,631,421)<br>\$20,473,787 | (\$47,362,824)<br>\$21,340,238 | (\$45,822,126)<br>\$22,243,357 | (\$40,101,736)<br>\$14,595,757 | (\$28,823,657)<br>\$15,213,449 | (\$15,625,247)<br>\$15,857,282 | (\$1,407,660)<br>\$16,528,362 | \$14,170,312 | \$31,071,629  |

11

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          |
|--------------------------------------------|----------------|----------------|--------------------------------|----------------|----------------|--------------------------------|--------------------------------|-----------------------------|--------------|---------------|
| BOYFund 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  |
| Prenium 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  |
| Camer 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)<br>Incurred Claim Cost | (\$32,351,102) | (\$42,631,421) | (\$47,362,824)<br>\$21,340,238 | (\$45,822,126) | (\$39,873,352) | (\$28,470,722)<br>\$14,916,613 | (\$15,148,306)<br>\$15,547,884 | (\$791,325)<br>\$16,205,870 | \$14,942,883 | \$32,018,855  |
|                                            |                |                |                                |                |                |                                |                                |                             |              |               |

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         |
|--------------------------------------------------------------------------------------|-----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------|----------------|--------------|--------------|
| BOYFund Balance                                                                      | \$50,402,211 \$50,182,768   | \$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                                                   | \$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                                                                       | 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                    | \$5,700,787                    | \$11,098,130                   | \$3,894,090                    | \$383,327                      | \$2,508,143    | \$4,850,520    | \$6,764,172  | \$8,708,583  |
| EOYFund 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) (\$42,831,421<br>Incurred Claim Cost \$20,473,787 | (\$32,351,102)              | (\$42,631,421)<br>\$20,473,787 | (\$47,362,824)<br>\$21,340,238 | (\$45,822,126)<br>\$22,243,357 | (\$40,741,779)<br>\$13,394,183 | (\$30,653,328)<br>\$13,961,024 | (\$18,834,436) | (\$6,121,204). | \$7,818,383  | \$22,937,446 |

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.

| Average Number of Si<br>By I | Table 10:<br>ck Leave Hours Used<br>CI Premium Category | in 2013 and 2014 |
|------------------------------|---------------------------------------------------------|------------------|
| 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.

| <b>Table</b><br>Historical Lag (in Mor<br>Benefit Paymer | nths) Before First ICI          |
|----------------------------------------------------------|---------------------------------|
| Premium Category                                         | Average Lag from<br>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.

| Estim                          |                               | Sick Leave Days Ga<br>rio 1: Category 6 Em      |                                |                                        | ICI Program                                       |
|--------------------------------|-------------------------------|-------------------------------------------------|--------------------------------|----------------------------------------|---------------------------------------------------|
| Current<br>Premium<br>Category | Number of<br>Employees<br>(A) | Expected Annual<br>New Claims<br>(B) = (A) x 3% | SL Used<br>Current Plan<br>(C) | Elim. Period<br>Redesigned Plan<br>(D) | Expected SL Days<br>Gained<br>(E) = (B) x (C – D) |
| 1                              | 9,309                         | 279                                             | 22                             | 30                                     |                                                   |
| 2                              | 3,373                         | 101                                             | 64                             | 30                                     | 3,440                                             |
| 3                              | 5,399                         | 162                                             | 64                             | 30                                     | 5,50                                              |
| 4                              | 3,773                         | 113                                             | 90                             | 60                                     | 3,390                                             |
| 5                              | 4,045                         | 121                                             | 130                            | 90                                     | 4,85                                              |
| 6                              | 10,904                        | 327                                             | 130                            | 90                                     | 13,08:                                            |
| 7                              | 2,971                         | 89                                              | 30                             | 30                                     |                                                   |
| 8                              | 4,808                         | 144                                             | 90                             | 90                                     |                                                   |
| 9                              | 638                           | 19                                              | 125                            | 90                                     | 670                                               |
| 10                             | 4,908                         | 147                                             | 130                            | 180                                    |                                                   |
| Total                          | 50,128                        | 1,504                                           | N/A                            | N/A                                    | 30,952                                            |

| Estim                          |                               | Sick Leave Days Ga<br>io 2: Category 6 Emp      |                                |                                        | ICI Program                                       |
|--------------------------------|-------------------------------|-------------------------------------------------|--------------------------------|----------------------------------------|---------------------------------------------------|
| Current<br>Premium<br>Category | Number of<br>Employees<br>(A) | Expected Annual<br>New Claims<br>(B) = (A) x 3% | SL Used<br>Current Plan<br>(C) | Elim. Period<br>Redesigned Plan<br>(D) | Expected SL Days<br>Gained<br>(E) = (B) x (C – D) |
| 1                              | 9,309                         | 279                                             | 22                             | 30                                     |                                                   |
| 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                                    | (                                                 |
| 7                              | 2,971                         | 89                                              | 30                             | 30                                     | C                                                 |
| 8                              | 4,808                         | 144                                             | 90                             | 90                                     | 0                                                 |
| 9                              | 638                           | 19                                              | 125                            | 90                                     | 670                                               |
| 10                             | 4,908                         | 147                                             | 130                            | 180                                    |                                                   |
| 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, 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

| Monthly Sala Minimum \$1.00 \$501.00 \$601.00 \$701.00 | Maximum \$500.99 \$600.99 | 30 Days | Eliminatio<br>60 Days |         |          |
|--------------------------------------------------------|---------------------------|---------|-----------------------|---------|----------|
| \$1.00<br>\$501.00<br>\$601.00                         | \$500.99                  |         | 60 Dave               | 00.70   | 100 D    |
| \$501.00<br>\$601.00                                   |                           | 05 56   |                       | 90 Days | 180 Days |
| \$601.00                                               | \$600.99                  | \$5.56  | \$4.13                | \$3.17  | \$1.6    |
|                                                        |                           | \$6.12  | \$4.55                | \$3.48  | \$1.7    |
| \$701.00                                               | \$700.99                  | \$7.24  | \$5.37                | \$4.11  | \$2.09   |
|                                                        | \$800.99                  | \$8.34  | \$6.21                | \$4.74  | \$2.4    |
| \$801.00                                               | \$900.99                  | \$9.46  | \$7.04                | \$5.37  | \$2.7    |
| \$901.00                                               | \$1,000.99                | \$10.56 | \$7.86                | \$6.00  | \$3.0.   |
| \$1,001.00                                             | \$1,100.99                | \$11.68 | \$8.68                | \$6.65  | \$3.30   |
| \$1,101.00                                             | \$1,200.99                | \$12.80 | \$9.52                | \$7.28  | \$3.6    |
| \$1,201.00                                             | \$1,300.99                | \$13.90 | \$10.34               | \$7.91  | \$4.0    |
| \$1,301.00                                             | \$1,400.99                | \$15.02 | \$11.17               | \$8.54  | \$4.3    |
| \$1,401.00                                             | \$1,500.99                | \$16.14 | \$12.01               | \$9.17  | \$4.6    |
| \$1,501.00                                             | \$1,600.99                | \$17.24 | \$12.83               | \$9.80  | \$4.9    |
| \$1,601.00                                             | \$1,700.99                | \$18.36 | \$13.65               | \$10.45 | \$5.2    |
| \$1,701.00                                             | \$1,800.99                | \$19.46 | \$14.47               | \$11.08 | \$5.6    |
| \$1,801.00                                             | \$1,900.99                | \$20.58 | \$15.31               | \$11.71 | \$5.9    |
| \$1,901.00                                             | \$2,000.99                | \$21.70 | \$16.14               | \$12.34 | \$6.2    |
| \$2,001.00                                             | \$2,100.99                | \$22.80 | \$16.96               | \$12.97 | \$6.5    |
| \$2,101.00                                             | \$2,200.99                | \$23.92 | \$17.80               | \$13.60 | \$6.8    |
| \$2,201.00                                             | \$2,300.99                | \$25.04 | \$18.62               | \$14.23 | \$7.2    |
| \$2,301.00                                             | \$2,400.99                | \$26.14 | \$19.44               | \$14.88 | \$7.5    |
| \$2,401.00                                             | \$2,500.99                | \$27.26 | \$20.27               | \$15.51 | \$7.8    |
| \$2,501.00                                             | \$2,600.99                | \$28.36 | \$21.11               | \$16.14 | \$8.1    |
| \$2,601.00                                             | \$2,700.99                | \$29.48 | \$21.93               | \$16.77 | \$8.4    |
| \$2,701.00                                             | \$2,800.99                | \$30.60 | \$22.75               | \$17.40 | \$8.7    |
| \$2,801.00                                             | \$2,900.99                | \$31.70 | \$23.57               | \$18.03 | \$9.1    |
| \$2,901.00                                             | \$3,000.99                | \$32.82 | \$24.41               | \$18.67 | \$9.4    |
| \$3,001.00                                             | \$3,100.99                | \$33.92 | \$25.24               | \$19.30 | \$9.7    |
| \$3,101.00                                             | \$3,200.99                | \$35.04 | \$26.06               | \$19.93 | \$10.0   |
| \$3,201.00                                             | \$3,300.99                | \$36.16 | \$26.90               | \$20.56 | \$10.4   |
| \$3,301.00                                             | \$3,400.99                | \$37.26 | \$27.72               | \$21.19 | \$10.7   |
| \$3,401.00                                             | \$3,500.99                | \$38.38 | \$28,54               | \$21.82 | \$11.0   |
| \$3,501.00                                             | \$3,600.99                | \$39.50 | \$29.37               | \$22.45 | \$11.3   |
| \$3,601.00                                             | \$3,700.99                | \$40.60 | \$30.21               | \$23.10 | \$11.6   |
| \$3,701.00                                             | \$3,800.99                | \$41.72 | \$31.03               | \$23.73 | \$12.0   |
| \$3,801.00                                             | \$3,900.99                | \$42.82 | \$31.85               | \$24.36 | \$12.3   |
| \$3,901.00                                             | \$4,000.99                | \$43.94 | \$32.69               | \$24.99 | \$12.6   |
| \$4,001.00                                             | \$4,100.99                | \$45.06 | \$33.51               | \$25.62 | \$12.9   |
| \$4,101.00                                             | \$4,200.99                | \$46.16 | \$34.34               | \$26.25 | \$13.2   |
| \$4,201.00                                             | \$4,300.99                | \$47.28 | \$35.16               | \$26.90 | \$13.5   |
| \$4,301.00                                             | \$4,400.99                | \$48.40 | \$36.00               | \$27.53 | \$13.9   |

Table A1 (Continued):

Estimated Monthly Contribution Rates

Benefit Amount: 70% of Pre-Disability Earnings up to a \$7,000 Maximum Monthly Benefit

| Monthly Sa | lary Range | Elimination Period 30 Days 60 Days 90 Days 180 Days |         |         |          |  |  |  |
|------------|------------|-----------------------------------------------------|---------|---------|----------|--|--|--|
| Minimum    | Maximum    |                                                     |         | 90 Days | 180 Days |  |  |  |
| \$4,401.00 | \$4,500.99 | \$49.50                                             | \$36.82 | \$28,16 | \$14.2   |  |  |  |
| \$4,501.00 | \$4,600.99 | \$50.62                                             | \$37.64 | \$28.79 | \$14.5   |  |  |  |
| \$4,601.00 | \$4,700.99 | \$51.72                                             | \$38.47 | \$29.42 | \$14.8   |  |  |  |
| \$4,701.00 | \$4,800.99 | \$52.84                                             | \$39.31 | \$30.05 | \$15.2   |  |  |  |
| \$4,801.00 | \$4,900.99 | \$53.96                                             | \$40.13 | \$30.70 | \$15.5   |  |  |  |
| \$4,901.00 | \$5,000.99 | \$55.06                                             | \$40.95 | \$31.33 | \$15.8   |  |  |  |
| \$5,001.00 | \$5,100.99 | \$56.18                                             | \$41.79 | \$31.96 | \$16.1   |  |  |  |
| \$5,101.00 | \$5,200.99 | \$57.30                                             | \$42.61 | \$32.59 | \$16.4   |  |  |  |
| \$5,201.00 | \$5,300.99 | \$58.40                                             | \$43.44 | \$33.22 | \$16.8   |  |  |  |
| \$5,301.00 | \$5,400.99 | \$59.52                                             | \$44.26 | \$33.85 | \$17.1   |  |  |  |
| \$5,401.00 | \$5,500.99 | \$60.62                                             | \$45.10 | \$34.48 | \$17.4   |  |  |  |
| \$5,501.00 | \$5,600.99 | \$61.74                                             | \$45.92 | \$35.12 | \$17.7   |  |  |  |
| \$5,601.00 | \$5,700.99 | \$62.86                                             | \$46.74 | \$35.75 | \$18.0   |  |  |  |
| \$5,701.00 | \$5,800.99 | \$63.96                                             | \$47.58 | \$36.38 | \$18.3   |  |  |  |
| \$5,801.00 | \$5,900.99 | \$65.08                                             | \$48.41 | \$37.01 | \$18.7   |  |  |  |
| \$5,901.00 | \$6,000.99 | \$66.20                                             | \$49.23 | \$37.64 | \$19.0   |  |  |  |
| \$6,001.00 | \$6,100.99 | \$67.30                                             | \$50.05 | \$38.27 | \$19.3   |  |  |  |
| \$6,101.00 | \$6,200.99 | \$68.42                                             | \$50.89 | \$38.92 | \$19.6   |  |  |  |
| \$6,201.00 | \$6,300.99 | \$69.52                                             | \$51.71 | \$39.55 | \$20.0   |  |  |  |
| \$6,301.00 | \$6,400.99 | \$70.64                                             | \$52.54 | \$40.18 | \$20.3   |  |  |  |
| \$6,401.00 | \$6,500.99 | \$71.76                                             | \$53.38 | \$40.81 | \$20.6   |  |  |  |
| \$6,501.00 | \$6,600.99 | \$72.86                                             | \$54.20 | \$41.44 | \$20.9   |  |  |  |
| \$6,601.00 | \$6,700.99 | \$73.98                                             | \$55.02 | \$42.07 | \$21.2   |  |  |  |
| \$6,701.00 | \$6,800.99 | \$75.10                                             | \$55.84 | \$42.70 | \$21.5   |  |  |  |
| \$6,801.00 | \$6,900.99 | \$76.20                                             | \$56.68 | \$43.35 | \$21.9   |  |  |  |
| \$6,901.00 | \$7,000.99 | \$77.32                                             | \$57.51 | \$43.98 | \$22.2   |  |  |  |
| \$7,001.00 | \$7,100.99 | \$78.42                                             | \$58.33 | \$44.61 | \$22.5   |  |  |  |
| \$7,101.00 | \$7,200.99 | \$79.54                                             | \$59.15 | \$45.24 | \$22.8   |  |  |  |
| \$7,201.00 | \$7,300.99 | \$80.66                                             | \$59.99 | \$45.87 | \$23.1   |  |  |  |
| \$7,301.00 | \$7,400.99 | \$81.76                                             | \$60.81 | \$46.50 | \$23.5   |  |  |  |
| \$7,401.00 | \$7,500.99 | \$82.88                                             | \$61.64 | \$47.15 | \$23.8   |  |  |  |
| \$7,501.00 | \$7,600.99 | \$84.00                                             | \$62.48 | \$47.78 | \$24.1   |  |  |  |
| \$7,601.00 | \$7,700.99 | \$85.10                                             | \$63.30 | \$48.41 | \$24.4   |  |  |  |
| \$7,701.00 | \$7,800.99 | \$86.22                                             | \$64.12 | \$49.04 | \$24.8   |  |  |  |
| \$7,801.00 | \$7,900.99 | \$87.32                                             | \$64.94 | \$49.67 | \$25.1   |  |  |  |
| \$7,901.00 | \$8,000.99 | \$88.44                                             | \$65.78 | \$50.30 | \$25.4   |  |  |  |
| \$8,001.00 | \$8,100.99 | \$89.56                                             | \$66.61 | \$50.93 | \$25.7   |  |  |  |
| \$8,101.00 | \$8,200.99 | \$90.66                                             | \$67.43 | \$51,57 | \$26.0   |  |  |  |
| \$8,201.00 | \$8,300.99 | \$91.78                                             | \$68.27 | \$52.20 | \$26.3   |  |  |  |
| \$8,301.00 | \$8,400.99 | \$92.88                                             | \$69.09 | \$52.83 | \$26.7   |  |  |  |

# Table A1 (Continued): Estimated Monthly Contribution Rates Benefit Amount: 70% of Pre-Disability Earnings up to a \$7,000 Maximum Monthly Benefit

| Monthly S   | alary Range | Elimination Period |         |         |          |  |  |  |
|-------------|-------------|--------------------|---------|---------|----------|--|--|--|
| Minimum     | Maximum     | Maximum 30 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: Estimated Monthly Contribution Rates

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

Table A2 (Continued):
Estimated Monthly Contribution Rates
Benefit Amount: 65% of Pre-Disability Earnings up to a \$6,500 Maximum Monthly Benefit

| Monthly Sa |            | Elimination Period |         |         |          |  |  |  |  |
|------------|------------|--------------------|---------|---------|----------|--|--|--|--|
| Minimum    | Maximum    | 30 Days            | 60 Days | 90 Days | 180 Days |  |  |  |  |
| \$4,401.00 | \$4,500.99 | \$45.42            | \$33.79 | \$25.83 | \$13.0   |  |  |  |  |
| \$4,501.00 | \$4,600.99 | \$46.44            | \$34.55 | \$26.43 | \$13.3   |  |  |  |  |
| \$4,601.00 | \$4,700.99 | \$47.46            | \$35.30 | \$27.00 | \$13.6   |  |  |  |  |
| \$4,701.00 | \$4,800.99 | \$48.50            | \$36.07 | \$27.58 | \$13.9   |  |  |  |  |
| \$4,801.00 | \$4,900.99 | \$49.52            | \$36.82 | \$28.16 | \$14.2   |  |  |  |  |
| \$4,901.00 | \$5,000.99 | \$50.54            | \$37.59 | \$28.74 | \$14.5   |  |  |  |  |
| \$5,001.00 | \$5,100.99 | \$51.56            | \$38.34 | \$29.31 | \$14.8   |  |  |  |  |
| \$5,101.00 | \$5,200.99 | \$52.58            | \$39.10 | \$29.91 | \$15.1   |  |  |  |  |
| \$5,201.00 | \$5,300.99 | \$53.60            | \$39.87 | \$30.49 | \$15.4   |  |  |  |  |
| \$5,301.00 | \$5,400.99 | \$54.62            | \$40.62 | \$31.06 | \$15.7   |  |  |  |  |
| \$5,401.00 | \$5,500.99 | \$55.64            | \$41.39 | \$31.64 | \$16.0   |  |  |  |  |
| \$5,501.00 | \$5,600.99 | \$56.66            | \$42.14 | \$32.22 | \$16.2   |  |  |  |  |
| \$5,601.00 | \$5,700.99 | \$57.68            | \$42.89 | \$32.81 | \$16.5   |  |  |  |  |
| \$5,701.00 | \$5,800.99 | \$58.70            | \$43.66 | \$33.39 | \$16.8   |  |  |  |  |
| \$5,801.00 | \$5,900.99 | \$59.72            | \$44.42 | \$33.97 | \$17.1   |  |  |  |  |
| \$5,901.00 | \$6,000.99 | \$60.74            | \$45.17 | \$34.55 | \$17.4   |  |  |  |  |
| \$6,001.00 | \$6,100.99 | \$61.76            | \$45.94 | \$35.12 | \$17.7   |  |  |  |  |
| \$6,101.00 | \$6,200.99 | \$62.78            | \$46.69 | \$35.70 | \$18.0   |  |  |  |  |
| \$6,201.00 | \$6,300.99 | \$63.80            | \$47.46 | \$36.30 | \$18.3   |  |  |  |  |
| \$6,301.00 | \$6,400.99 | \$64.82            | \$48.21 | \$36.87 | \$18.6   |  |  |  |  |
| \$6,401.00 | \$6,500.99 | \$65.84            | \$48.97 | \$37.45 | \$18.9   |  |  |  |  |
| \$6,501.00 | \$6,600.99 | \$66.86            | \$49.74 | \$38.03 | \$19.2   |  |  |  |  |
| \$6,601.00 | \$6,700.99 | \$67.88            | \$50.49 | \$38.61 | \$19.5   |  |  |  |  |
| \$6,701.00 | \$6,800.99 | \$68.90            | \$51.26 | \$39.18 | \$19.8   |  |  |  |  |
| \$6,801.00 | \$6,900.99 | \$69.92            | \$52.01 | \$39.78 | \$20.1   |  |  |  |  |
| \$6,901.00 | \$7,000.99 | \$70.94            | \$52.76 | \$40.36 | \$20.4   |  |  |  |  |
| \$7,001.00 | \$7,100.99 | \$71.98            | \$53.53 | \$40.93 | \$20.7   |  |  |  |  |
| \$7,101.00 | \$7,200.99 | \$73.00            | \$54.29 | \$41.51 | \$20.9   |  |  |  |  |
| \$7,201.00 | \$7,300.99 | \$74.02            | \$55.06 | \$42.09 | \$21.2   |  |  |  |  |
| \$7,301.00 | \$7,400.99 | \$75.04            | \$55.81 | \$42.68 | \$21.5   |  |  |  |  |
| \$7,401.00 | \$7,500.99 | \$76.06            | \$56.56 | \$43.26 | \$21.8   |  |  |  |  |
| \$7,501.00 | \$7,600.99 | \$77.08            | \$57.33 | \$43.84 | \$22.1   |  |  |  |  |
| \$7,601.00 | \$7,700.99 | \$78.10            | \$58.08 | \$44.42 | \$22.4   |  |  |  |  |
| \$7,701.00 | \$7,800.99 | \$79.12            | \$58.84 | \$44.99 | \$22.7   |  |  |  |  |
| \$7,801.00 | \$7,900.99 | \$80.14            | \$59.61 | \$45.57 | \$23.0   |  |  |  |  |
| \$7,901.00 | \$8,000.99 | \$81.16            | \$60.36 | \$46.17 | \$23.3   |  |  |  |  |
| \$8,001.00 | \$8,100.99 | \$82.18            | \$61.13 | \$46.74 | \$23.0   |  |  |  |  |
| \$8,101.00 | \$8,200.99 | \$83.20            | \$61.88 | \$47.32 | \$23.9   |  |  |  |  |
| \$8,201.00 | \$8,300.99 | \$84.22            | \$62.63 | \$47.90 | \$24.2   |  |  |  |  |
| \$8,301.00 | \$8,400.99 | \$85.24            | \$63.40 | \$48.48 | \$24.5   |  |  |  |  |

## Table A2 (Continued): Estimated Monthly Contribution Rates Benefit Amount: 65% of Pre-Disability Earnings up to a \$6,500 Maximum Monthly Benefit

| Monthly S   | alary 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  |  |  |  |  |

#### 2. Analytical methods

The analysis described in this letter was performed using claim data from 2010-2014 and member data from the insurance files from 2009-2013, which were provided to us by ETF. We used the historical claim data to estimate incurred claims from 2010 to 2014. Incurred claims represent the present value of expected total benefits for all disabilities that begin in a given year, with the present value expressed as of the year of disability. For claims that were both incurred and closed within the 2010-2014 experience period, the incurred claims represent the present value of all of the benefit payments made on those claims. For claims that were incurred between 2010 and 2014 and were still open at the end of the experience period (i.e. as of 12/31/2014), the incurred claims include an estimated runoff of future benefit payments, as well as the present value of payments already made.

We used the ICI premium tables and the insurance files provided to us by ETF to estimate historical ICI premium contributions. For every member listed on the insurance file, we looked up the gross contribution amount (i.e., the cost of basic insurance that provides benefits up to \$4,000 per month) and supplemental contribution amount (i.e., the cost of supplemental insurance providing an additional \$3,500 per month, if applicable) based on the member's salary and ICI premium category listed on the file. For example, if a member is listed on the file with ICI premium category 20 (i.e., supplemental coverage with over 130 days of accumulated sick leave), we added together the gross and supplemental premium amounts corresponding to category 6 from the premium tables. The following is a mapping of the premium categories listed on the insurance files to the categories from the premium tables, which we used to calculate contributions from 2010- 2014:

| Table 1  Mapping of Premium Categories from Insurance Files to ICI Premium Tables |                                               |                           |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------|---------------------------|--|--|--|--|--|
| Insurance File<br>Category                                                        | Insurance File<br>Category Description        | Premium Table<br>Category |  |  |  |  |  |
| 0                                                                                 | State pays all: Over 130 days of sick leave   | 6                         |  |  |  |  |  |
| 1                                                                                 | Fewer than 23 days of sick leave              | 1                         |  |  |  |  |  |
| 2                                                                                 | 23-65 days of sick leave                      | 2                         |  |  |  |  |  |
| 3                                                                                 | Special category                              | 3                         |  |  |  |  |  |
| 4                                                                                 | 65-91 days of sick leave                      | 4                         |  |  |  |  |  |
| 5                                                                                 | 91-130 days of sick leave                     | 5                         |  |  |  |  |  |
| 6                                                                                 | No coverage                                   | NA                        |  |  |  |  |  |
| 9                                                                                 | Reported on another record                    | NA                        |  |  |  |  |  |
| 12                                                                                | UW faculty - 30 Day EP                        | 7                         |  |  |  |  |  |
| 13                                                                                | UW faculty - 90 Day EP                        | 8                         |  |  |  |  |  |
| 14                                                                                | UW faculty - 125 Day EP                       | 9                         |  |  |  |  |  |
| 15                                                                                | UW faculty - 180 Day EP                       | 10                        |  |  |  |  |  |
| 20                                                                                | Supplemental: over 130 days of sick leave     | 6                         |  |  |  |  |  |
| 21                                                                                | Supplemental: Less than 23 days of sick leave | 1                         |  |  |  |  |  |
| 22                                                                                | Supplemental: 23-65 days of sick leave        | 2                         |  |  |  |  |  |
| 23                                                                                | Supplemental: Special Category                | 3                         |  |  |  |  |  |
| 24                                                                                | Supplemental: 65-91 days of sick leave        | 4                         |  |  |  |  |  |
| 25                                                                                | Supplemental: 91-130 days of sick leave       | 5                         |  |  |  |  |  |
| 32                                                                                | Supplemental: UW faculty - 30 Day EP          | 7                         |  |  |  |  |  |
| 33                                                                                | Supplemental: UW faculty - 90 Day EP          | 8                         |  |  |  |  |  |
| 34                                                                                | Supplemental: UW faculty - 125 Day EP         | 9                         |  |  |  |  |  |
| 35                                                                                | Supplemental: UW faculty - 180 Day EP         | 10                        |  |  |  |  |  |

We used the insurance file from a given year to estimate premium contributions in the next year, which assumes that the insurance files provide a snapshot of active members at year end. For example, we used the 2010 insurance files to estimate 2011 contributions by looking up premium rates from the 2011 premium tables. Although this is a somewhat simplified approach for estimating historical contributions at the member level, since it doesn't take into account employees who began or terminated employment in the middle of the year, we believe it is the best approach given the data that is available. For validation, we compared our estimated contributions to actual contributions from 2010-2014. Our estimates were within about 2-4% of actual contributions for this period. The following table shows a comparison of estimated contributions to actual contributions from 2010-2014.

| Table 2 State ICI Plan Comparison of Estimated to Actual Premium Contributions 2010-2014 |                                  |              |      |  |  |  |  |
|------------------------------------------------------------------------------------------|----------------------------------|--------------|------|--|--|--|--|
| Year                                                                                     | ETF Financials Milliman Differen |              |      |  |  |  |  |
| 2010                                                                                     | \$14,081,000                     | \$13,536,006 | 3.9% |  |  |  |  |
| 2011                                                                                     | \$13,688,000                     | \$13,416,684 | 2.0% |  |  |  |  |
| 2012                                                                                     | \$14,338,000                     | \$13,755,201 | 4.1% |  |  |  |  |
| 2013                                                                                     | \$14,985,000                     | \$14,531,709 | 3.0% |  |  |  |  |
| 2014                                                                                     | \$15,747,000                     | \$15,294,299 | 2.9% |  |  |  |  |

#### 3. Restatement of Historical Experience for Different Benefit Designs

The ICI plan provides basic benefits up to 75% of a participant's average monthly earnings, capped at \$4,000 per month. Supplemental coverage is available to employees whose annual salary exceeds \$64,000, and it provides an additional benefit up to \$3,500 per month. The plan also provides an additional benefit of \$75 per month to disabled employees whose disability lasts longer than 12 months, to help these employees with medical fees.

Both the 75% income replacement level and the \$75 additional benefit are not common provisions of typical disability insurance plans. Most disability plans feature maximum income replacement levels of 60%, with more generous plans providing income replacement in the range of 65-70%. The 75% benefit level featured in the ICI plan is very high, particularly because the benefits are often non-taxable (when premiums are paid with post-tax contributions). The taxable portion of benefits is based on the proportion of premium paid by the employer. For example, when the employee pays 100% of premiums with after-tax contributions the benefits are 100% non-taxable. Please note that a non-taxable 75% benefit could easily exceed an employee's actual after tax earnings, which could exacerbate risk and reduce return-to-work incentives.

The \$75 additional benefit payable to employees whose disability lasts longer than 12 months is also very unusual. This additional benefit, coupled with the already high income replacement level, could reduce return-to-work incentives.

We have restated historical ICI experience by assuming different benefit designs, in order to assess the potential impact of making changes to the ICI plan provisions. We restated the experience by adjusting both the historical benefit payments and the estimated liability for claims that were open as of 12/31/2014. We considered the following different benefit designs and calculated the expected decrease in incurred claims corresponding to each:

- 1. Maximum income replacement of 70% of salary
- 2. Maximum income replacement of 65% of salary
- 3. No additional benefit of \$75 for disabilities lasting longer than 12 months

The following table shows the expected impact of reducing the State ICI benefit percent from the current 75% level to 70%.

| Table 3 Actual and Restated Incurred Claims Experience from 2010 to 2014 State ICI Plan |                                               |                              |             |  |  |  |  |  |
|-----------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------|-------------|--|--|--|--|--|
| Disability                                                                              | Disability Incurred Claims Expected Impact of |                              |             |  |  |  |  |  |
| Year                                                                                    | Current Benefit                               | 70% Benefit                  | Plan Change |  |  |  |  |  |
| 2010                                                                                    | \$16,603,066<br>\$18,887,693                  | \$14,752,238<br>\$16,856,359 | 11%<br>11%  |  |  |  |  |  |
| 2012                                                                                    | \$19,771,263                                  | \$17,615,081                 | 11%         |  |  |  |  |  |
| 2013                                                                                    | \$21,531,252                                  | \$19,326,147                 | 10%         |  |  |  |  |  |
| 2014                                                                                    | \$16,579,392                                  | \$15,133,623                 | 9%          |  |  |  |  |  |
| Total                                                                                   | \$93,372,666                                  | \$83,683,448                 | 10%         |  |  |  |  |  |

Based on this analysis, we would expect incurred claims to decrease by approximately 10% if the benefit percent is reduced from 75% to 70%. (The reduction is greater than the percentage change in the gross benefit because the offsets are unaffected, meaning that the net benefit decreases by a larger percentage than the gross benefit). It is possible that incurred claims would decrease by more than 10% if the benefit percent is reduced to 70%, because our analysis does not take into consideration any differences in claimants' behavior that may result from the different benefit levels. For example, to the extent that individuals are more motivated to return to work when their benefit is lower, this dynamic was not captured in the analysis. In other words, we restated the historical experience by adjusting the benefit amounts accordingly, but we did not assume different claim termination experience.

The following table shows the expected impact of reducing the State ICI benefit percent from the current 75% level to 65%.

|            | Table 4                                                          |              |             |  |  |  |  |  |  |
|------------|------------------------------------------------------------------|--------------|-------------|--|--|--|--|--|--|
| A          | Actual and Restated Incurred Claims Experience from 2010 to 2014 |              |             |  |  |  |  |  |  |
|            | State ICI Plan                                                   |              |             |  |  |  |  |  |  |
| Disability | ility Incurred Claims Expected Impact of                         |              |             |  |  |  |  |  |  |
| Year       | Current Benefit                                                  | 65% Benefit  | Plan Change |  |  |  |  |  |  |
| 2010       | \$16,603,066                                                     | \$13,075,276 | 21%         |  |  |  |  |  |  |
| 2011       | \$18,887,693                                                     | \$15,021,692 | 20%         |  |  |  |  |  |  |
| 2012       | \$19,771,263                                                     | \$15,684,056 | 21%         |  |  |  |  |  |  |
| 2013       | \$21,531,252                                                     | \$17,249,854 | 20%         |  |  |  |  |  |  |
| 2014       | \$16,579,392                                                     | \$13,705,210 | 17%         |  |  |  |  |  |  |
| Total      | \$93,372,666                                                     | \$74,736,087 | 20%         |  |  |  |  |  |  |

From these results, we would expect incurred claims to decrease by at least 20% if the benefit percent is reduced from 75% to 65%, and potentially more due to expected differences in claimants' behavior and return-to-work patterns.

Finally, the following table shows the expected impact of eliminating the \$75 additional monthly benefit payable for disabilities lasting longer than 12 months.

| Table 5                                                          |                                               |              |    |  |  |  |  |  |
|------------------------------------------------------------------|-----------------------------------------------|--------------|----|--|--|--|--|--|
| Actual and Restated Incurred Claims Experience from 2010 to 2014 |                                               |              |    |  |  |  |  |  |
|                                                                  | State                                         | : ICI Plan   |    |  |  |  |  |  |
| Disability                                                       | Disability Incurred Claims Expected Impact of |              |    |  |  |  |  |  |
| Year                                                             | Current Benefit                               | Plan Change  |    |  |  |  |  |  |
| 2010                                                             | \$16,603,066                                  | \$16,085,841 | 3% |  |  |  |  |  |
| 2011                                                             | \$18,887,693                                  | \$18,379,334 | 3% |  |  |  |  |  |
| 2012                                                             | \$19,771,263                                  | \$19,219,860 | 3% |  |  |  |  |  |
| 2013                                                             | \$21,531,252                                  | \$20,932,617 | 3% |  |  |  |  |  |
| 2014                                                             | 4 \$16,579,392 \$15,947,675 49                |              |    |  |  |  |  |  |
| Total                                                            | \$93,372,666                                  | \$90,565,327 | 3% |  |  |  |  |  |

Incurred claims are expected to decrease by approximately 3% if the \$75 additional monthly benefit is removed from the plan.

#### 4. Interest Adjusted Loss Ratio Studies

We have performed interest-adjusted loss ratio (IALR) studies using claim data from 2010-2014 and member data from the insurance files from 2009-2013. The IALR's were calculated by dividing the total amount of claims incurred in a given year by total premium contributions in that year. Any segments for which the IALR's are greater than 100% have had poor claims experience (i.e. the incurred claims exceed the premium contributions). Please note, however, that a typical target IALR for a plan of this size often falls in the range of about 70-80% in order to allow for expenses and a risk margin.

The key results from the IALR studies are summarized in the following tables. More detailed results have been provided in Appendix A of this letter. Please note that in each of the tables shown below, we have included total premium contributions between 2010-2014 in the final column in order to provide perspective on the size of each segment, and therefore the relative credibility of results for each segment. As a rough guideline, we find that segments with 2010-2014 premium of \$1 million or more have at least partial credibility, while smaller segments may show greater volatility.

Table 6 shows the IALR's for the State ICI plan from 2010-2014, both in total and by employer.

| Table 6<br>State ICI Plan                                              |      |      |      |      |      |           |            |  |  |
|------------------------------------------------------------------------|------|------|------|------|------|-----------|------------|--|--|
| Interest-Adjusted Loss Ratios by Year of Disability and Employer Group |      |      |      |      |      |           |            |  |  |
| Employer Group                                                         | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |
| Dept. of Administration                                                | 76%  | 64%  | 66%  | 196% | 69%  | 94%       | 986,687    |  |  |
| Dept. of Corrections                                                   | 210% | 312% | 291% | 276% | 239% | 265%      | 11,264,136 |  |  |
| Dept. of Health Services                                               | 200% | 286% | 274% | 225% | 192% | 234%      | 5,850,627  |  |  |
| Dept. of Natural Resources                                             | 31%  | 27%  | 61%  | 9%   | 30%  | 31%       | 1,938,956  |  |  |
| Dept. of Revenue                                                       | 82%  | 168% | 14%  | 57%  | 130% | 90%       | 848,499    |  |  |
| Dept. of Transportation                                                | 75%  | 61%  | 65%  | 94%  | 72%  | 74%       | 3,080,754  |  |  |
| Dept. of Veterans Affairs                                              | 363% | 371% | 797% | 828% | 699% | 617%      | 1,095,397  |  |  |
| Dept. of Workforce Dev.                                                | 228% | 359% | 248% | 174% | 199% | 237%      | 1,480,660  |  |  |
| UW System                                                              | 60%  | 44%  | 48%  | 69%  | 45%  | 53%       | 30,339,792 |  |  |
| UW Hospital Authority                                                  | 144% | 124% | 128% | 138% | 176% | 144%      | 9,557,952  |  |  |
| Other                                                                  | 87%  | 124% | 129% | 127% | 97%  | 112%      | 6,395,539  |  |  |
| NA                                                                     | NA   | NA   | NA   | NA   | NA   | NA        | -          |  |  |
| Total                                                                  | 118% | 138% | 138% | 144% | 125% | 132%      | 72,839,000 |  |  |

The overall IALR's (shown in the row labeled "Total") indicate that claim experience has been unfavorable relative to premium contributions from 2010-2014, and that the experience has generally deteriorated during the study period. The slight improvement in 2014 is not yet fully credible since much of the claim cost in that year consists of the estimated liability for incurred but not reported claims.

Based on the IALR's shown above, the unfavorable experience on the State ICI plan appears to be driven by five employer groups: the Department of Corrections, the Department of Health Services, the Department of Veterans Affairs, the Department of Workforce Development and the University of Wisconsin Hospital Authority. Interestingly, the experience from the UW System, which makes up almost half of the entire plan, has been much more favorable than overall experience.

We also looked at the experience among different occupations. Table 7 shows the IALR's by occupation:

| Table 7 State ICI Plan Interest-Adjusted Loss Ratios by Year of Disability and Occupation |      |      |       |      |      |           |            |  |  |
|-------------------------------------------------------------------------------------------|------|------|-------|------|------|-----------|------------|--|--|
| Occupation                                                                                | 2010 | 2011 | 2012  | 2013 | 2014 | 2010-2014 | Premium    |  |  |
| General Employee                                                                          | 146% | 171% | 170%  | 174% | 159% | 164%      | 39,806,558 |  |  |
| Court Reporters                                                                           | 379% | 430% | 15%   | 5%   | 357% | 241%      | 281,503    |  |  |
| Exec. Pay Plan                                                                            | 4%   | 0%   | 0%    | 8%   | 0%   | 3%        | 303,385    |  |  |
| Protective Occ. With S.S.                                                                 | 181% | 269% | 265%  | 268% | 217% | 240%      | 9,459,529  |  |  |
| Supreme Court Judges                                                                      | 0%   | 0%   | 0%    | 0%   | 0%   | 0%        | 5,953      |  |  |
| Legislator/Officer                                                                        | 78%  | 0%   | 1584% | 0%   | 38%  | 251%      | 104,796    |  |  |
| Court of Appeals Judges                                                                   | 0%   | 0%   | 0%    | 0%   | 0%   | 0%        | 17,407     |  |  |
| Circuit Judges                                                                            | 0%   | 0%   | 0%    | 0%   | 0%   | 0%        | 362,473    |  |  |
| Teachers                                                                                  | 38%  | 20%  | 26%   | 39%  | 24%  | 29%       | 22,410,341 |  |  |
| UW Exec. Teachers                                                                         | 0%   | 0%   | 0%    | 0%   | 0%   | 0%        | 81,013     |  |  |
| Non-WRS Participant                                                                       | 0%   | 297% | 326%  | 145% | 28%  | 186%      | 6,041      |  |  |
| NA                                                                                        | NA   | NA   | NA    | NA   | NA   | NA        | -          |  |  |
| Total                                                                                     | 118% | 138% | 138%  | 144% | 125% | 132%      | 72,839,000 |  |  |

The poor experience was driven by general employee occupations and protective occupations with Social Security. Teachers had favorable experience in every year, and many of the teachers that participate in ICI are employees of the University of Wisconsin system. Although court reporters, legislators and non-WRS participants also have total IALR's greater than 100%, the experience in these segments is not very credible (based on relatively low premium contributions in the last column).

Table 8 shows the IALR's by premium category (corresponding to categories from the premium tables):

| Table 8 State ICI Plan Interest-Adjusted Loss Ratios by Year of Disability and Premium Category |      |      |      |      |      |           |            |  |  |
|-------------------------------------------------------------------------------------------------|------|------|------|------|------|-----------|------------|--|--|
| Prem. Category                                                                                  | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |
| 1                                                                                               | 267% | 396% | 308% | 336% | 307% | 322%      | 19,236,415 |  |  |
| 2                                                                                               | 107% | 99%  | 88%  | 98%  | 85%  | 95%       | 6,378,683  |  |  |
| 3                                                                                               | 80%  | 82%  | 158% | 133% | 88%  | 108%      | 6,402,615  |  |  |
| 4                                                                                               | 88%  | 81%  | 200% | 97%  | 179% | 131%      | 4,112,943  |  |  |
| 5                                                                                               | 79%  | 66%  | 58%  | 110% | 69%  | 77%       | 3,621,272  |  |  |
| 6                                                                                               | 17%  | 8%   | 22%  | 23%  | 22%  | 18%       | 11,170,003 |  |  |
| 7                                                                                               | 61%  | 10%  | 22%  | 53%  | 26%  | 34%       | 8,636,545  |  |  |
| 8                                                                                               | 36%  | 17%  | 47%  | 30%  | 15%  | 29%       | 6,940,385  |  |  |
| 9                                                                                               | 0%   | 0%   | 0%   | 5%   | 0%   | 1%        | 1,053,998  |  |  |
| 10                                                                                              | 4%   | 20%  | 3%   | 0%   | 5%   | 6%        | 5,286,140  |  |  |
| NA                                                                                              | NA   | NA   | NA   | NA   | NA   | NA        | -          |  |  |
| Total                                                                                           | 118% | 138% | 138% | 144% | 125% | 132%      | 72,839,000 |  |  |

Categories 1-6 are for employees other than UW faculty, with category 1 corresponding to employees with the least accrued sick leave and who pay the full cost of insurance, and category 6 corresponding to employees with the most accrued sick leave and who pay the lowest premiums. Categories 7-10 are for UW faculty and vary by elimination period (category 7 = 30 days, category 8 = 90 days, category 9 = 125 days and category 10 = 180 days). The unfavorable experience was primarily from members in premium category 1, and to a much lesser degree from members in categories 3 and 4. It is interesting that category 2 had more favorable experience than categories 3 and 4, disrupting the generally decreasing trends from categories 1 through 6. Categories 7-10 have had favorable experience and correspond to UW faculty.

Table 9 shows the IALR's by gender:

| Table 9 |          |             |               |             |                 |           |            |  |
|---------|----------|-------------|---------------|-------------|-----------------|-----------|------------|--|
|         |          |             | State IC      | CI Plan     |                 |           |            |  |
|         | Interest | -Adjusted L | oss Ratios by | Year of Dis | sability and Ge | nder      |            |  |
| Gender  | 2010     | 2011        | 2012          | 2013        | 2014            | 2010-2014 | Premium    |  |
| Female  | 149%     | 175%        | 158%          | 172%        | 160%            | 163%      | 39,553,293 |  |
| Male    | 80%      | 92%         | 113%          | 104%        | 76%             | 93%       | 33,279,898 |  |
| NA      | 29351%   | NA          | 7945%         | 15890%      | 22579%          | 20317%    | 5,809      |  |
| Total   | 118%     | 138%        | 138%          | 144%        | 125%            | 132%      | 72,839,000 |  |

Females have had higher IALR's than males in every year. This is not surprising since the contribution rates do not vary by gender, and because disability claim costs tend to be higher for females. The patterns in the table above are very typical of disability plans that charge the same premiums for males and females, which is the case for most group plans.

Table 10 shows the IALR's by sick leave used in the prior year:

| Table 10<br>State ICI Plan |                                                                                           |      |        |         |      |           |            |  |  |  |
|----------------------------|-------------------------------------------------------------------------------------------|------|--------|---------|------|-----------|------------|--|--|--|
| Interest                   | Interest-Adjusted Loss Ratios by Year of Disability and Sick Leave Used in the Prior Year |      |        |         |      |           |            |  |  |  |
| SL Used                    | 2010                                                                                      | 2011 | 2012   | 2013    | 2014 | 2010-2014 | Premium    |  |  |  |
| 0-24 hours                 | 50%                                                                                       | 26%  | 37%    | 49%     | 34%  | 39%       | 35,353,231 |  |  |  |
| 25-49 hours                | 52%                                                                                       | 60%  | 115%   | 115%    | 67%  | 82%       | 9,504,811  |  |  |  |
| 50-74 hours                | 176%                                                                                      | 178% | 203%   | 167%    | 193% | 183%      | 7,397,394  |  |  |  |
| 75-99 hours                | 190%                                                                                      | 214% | 168%   | 227%    | 239% | 208%      | 5,872,116  |  |  |  |
| 100-124 hours              | 219%                                                                                      | 340% | 325%   | 356%    | 249% | 296%      | 5,219,461  |  |  |  |
| 125-149 hours              | 247%                                                                                      | 425% | 337%   | 327%    | 418% | 347%      | 4,104,247  |  |  |  |
| 150-174 hours              | 278%                                                                                      | 345% | 397%   | 416%    | 493% | 379%      | 1,870,983  |  |  |  |
| 175-199 hours              | 94%                                                                                       | 487% | 418%   | 354%    | 364% | 335%      | 1,000,271  |  |  |  |
| 200-224 hours              | 182%                                                                                      | 388% | 405%   | 498%    | 379% | 367%      | 643,701    |  |  |  |
| 225-249 hours              | 305%                                                                                      | 255% | 77%    | 594%    | 484% | 328%      | 414,130    |  |  |  |
| 250+ hours                 | 204%                                                                                      | 228% | 528%   | 234%    | 241% | 290%      | 1,457,591  |  |  |  |
| NA                         | NA                                                                                        | NA   | 16967% | 107368% | NA   | 94968%    | 1,065      |  |  |  |
| Total                      | 118%                                                                                      | 138% | 138%   | 144%    | 125% | 132%      | 72,839,000 |  |  |  |

Not surprisingly, the IALR's generally increase with the number of sick leave hours used in the prior year. Members who used 50 or more hours in the prior year have had poor experience.

Table 11 shows the IALR's by coverage type:

| Table 11      |                |            |              |               |                |           |            |  |  |
|---------------|----------------|------------|--------------|---------------|----------------|-----------|------------|--|--|
|               | State ICI Plan |            |              |               |                |           |            |  |  |
|               | Interest-Adj   | usted Loss | Ratios by Ye | ar of Disabil | ity and Covera | ige Type  |            |  |  |
| Coverage Type | 2010           | 2011       | 2012         | 2013          | 2014           | 2010-2014 | Premium    |  |  |
| Basic only    | 134%           | 161%       | 146%         | 159%          | 136%           | 147%      | 56,431,370 |  |  |
| Supplemental  | 50%            | 50%        | 109%         | 84%           | 84%            | 77%       | 16,407,630 |  |  |
| NA            | NA             | NA         | NA           | NA            | NA             | NA        | ı          |  |  |
| Total         | 118%           | 138%       | 138%         | 144%          | 125%           | 132%      | 72,839,000 |  |  |

It is interesting that members with basic coverage only have had worse claim experience than members with supplemental coverage. Oftentimes, adverse selection risk is more prominent in disability buy-up plans which allow employees to purchase higher levels of coverage. This does not appear to be the case with the supplemental State ICI plan, possibly because participation in the basic plan is also voluntary. In addition, group disability experience tends to be more favorable at higher salaries than at lower salaries, and this dynamic may outweigh the cost of adverse selection, resulting in more favorable experience for supplemental versus basic coverage.

#### 5. Average Lag Before First Benefit Payment

We have studied the average lag before the first benefit payment is made for State ICI claims incurred from 2010 to 2014. State ICI benefits begin only after an elimination period is satisfied. However, the elimination period varies by member and employer group. For non-UW faculty, the elimination period is equal to the greater of (1) sick leave up to a maximum of 130 working days and (2) 30 days. The elimination period is only 30 days if employees qualify for LTDI benefits (i.e. have a permanent and totally disabling condition) and elect to terminate employment. Employees who terminate their employment due to disability may convert their sick leave balances to help cover health insurance premiums. The decision about whether or not to terminate employment is an important and complicated one that employees have to make if they qualify for LTDI benefits. For UW faculty, the elimination period is equal to the greater of (1) sick leave up to a maximum of 130 working days and (2) 30, 90, 125 or 180 days chosen by the employee. UW faculty also have the option to convert their sick leave to help pay health insurance premiums if they are permanently disabled or retired.

The following table shows the average lag (in months) before the first ICI benefit payment was made for UW faculty and non-UW faculty for claims incurred between 1/1/2010 and 12/31/2014.

| Table 12 Average Lag (in Months) Before First State ICI Benefit Payment UW Faculty vs. Non-UW Faculty |      |      |      |      |      |      |  |
|-------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|--|
| Employer Group                                                                                        |      |      |      |      |      |      |  |
| UW Faculty 4.92 3.24 3.87 4.24 2.23 4.00                                                              |      |      |      |      |      |      |  |
| Non-UW Faculty                                                                                        | 2.82 | 2.52 | 2.72 | 2.70 | 1.17 | 2.45 |  |

The average lag was greater for UW faculty versus non-UW faculty in every year and in total. The historical claims experience from UW faculty was also much better over the same period of time, suggesting a potential correlation between the elimination period provision and claims experience. (The 2014 experience is not yet meaningful due to the large number of incurred but not reported claims as of 12/31/2014).

We noticed similar correlations when we compared average lags to IALR's across employer groups, as shown in the following table.

| Table 13                                                  |              |             |  |  |  |  |  |
|-----------------------------------------------------------|--------------|-------------|--|--|--|--|--|
| Comparison of IALR's and Average Lag Before First Payment |              |             |  |  |  |  |  |
| By Emp                                                    | oloyer Group |             |  |  |  |  |  |
| Employer Group                                            | 2010-2014    | 2010-2014   |  |  |  |  |  |
| Employer Group                                            | IALR         | Average Lag |  |  |  |  |  |
| Dept. of Veterans Affairs                                 | 617%         | 2.37        |  |  |  |  |  |
| Dept. of Corrections                                      | 265%         | 2.48        |  |  |  |  |  |
| Dept. of Workforce Dev.                                   | 237%         | 2.48        |  |  |  |  |  |
| Dept. of Health Services                                  | 234%         | 2.32        |  |  |  |  |  |
| UW Hospital Authority                                     | 144%         | 1.88        |  |  |  |  |  |
| Other                                                     | 112%         | 2.60        |  |  |  |  |  |
| Dept. of Administration                                   | 94%          | 3.53        |  |  |  |  |  |
| Dept. of Revenue                                          | 90%          | 3.36        |  |  |  |  |  |
| Dept. of Transportation                                   | 74%          | 3.24        |  |  |  |  |  |
| UW System                                                 | 53%          | 3.07        |  |  |  |  |  |
| Dept. of Natural Resources                                | 31%          | 4.33        |  |  |  |  |  |

Additional details of the lag analysis and results have been provided in Appendix D of this letter.

#### 6. Integration with LTDI or 40.63 Disability Retirement Benefits

We have studied the experience among ICI claimants who have and have not been approved for LTDI or 40.63 disability retirement benefits. We identified ICI claimants who had been awarded LTDI or "Disability Pension" benefits in the claim databases, and then calculated the proportion of ICI claimants who received LTDI or 40.63 benefits for each of the different segments, such as employer group, occupation, gender, etc. We compared these results to the IALR study results to see if there is some connection between claims experience and LTDI/40.63 approval rates, and we noticed that the segments with favorable experience often have higher proportions of LTDI/40.63. For example, the following table compares the 2010-2014 IALR's to the proportion of ICI claimants who received LTDI or 40.63 benefits across different employer groups.

| Table 14                                                                |           |                   |  |  |  |  |  |  |
|-------------------------------------------------------------------------|-----------|-------------------|--|--|--|--|--|--|
| Comparison of IALR's and Proportion of State ICI Claims with LTDI/40.63 |           |                   |  |  |  |  |  |  |
| By Employer Group                                                       |           |                   |  |  |  |  |  |  |
| Employer Group                                                          | 2010-2014 | % ICI Claims with |  |  |  |  |  |  |
| Employer Group                                                          | IALR      | LTDI/40.63        |  |  |  |  |  |  |
| Dept. of Veterans Affairs                                               | 617%      | 9%                |  |  |  |  |  |  |
| Dept. of Corrections                                                    | 265%      | 15%               |  |  |  |  |  |  |
| Dept. of Workforce Dev.                                                 | 237%      | 16%               |  |  |  |  |  |  |
| Dept. of Health Services                                                | 234%      | 18%               |  |  |  |  |  |  |
| UW Hospital Authority                                                   | 144%      | 9%                |  |  |  |  |  |  |
| Other                                                                   | 112%      | 19%               |  |  |  |  |  |  |
| Dept. of Administration                                                 | 94%       | 25%               |  |  |  |  |  |  |
| Dept. of Revenue                                                        | 90%       | 41%               |  |  |  |  |  |  |
| Dept. of Transportation                                                 | 74%       | 32%               |  |  |  |  |  |  |
| UW System                                                               | 53%       | 22%               |  |  |  |  |  |  |
| Dept. of Natural Resources                                              | 31%       | 33%               |  |  |  |  |  |  |
| Total                                                                   | 132%      | 16%               |  |  |  |  |  |  |

From the last row in Table 14 above, the overall proportion of ICI claimants with LTDI/40.63 benefits was 16%. This value may be a little understated, however, since it includes experience from claims incurred in 2013 and 2014 whose LTDI/40.63 experience may not have been fully developed by the 12/31/2014 valuation date (since many claimants are awarded LTDI/40.63 benefits later than ICI benefits). To put this into perspective, for ICI claims incurred in 2010 the proportion with LTDI/40.63 benefits as of 12/31/2014 was 22%; for claims incurred in 2011 the proportion was 21%; for claims incurred in 2012 the proportion was 19%; for claims incurred in 2013 the proportion was 13%; and for claims incurred in 2014 the proportion was only 2% (see Appendix C for additional details of the LTDI/40.63 analysis). Based on this historical pattern, we would estimate the percentage of ICI claimants who receive LTDI/40.63 benefits to be approximately 20%.

The results from Table 14 (and tables 15 to 17 below) suggest that ICI claims experience is correlated with the proportion of ICI claimants who qualify for LTDI/40.63 benefits. Segments with lower proportions of LTDI/40.63 typically have worse claims experience. One reason for this is that LTDI/40.63 benefits reduce the ICI benefit amount dollar for dollar, so the incurred claims amounts would naturally be lower. This is especially true because the ICI valuation assumptions do not currently include an estimated LTDI/40.63 offset assumption for ICI claimants who have not received LTDI/40.63 benefits as of the valuation date.

Another reason why segments with lower proportions of LTDI/40.63 typically have worse experience may be attributable to claim characteristics. Claimants with LTDI or 40.63 benefits by definition are severely disabled, meaning that their disabilities are expected to last for long periods of time and that they are expected to receive Social Security Disability Income benefits. On the other hand, ICI claimants who do not have LTDI or 40.63 benefits may possess very different characteristics, such as short-term disabilities which occur relatively frequently but do not last longer than 12 months or so. In other words, the variation in ICI claim experience by segment is likely driven less by the type of severe disability that qualifies for LTDI or 40.63 benefits, and more by shorter-term or less severe disabilities.

Tables 15 - 17 show other segments where we noticed that higher proportions of LTDI/40.63 corresponds to more favorable claims experience, and vice versa.

| Table 15                                                                |           |                   |  |  |  |  |  |  |
|-------------------------------------------------------------------------|-----------|-------------------|--|--|--|--|--|--|
| Comparison of IALR's and Proportion of State ICI Claims with LTDI/40.63 |           |                   |  |  |  |  |  |  |
| By Gender                                                               |           |                   |  |  |  |  |  |  |
| Candar                                                                  | 2010-2014 | % ICI Claims with |  |  |  |  |  |  |
| Gender                                                                  | IALR      | LTDI/40.63        |  |  |  |  |  |  |
| Female                                                                  | 163%      | 15%               |  |  |  |  |  |  |
| Male                                                                    | 93%       | 21%               |  |  |  |  |  |  |

| Table 16 Comparison of IALR's and Proportion of State ICI Claims with LTDI/40.63 |           |                   |  |  |  |  |  |
|----------------------------------------------------------------------------------|-----------|-------------------|--|--|--|--|--|
| By Coverage Type                                                                 |           |                   |  |  |  |  |  |
| Coverage                                                                         | 2010-2014 | % ICI Claims with |  |  |  |  |  |
| Type                                                                             | IALR      | LTDI/40.63        |  |  |  |  |  |
| Basic Only                                                                       | 147%      | 16%               |  |  |  |  |  |
| Supplemental                                                                     | 77%       | 27%               |  |  |  |  |  |

| Table 17 Comparison of IALR's and Proportion of State ICI Claims with LTDI/40.63 By Sick Leave Balance |           |     |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------|-----------|-----|--|--|--|--|--|
| Sick Leave<br>Balance                                                                                  | 2010-2014 |     |  |  |  |  |  |
| 0-99 hours                                                                                             | 400%      | 15% |  |  |  |  |  |
| 100-199 hours                                                                                          | 150%      | 8%  |  |  |  |  |  |
| 200-299 hours                                                                                          | 82%       | 15% |  |  |  |  |  |
| 300-399 hours                                                                                          | 69%       | 23% |  |  |  |  |  |
| 400-499 hours                                                                                          | 48%       | 28% |  |  |  |  |  |
| 500-599 hours                                                                                          | 67%       | 60% |  |  |  |  |  |
| 600-699 hours                                                                                          | 39%       | 54% |  |  |  |  |  |
| 700-799 hours                                                                                          | 44%       | 36% |  |  |  |  |  |
| 800-899 hours                                                                                          | 43%       | 63% |  |  |  |  |  |
| 900-999 hours                                                                                          | 15%       | 83% |  |  |  |  |  |
| 1,000+ hours                                                                                           | 8%        | 61% |  |  |  |  |  |

#### 7. Employee Participation Levels

We computed the percentage of employees who participated in the State ICI plan from 2010-2014. Details of this analysis have been provided in Appendix B of this letter. Participation levels have generally decreased from 2010 to 2014, from 70% in 2010 to 63% in 2014. We noticed that participation levels have remained relatively stable at the UW Hospital Authority, where the participation rate in 2010 was 71% and in 2014 it was 72%. We also noticed that employees with the least amount of accrued sick leave have the lowest levels of participation in the plan. One reason may be that these employees have to contribute to their premium payments, whereas employees who have accumulated a large sick leave bank do not. The table below shows participation levels by accumulated sick leave.

| Table 18                                            |      |      |      |      |      |           |  |  |  |
|-----------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| State ICI Historical Participation From 2010 – 2014 |      |      |      |      |      |           |  |  |  |
| By Sick Leave Balance                               |      |      |      |      |      |           |  |  |  |
| SL Balance                                          | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 0-99 hours                                          | 35%  | 33%  | 31%  | 31%  | 29%  | 32%       |  |  |  |
| 100-199 hours                                       | 72%  | 70%  | 56%  | 54%  | 54%  | 61%       |  |  |  |
| 200-299 hours                                       | 77%  | 77%  | 75%  | 71%  | 71%  | 74%       |  |  |  |
| 300-399 hours                                       | 81%  | 80%  | 79%  | 76%  | 77%  | 79%       |  |  |  |
| 400-499 hours                                       | 84%  | 82%  | 80%  | 80%  | 79%  | 81%       |  |  |  |
| 500-599 hours                                       | 85%  | 85%  | 83%  | 82%  | 83%  | 84%       |  |  |  |
| 600-699 hours                                       | 88%  | 88%  | 86%  | 85%  | 85%  | 86%       |  |  |  |
| 700-799 hours                                       | 88%  | 88%  | 88%  | 85%  | 87%  | 87%       |  |  |  |
| 800-899 hours                                       | 89%  | 90%  | 88%  | 88%  | 88%  | 89%       |  |  |  |
| 900-999 hours                                       | 91%  | 90%  | 89%  | 88%  | 89%  | 89%       |  |  |  |
| 1,000+ hours                                        | 96%  | 96%  | 95%  | 94%  | 95%  | 95%       |  |  |  |
| NA                                                  | NA   | NA   | 27%  | NA   | 100% | 30%       |  |  |  |
| Total                                               | 70%  | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |

Finally, we have observed that participation in the program varies significantly by employees' attained age. The following table shows participation percentages by attained age from 2010-2014.

| Table 19<br>State ICI Historical Participation From 2010 – 2014 |                          |      |      |      |      |           |  |  |  |  |
|-----------------------------------------------------------------|--------------------------|------|------|------|------|-----------|--|--|--|--|
|                                                                 | By Employee Attained Age |      |      |      |      |           |  |  |  |  |
| Attained Age                                                    | 2010                     | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |
| Under 25                                                        | 24%                      | 20%  | 15%  | 16%  | 26%  | 20%       |  |  |  |  |
| 25-29                                                           | 34%                      | 32%  | 27%  | 27%  | 25%  | 29%       |  |  |  |  |
| 30-34                                                           | 50%                      | 49%  | 45%  | 43%  | 39%  | 45%       |  |  |  |  |
| 35-39                                                           | 68%                      | 66%  | 62%  | 60%  | 56%  | 62%       |  |  |  |  |
| 40-44                                                           | 77%                      | 75%  | 73%  | 71%  | 69%  | 73%       |  |  |  |  |
| 45-49                                                           | 82%                      | 81%  | 78%  | 77%  | 76%  | 79%       |  |  |  |  |
| 50-54                                                           | 86%                      | 85%  | 83%  | 83%  | 81%  | 84%       |  |  |  |  |
| 55-59                                                           | 88%                      | 87%  | 85%  | 84%  | 83%  | 85%       |  |  |  |  |
| 60-64                                                           | 85%                      | 85%  | 83%  | 82%  | 80%  | 83%       |  |  |  |  |
| 65+                                                             | 61%                      | 60%  | 60%  | 61%  | 61%  | 61%       |  |  |  |  |
| Total                                                           | 70%                      | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |  |

From above, participation levels generally increase with attained age. This could be driven by younger employees having different perceptions of the need for disability insurance versus older employees who may find the insurance more valuable. It could also be because younger employees in general have accrued less sick leave time than older employees, and are therefore required to contribute more to ICI premiums (since the premium categories are based on accumulated sick leave time), which could deter some younger employees from participating in the program. Please note that participation in disability plans tends to decrease the more that employees are required to contribute to the funding of the plan, which can exacerbate the adverse selection risk.

#### 8. Conclusions from Experience Studies

The key findings of our work on this project are summarized below:

- State ICI claim experience varies widely by employer group and specific occupation, with the most favorable experience on the UW System and the Department of Natural Resources and the least favorable experience on the Department of Corrections, the Department of Health Services, Department of Veterans Affairs, and the Department of Workforce Development. The experience from teachers has been favorable whereas Protective Employees with Social Security and General Employees have had poor experience. The current rate structure does not capture this variation in experience by segment.
- The plan provides benefits up to 75% of a participant's average monthly earnings. This is a very high income replacement level which may exacerbate adverse selection risk and reduce return to work incentives. Based on the analysis in which we restated historical experience by capping benefits at 65% and 70%, we would expect a significant reduction in claim costs if the benefits were reduced from 75%.

- The plan also provides an additional benefit of \$75 per month to disabled employees whose disability lasts longer than 12 months. This additional benefit adds material costs. If this benefit were eliminated, we would expect claim costs to be reduced by approximately 3%.
- When we analyzed the correlation between ICI and LTDI/40.63 experience, we noticed that the claim segments with higher proportions of LTDI/40.63 typically have more favorable experience, and vice versa. This suggests potential issues arising from differences between short-term and longer-term claims, both of which are covered under the ICI plan. One issue with the pricing for the plan could be that it may not capture the full cost of short term disabilities.
- Participation levels have generally decreased from 2010 to 2014, from 70% in 2010 to 63% in 2014. If this trend continues it could have adverse effects on the plan, since greater levels of participation provide a better spread of risk.
- Members with basic coverage only have had worse claim experience than members with supplemental coverage. This is interesting because adverse selection risk is often more prominent in disability buy-up plans which allow employees to purchase higher levels of coverage, but this does not seem to be the case with the ICI plan.

#### 9. Additional Considerations

ETF may wish to consider the following items when thinking about potential future plan design changes. We look forward to discussing these with you, as well as the other changes to the LTDI and ICI programs that ETF and Milliman are investigating.

- Reducing the benefit percent to 60% or 65% of pre-disability earnings may help to reduce claim costs. The vast majority of disability plans provide benefits up to 60% of earnings.
- Eliminating the additional \$75 monthly benefit may also help to reduce costs. This type of additional benefit is not a common feature of most disability plans.
- Restructuring the elimination period requirements may help to manage the plan and stabilize
  the experience. We should discuss sick leave dynamics and elimination period requirements
  more thoroughly when we get into the next stage of potential plan design changes.
- It might make sense to restructure the premiums to better align with experience, for example by developing different rates for UW faculty who represent a sizable portion of the plan and have very different experience than non-UW faculty.

#### General

This letter has been developed for the internal use of The Wisconsin Department of Employee Trust Funds (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 ETF, including historical claim data, plan documents, insurance files and other information. To the extent this information is inaccurate or incomplete, the results of our work may be materially affected. 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 now if you have any questions on the information in this letter. We look forward to discussing these results with you soon. Thank you.

Sincerely,

Paul Correia, FSA, MAAA Consulting Actuary

Paul Carrer

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

### Appendix A – Interest Adjusted Loss Ratios

• Interest-adjusted loss ratios by year of disability and employer group

| State ICI Historical Experience From 2010 - 2014 |      |      |      |      |      |           |            |  |  |
|--------------------------------------------------|------|------|------|------|------|-----------|------------|--|--|
| Employer Group                                   | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |
| Dept. of Administration                          | 76%  | 64%  | 66%  | 196% | 69%  | 94%       | 986,687    |  |  |
| Dept. of Corrections                             | 210% | 312% | 291% | 276% | 239% | 265%      | 11,264,136 |  |  |
| Dept. of Health Services                         | 200% | 286% | 274% | 225% | 192% | 234%      | 5,850,627  |  |  |
| Dept. of Natural Resources                       | 31%  | 27%  | 61%  | 9%   | 30%  | 31%       | 1,938,956  |  |  |
| Dept. of Revenue                                 | 82%  | 168% | 14%  | 57%  | 130% | 90%       | 848,499    |  |  |
| Dept. of Transportation                          | 75%  | 61%  | 65%  | 94%  | 72%  | 74%       | 3,080,754  |  |  |
| Dept. of Veterans Affairs                        | 363% | 371% | 797% | 828% | 699% | 617%      | 1,095,397  |  |  |
| Dept. of Workforce Dev.                          | 228% | 359% | 248% | 174% | 199% | 237%      | 1,480,660  |  |  |
| UW System                                        | 60%  | 44%  | 48%  | 69%  | 45%  | 53%       | 30,339,792 |  |  |
| UW Hospital Authority                            | 144% | 124% | 128% | 138% | 176% | 144%      | 9,557,952  |  |  |
| Other                                            | 87%  | 124% | 129% | 127% | 97%  | 112%      | 6,395,539  |  |  |
| NA                                               | NA   | NA   | NA   | NA   | NA   | NA        | -          |  |  |
| Total                                            | 118% | 138% | 138% | 144% | 125% | 132%      | 72,839,000 |  |  |

• Interest-adjusted loss ratios by year of disability and occupation

|                           | State ICI Historical Experience From 2010 - 2014 |      |       |      |      |           |            |  |  |  |  |
|---------------------------|--------------------------------------------------|------|-------|------|------|-----------|------------|--|--|--|--|
| Occupation                | 2010                                             | 2011 | 2012  | 2013 | 2014 | 2010-2014 | Premium    |  |  |  |  |
| General Employee          | 146%                                             | 171% | 170%  | 174% | 159% | 164%      | 39,806,558 |  |  |  |  |
| Court Reporters           | 379%                                             | 430% | 15%   | 5%   | 357% | 241%      | 281,503    |  |  |  |  |
| Exec. Pay Plan            | 4%                                               | 0%   | 0%    | 8%   | 0%   | 3%        | 303,385    |  |  |  |  |
| Protective Occ. With S.S. | 181%                                             | 269% | 265%  | 268% | 217% | 240%      | 9,459,529  |  |  |  |  |
| Supreme Court Judges      | 0%                                               | 0%   | 0%    | 0%   | 0%   | 0%        | 5,953      |  |  |  |  |
| Legislator/Officer        | 78%                                              | 0%   | 1584% | 0%   | 38%  | 251%      | 104,796    |  |  |  |  |
| Court of Appeals Judges   | 0%                                               | 0%   | 0%    | 0%   | 0%   | 0%        | 17,407     |  |  |  |  |
| Circuit Judges            | 0%                                               | 0%   | 0%    | 0%   | 0%   | 0%        | 362,473    |  |  |  |  |
| Teachers                  | 38%                                              | 20%  | 26%   | 39%  | 24%  | 29%       | 22,410,341 |  |  |  |  |
| UW Exec. Teachers         | 0%                                               | 0%   | 0%    | 0%   | 0%   | 0%        | 81,013     |  |  |  |  |
| Non-WRS Participant       | 0%                                               | 297% | 326%  | 145% | 28%  | 186%      | 6,041      |  |  |  |  |
| NA                        | NA                                               | NA   | NA    | NA   | NA   | NA        | -          |  |  |  |  |
| Total                     | 118%                                             | 138% | 138%  | 144% | 125% | 132%      | 72,839,000 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and coverage type

| State ICI Historical Experience From 2010 - 2014 |      |      |      |      |      |           |            |  |  |
|--------------------------------------------------|------|------|------|------|------|-----------|------------|--|--|
| Cov. Type                                        | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |
| Basic only                                       | 134% | 161% | 146% | 159% | 136% | 147%      | 56,431,370 |  |  |
| Supplemental                                     | 50%  | 50%  | 109% | 84%  | 84%  | 77%       | 16,407,630 |  |  |
| NA                                               | NA   | NA   | NA   | NA   | NA   | NA        | -          |  |  |
| Total                                            | 118% | 138% | 138% | 144% | 125% | 132%      | 72,839,000 |  |  |

• Interest-adjusted loss ratios by year of disability and premium category

|                | State ICI Historical Experience From 2010 - 2014 |      |      |      |      |           |            |  |  |  |  |
|----------------|--------------------------------------------------|------|------|------|------|-----------|------------|--|--|--|--|
| Prem. Category | 2010                                             | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |  |  |
| 1              | 267%                                             | 396% | 308% | 336% | 307% | 322%      | 19,236,415 |  |  |  |  |
| 2              | 107%                                             | 99%  | 88%  | 98%  | 85%  | 95%       | 6,378,683  |  |  |  |  |
| 3              | 80%                                              | 82%  | 158% | 133% | 88%  | 108%      | 6,402,615  |  |  |  |  |
| 4              | 88%                                              | 81%  | 200% | 97%  | 179% | 131%      | 4,112,943  |  |  |  |  |
| 5              | 79%                                              | 66%  | 58%  | 110% | 69%  | 77%       | 3,621,272  |  |  |  |  |
| 6              | 17%                                              | 8%   | 22%  | 23%  | 22%  | 18%       | 11,170,003 |  |  |  |  |
| 7              | 61%                                              | 10%  | 22%  | 53%  | 26%  | 34%       | 8,636,545  |  |  |  |  |
| 8              | 36%                                              | 17%  | 47%  | 30%  | 15%  | 29%       | 6,940,385  |  |  |  |  |
| 9              | 0%                                               | 0%   | 0%   | 5%   | 0%   | 1%        | 1,053,998  |  |  |  |  |
| 10             | 4%                                               | 20%  | 3%   | 0%   | 5%   | 6%        | 5,286,140  |  |  |  |  |
| NA             | NA                                               | NA   | NA   | NA   | NA   | NA        | -          |  |  |  |  |
| Total          | 118%                                             | 138% | 138% | 144% | 125% | 132%      | 72,839,000 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and gender

| State ICI Historical Experience From 2010 - 2014 |                                                   |      |       |        |        |        |            |  |  |  |
|--------------------------------------------------|---------------------------------------------------|------|-------|--------|--------|--------|------------|--|--|--|
| Gender                                           | Gender 2010 2011 2012 2013 2014 2010-2014 Premium |      |       |        |        |        |            |  |  |  |
| Female                                           | 149%                                              | 175% | 158%  | 172%   | 160%   | 163%   | 39,553,293 |  |  |  |
| Male                                             | 80%                                               | 92%  | 113%  | 104%   | 76%    | 93%    | 33,279,898 |  |  |  |
| NA                                               | 29351%                                            | NA   | 7945% | 15890% | 22579% | 20317% | 5,809      |  |  |  |
| Total                                            | 118%                                              | 138% | 138%  | 144%   | 125%   | 132%   | 72,839,000 |  |  |  |

• Interest-adjusted loss ratios by year of disability and sick leave balance

|               | State ICI Historical Experience From 2010 - 2014 |      |        |      |        |           |            |  |  |  |  |
|---------------|--------------------------------------------------|------|--------|------|--------|-----------|------------|--|--|--|--|
| SL Balance    | 2010                                             | 2011 | 2012   | 2013 | 2014   | 2010-2014 | Premium    |  |  |  |  |
| 0-99 hours    | 349%                                             | 453% | 380%   | 438% | 383%   | 400%      | 15,999,726 |  |  |  |  |
| 100-199 hours | 119%                                             | 154% | 205%   | 145% | 133%   | 150%      | 9,328,907  |  |  |  |  |
| 200-299 hours | 71%                                              | 62%  | 104%   | 79%  | 95%    | 82%       | 6,066,266  |  |  |  |  |
| 300-399 hours | 121%                                             | 33%  | 57%    | 97%  | 42%    | 69%       | 4,984,979  |  |  |  |  |
| 400-499 hours | 21%                                              | 23%  | 60%    | 57%  | 68%    | 48%       | 4,201,302  |  |  |  |  |
| 500-599 hours | 41%                                              | 85%  | 140%   | 21%  | 49%    | 67%       | 3,249,637  |  |  |  |  |
| 600-699 hours | 30%                                              | 19%  | 43%    | 25%  | 71%    | 39%       | 2,720,145  |  |  |  |  |
| 700-799 hours | 13%                                              | 13%  | 27%    | 133% | 26%    | 44%       | 2,315,140  |  |  |  |  |
| 800-899 hours | 22%                                              | 70%  | 44%    | 39%  | 42%    | 43%       | 2,109,973  |  |  |  |  |
| 900-999 hours | 28%                                              | 8%   | 17%    | 18%  | 4%     | 15%       | 1,937,853  |  |  |  |  |
| 1,000+ hours  | 10%                                              | 5%   | 7%     | 9%   | 7%     | 8%        | 19,923,916 |  |  |  |  |
| NA            | NA                                               | NA   | 16967% | NA   | 62687% | 92522%    | 1,156      |  |  |  |  |
| Total         | 118%                                             | 138% | 138%   | 144% | 125%   | 132%      | 72,839,000 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and sick leave used in the prior year

|               | State ICI Historical Experience From 2010 - 2014 |      |        |         |      |           |            |  |  |  |  |
|---------------|--------------------------------------------------|------|--------|---------|------|-----------|------------|--|--|--|--|
| SL Used       | 2010                                             | 2011 | 2012   | 2013    | 2014 | 2010-2014 | Premium    |  |  |  |  |
| 0-24 hours    | 50%                                              | 26%  | 37%    | 49%     | 34%  | 39%       | 35,353,231 |  |  |  |  |
| 25-49 hours   | 52%                                              | 60%  | 115%   | 115%    | 67%  | 82%       | 9,504,811  |  |  |  |  |
| 50-74 hours   | 176%                                             | 178% | 203%   | 167%    | 193% | 183%      | 7,397,394  |  |  |  |  |
| 75-99 hours   | 190%                                             | 214% | 168%   | 227%    | 239% | 208%      | 5,872,116  |  |  |  |  |
| 100-124 hours | 219%                                             | 340% | 325%   | 356%    | 249% | 296%      | 5,219,461  |  |  |  |  |
| 125-149 hours | 247%                                             | 425% | 337%   | 327%    | 418% | 347%      | 4,104,247  |  |  |  |  |
| 150-174 hours | 278%                                             | 345% | 397%   | 416%    | 493% | 379%      | 1,870,983  |  |  |  |  |
| 175-199 hours | 94%                                              | 487% | 418%   | 354%    | 364% | 335%      | 1,000,271  |  |  |  |  |
| 200-224 hours | 182%                                             | 388% | 405%   | 498%    | 379% | 367%      | 643,701    |  |  |  |  |
| 225-249 hours | 305%                                             | 255% | 77%    | 594%    | 484% | 328%      | 414,130    |  |  |  |  |
| 250+ hours    | 204%                                             | 228% | 528%   | 234%    | 241% | 290%      | 1,457,591  |  |  |  |  |
| NA            | NA                                               | NA   | 16967% | 107368% | NA   | 94968%    | 1,065      |  |  |  |  |
| Total         | 118%                                             | 138% | 138%   | 144%    | 125% | 132%      | 72,839,000 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and years of service

|                  | State ICI Historical Experience From 2010 - 2014 |      |      |       |       |           |            |  |  |  |  |
|------------------|--------------------------------------------------|------|------|-------|-------|-----------|------------|--|--|--|--|
| Years of service | 2010                                             | 2011 | 2012 | 2013  | 2014  | 2010-2014 | Premium    |  |  |  |  |
| Less than 1      | 263%                                             | 185% | 127% | 337%  | 180%  | 219%      | 2,598,099  |  |  |  |  |
| 1                | 125%                                             | 255% | 138% | 108%  | 174%  | 146%      | 3,661,172  |  |  |  |  |
| 2                | 168%                                             | 282% | 302% | 130%  | 106%  | 190%      | 3,893,268  |  |  |  |  |
| 3                | 159%                                             | 272% | 141% | 163%  | 111%  | 161%      | 4,067,300  |  |  |  |  |
| 4                | 216%                                             | 195% | 153% | 124%  | 64%   | 141%      | 3,672,357  |  |  |  |  |
| 5                | 260%                                             | 259% | 140% | 98%   | 137%  | 157%      | 3,572,740  |  |  |  |  |
| 6-10             | 147%                                             | 176% | 134% | 129%  | 118%  | 138%      | 13,643,155 |  |  |  |  |
| 11-15            | 206%                                             | 170% | 131% | 170%  | 134%  | 157%      | 11,403,866 |  |  |  |  |
| 16-20            | 69%                                              | 148% | 133% | 176%  | 157%  | 137%      | 7,462,946  |  |  |  |  |
| 21-25            | 72%                                              | 143% | 92%  | 116%  | 103%  | 105%      | 6,097,557  |  |  |  |  |
| 26-30            | 81%                                              | 60%  | 104% | 30%   | 91%   | 73%       | 3,397,410  |  |  |  |  |
| 31+              | 33%                                              | 48%  | 86%  | 88%   | 97%   | 69%       | 2,827,028  |  |  |  |  |
| NA               | 44%                                              | 22%  | 485% | 1286% | 1090% | 45%       | 6,542,101  |  |  |  |  |
| Total            | 118%                                             | 138% | 138% | 144%  | 125%  | 132%      | 72,839,000 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and attained age

|              | State ICI Historical Experience From 2010 - 2014 |      |      |      |      |           |            |  |  |  |  |
|--------------|--------------------------------------------------|------|------|------|------|-----------|------------|--|--|--|--|
| Attained Age | 2010                                             | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |  |  |
| Under 25     | 89%                                              | 104% | 291% | 123% | 148% | 146%      | 765,992    |  |  |  |  |
| 25-29        | 108%                                             | 152% | 82%  | 120% | 103% | 113%      | 3,985,717  |  |  |  |  |
| 30-34        | 154%                                             | 139% | 136% | 89%  | 101% | 123%      | 6,552,720  |  |  |  |  |
| 35-39        | 166%                                             | 205% | 129% | 152% | 120% | 153%      | 8,001,437  |  |  |  |  |
| 40-44        | 126%                                             | 128% | 128% | 154% | 87%  | 125%      | 9,818,374  |  |  |  |  |
| 45-49        | 96%                                              | 138% | 170% | 194% | 155% | 151%      | 10,790,242 |  |  |  |  |
| 50-54        | 111%                                             | 147% | 116% | 178% | 145% | 140%      | 12,375,230 |  |  |  |  |
| 55-59        | 99%                                              | 118% | 177% | 118% | 163% | 136%      | 11,504,085 |  |  |  |  |
| 60-64        | 114%                                             | 98%  | 131% | 98%  | 104% | 109%      | 7,035,379  |  |  |  |  |
| 65+          | 35%                                              | 31%  | 19%  | 33%  | 18%  | 26%       | 2,009,825  |  |  |  |  |
| Total        | 118%                                             | 138% | 138% | 144% | 125% | 132%      | 72,839,000 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and attained age - Males

|              | State ICI Historical Experience From 2010 - 2014 |      |      |      |      |           |            |  |  |  |  |
|--------------|--------------------------------------------------|------|------|------|------|-----------|------------|--|--|--|--|
| Attained Age | 2010                                             | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |  |  |
| Under 25     | 47%                                              | 74%  | 94%  | 340% | 142% | 128%      | 256,662    |  |  |  |  |
| 25-29        | 50%                                              | 38%  | 75%  | 68%  | 56%  | 57%       | 1,451,922  |  |  |  |  |
| 30-34        | 111%                                             | 88%  | 68%  | 87%  | 69%  | 84%       | 2,563,188  |  |  |  |  |
| 35-39        | 75%                                              | 151% | 101% | 106% | 57%  | 97%       | 3,404,004  |  |  |  |  |
| 40-44        | 42%                                              | 90%  | 116% | 132% | 45%  | 86%       | 4,617,940  |  |  |  |  |
| 45-49        | 58%                                              | 95%  | 131% | 132% | 87%  | 101%      | 5,035,942  |  |  |  |  |
| 50-54        | 72%                                              | 98%  | 116% | 129% | 121% | 108%      | 5,618,837  |  |  |  |  |
| 55-59        | 128%                                             | 75%  | 134% | 69%  | 84%  | 98%       | 5,418,938  |  |  |  |  |
| 60-64        | 119%                                             | 95%  | 143% | 75%  | 75%  | 99%       | 3,689,081  |  |  |  |  |
| 65+          | 21%                                              | 13%  | 21%  | 31%  | 17%  | 21%       | 1,223,385  |  |  |  |  |
| Total        | 80%                                              | 92%  | 113% | 104% | 76%  | 93%       | 33,279,898 |  |  |  |  |

• Interest-adjusted loss ratios by year of disability and attained age - Females

|              | State ICI Historical Experience From 2010 - 2014 |      |      |      |      |           |            |  |  |  |  |
|--------------|--------------------------------------------------|------|------|------|------|-----------|------------|--|--|--|--|
| Attained Age | 2010                                             | 2011 | 2012 | 2013 | 2014 | 2010-2014 | Premium    |  |  |  |  |
| Under 25     | 111%                                             | 122% | 403% | 33%  | 150% | 155%      | 509,330    |  |  |  |  |
| 25-29        | 143%                                             | 220% | 86%  | 150% | 128% | 145%      | 2,532,646  |  |  |  |  |
| 30-34        | 183%                                             | 173% | 180% | 90%  | 120% | 148%      | 3,988,494  |  |  |  |  |
| 35-39        | 240%                                             | 248% | 150% | 183% | 162% | 194%      | 4,596,619  |  |  |  |  |
| 40-44        | 204%                                             | 163% | 140% | 172% | 122% | 159%      | 5,200,435  |  |  |  |  |
| 45-49        | 128%                                             | 176% | 205% | 249% | 205% | 193%      | 5,753,452  |  |  |  |  |
| 50-54        | 144%                                             | 188% | 115% | 218% | 164% | 166%      | 6,755,649  |  |  |  |  |
| 55-59        | 73%                                              | 157% | 217% | 159% | 229% | 169%      | 6,083,931  |  |  |  |  |
| 60-64        | 109%                                             | 101% | 118% | 123% | 135% | 118%      | 3,346,298  |  |  |  |  |
| 65+          | 59%                                              | 61%  | 17%  | 37%  | 18%  | 34%       | 786,440    |  |  |  |  |
| Total        | 149%                                             | 175% | 158% | 172% | 160% | 163%      | 39,553,293 |  |  |  |  |

### Appendix B – Employee Participation in the State ICI Program

• Employee participation levels by calendar year and employer group

|                            | State ICI Histo | orical Particip | ation From 20 | 010 - 2014 |      |           |
|----------------------------|-----------------|-----------------|---------------|------------|------|-----------|
| Employer Group             | 2010            | 2011            | 2012          | 2013       | 2014 | 2010-2014 |
| Dept. of Administration    | 83%             | 82%             | 79%           | 78%        | 71%  | 79%       |
| Dept. of Corrections       | 85%             | 85%             | 83%           | 82%        | 79%  | 83%       |
| Dept. of Health Services   | 86%             | 85%             | 79%           | 78%        | 76%  | 81%       |
| Dept. of Natural Resources | 65%             | 64%             | 63%           | 63%        | 57%  | 62%       |
| Dept. of Revenue           | 78%             | 78%             | 73%           | 70%        | 59%  | 72%       |
| Dept. of Transportation    | 89%             | 88%             | 81%           | 81%        | 78%  | 83%       |
| Dept. of Veterans Affairs  | 87%             | 89%             | 88%           | 81%        | 74%  | 84%       |
| Dept. of Workforce Dev.    | 75%             | 72%             | 72%           | 71%        | 68%  | 72%       |
| UW System                  | 60%             | 58%             | 54%           | 52%        | 54%  | 56%       |
| UW Hospital Authority      | 71%             | 71%             | 69%           | 72%        | 72%  | 71%       |
| Other                      | 74%             | 71%             | 68%           | 64%        | 59%  | 67%       |
| Total                      | 70%             | 68%             | 65%           | 63%        | 63%  | 66%       |

• Employee participation levels by calendar year and occupation

|                           | State ICI Historical Participation From 2010 - 2014 |      |      |      |      |           |  |  |  |  |  |
|---------------------------|-----------------------------------------------------|------|------|------|------|-----------|--|--|--|--|--|
| Occupation                | 2010                                                | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |  |
| General Employee          | 79%                                                 | 77%  | 74%  | 73%  | 73%  | 75%       |  |  |  |  |  |
| Court Reporters           | 74%                                                 | 78%  | 77%  | 59%  | 79%  | 74%       |  |  |  |  |  |
| Exec. Pay Plan            | 80%                                                 | 73%  | 74%  | 78%  | 76%  | 76%       |  |  |  |  |  |
| Protective Occ. With S.S. | 86%                                                 | 86%  | 84%  | 83%  | 80%  | 84%       |  |  |  |  |  |
| Supreme Court Judges      | 57%                                                 | 57%  | 57%  | 29%  | 43%  | 49%       |  |  |  |  |  |
| Legislator/Officer        | 75%                                                 | 69%  | 68%  | 53%  | 53%  | 59%       |  |  |  |  |  |
| Court of Appeals Judges   | 73%                                                 | 88%  | 75%  | 40%  | 75%  | 71%       |  |  |  |  |  |
| Circuit Judges            | 83%                                                 | 84%  | 80%  | 57%  | 79%  | 77%       |  |  |  |  |  |
| Teachers                  | 74%                                                 | 72%  | 69%  | 67%  | 69%  | 70%       |  |  |  |  |  |
| UW Exec. Teachers         | 92%                                                 | 84%  | 79%  | 82%  | 79%  | 83%       |  |  |  |  |  |
| Non-WRS Participant       | 0%                                                  | 0%   | 0%   | 0%   | 0%   | 0%        |  |  |  |  |  |
| Total                     | 70%                                                 | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |  |  |

• Employee participation levels by calendar year and coverage type

| State ICI Historical Participation From 2010 - 2014 |      |      |      |      |      |           |  |
|-----------------------------------------------------|------|------|------|------|------|-----------|--|
| Coverage Type                                       | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |
| Basic only                                          | 67%  | 65%  | 61%  | 60%  | 59%  | 62%       |  |
| Supplemental                                        | 100% | 100% | 100% | 100% | 100% | 100%      |  |
| Total                                               | 70%  | 68%  | 65%  | 63%  | 63%  | 66%       |  |

• Employee participation levels by calendar year and gender

| State ICI Historical Participation From 2010 - 2014 |      |      |      |      |      |           |  |  |
|-----------------------------------------------------|------|------|------|------|------|-----------|--|--|
| Gender                                              | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |
| Female                                              | 70%  | 69%  | 65%  | 65%  | 64%  | 67%       |  |  |
| Male                                                | 69%  | 68%  | 64%  | 62%  | 61%  | 65%       |  |  |
| NA                                                  | 2%   | 0%   | 5%   | 8%   | 5%   | 5%        |  |  |
| Total                                               | 70%  | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |

• Employee participation levels by calendar year and sick leave balance

| State ICI Historical Participation From 2010 - 2014 |      |      |      |      |      |           |  |  |  |
|-----------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| SL Balance                                          | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 0-99 hours                                          | 35%  | 33%  | 31%  | 31%  | 29%  | 32%       |  |  |  |
| 100-199 hours                                       | 72%  | 70%  | 56%  | 54%  | 54%  | 61%       |  |  |  |
| 200-299 hours                                       | 77%  | 77%  | 75%  | 71%  | 71%  | 74%       |  |  |  |
| 300-399 hours                                       | 81%  | 80%  | 79%  | 76%  | 77%  | 79%       |  |  |  |
| 400-499 hours                                       | 84%  | 82%  | 80%  | 80%  | 79%  | 81%       |  |  |  |
| 500-599 hours                                       | 85%  | 85%  | 83%  | 82%  | 83%  | 84%       |  |  |  |
| 600-699 hours                                       | 88%  | 88%  | 86%  | 85%  | 85%  | 86%       |  |  |  |
| 700-799 hours                                       | 88%  | 88%  | 88%  | 85%  | 87%  | 87%       |  |  |  |
| 800-899 hours                                       | 89%  | 90%  | 88%  | 88%  | 88%  | 89%       |  |  |  |
| 900-999 hours                                       | 91%  | 90%  | 89%  | 88%  | 89%  | 89%       |  |  |  |
| 1,000+ hours                                        | 96%  | 96%  | 95%  | 94%  | 95%  | 95%       |  |  |  |
| NA                                                  | NA   | NA   | 27%  | NA   | 100% | 30%       |  |  |  |
| Total                                               | 70%  | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |

• Employee participation levels by calendar year and sick leave used in the prior year

| State ICI Historical Participation From 2010 - 2014 |      |      |      |      |      |           |  |  |  |
|-----------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| SL Used                                             | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 0-24 hours                                          | 59%  | 58%  | 54%  | 53%  | 53%  | 55%       |  |  |  |
| 25-49 hours                                         | 86%  | 85%  | 83%  | 80%  | 80%  | 83%       |  |  |  |
| 50-74 hours                                         | 85%  | 85%  | 83%  | 80%  | 80%  | 83%       |  |  |  |
| 75-99 hours                                         | 83%  | 81%  | 80%  | 79%  | 77%  | 80%       |  |  |  |
| 100-124 hours                                       | 83%  | 81%  | 80%  | 77%  | 79%  | 80%       |  |  |  |
| 125-149 hours                                       | 81%  | 82%  | 80%  | 78%  | 76%  | 80%       |  |  |  |
| 150-174 hours                                       | 83%  | 83%  | 81%  | 80%  | 81%  | 82%       |  |  |  |
| 175-199 hours                                       | 85%  | 84%  | 84%  | 83%  | 82%  | 84%       |  |  |  |
| 200-224 hours                                       | 86%  | 86%  | 81%  | 85%  | 81%  | 84%       |  |  |  |
| 225-249 hours                                       | 86%  | 87%  | 86%  | 80%  | 81%  | 84%       |  |  |  |
| 250+ hours                                          | 89%  | 89%  | 89%  | 88%  | 89%  | 89%       |  |  |  |
| NA                                                  | NA   | NA   | 27%  | 50%  | NA   | 29%       |  |  |  |
| Total                                               | 70%  | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |

• Employee participation levels by calendar year and years of service

|                  | State ICI Historical Participation From 2010 - 2014 |      |      |      |      |           |  |  |  |  |
|------------------|-----------------------------------------------------|------|------|------|------|-----------|--|--|--|--|
| Years of Service | 2010                                                | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |
| Less than 1      | 30%                                                 | 25%  | 16%  | 18%  | 24%  | 20%       |  |  |  |  |
| 1                | 58%                                                 | 55%  | 37%  | 32%  | 48%  | 41%       |  |  |  |  |
| 2                | 66%                                                 | 65%  | 48%  | 43%  | 22%  | 42%       |  |  |  |  |
| 3                | 73%                                                 | 71%  | 62%  | 52%  | 38%  | 55%       |  |  |  |  |
| 4                | 73%                                                 | 75%  | 69%  | 65%  | 49%  | 65%       |  |  |  |  |
| 5                | 77%                                                 | 76%  | 74%  | 72%  | 64%  | 71%       |  |  |  |  |
| 6-10             | 82%                                                 | 82%  | 80%  | 79%  | 76%  | 79%       |  |  |  |  |
| 11-15            | 89%                                                 | 88%  | 87%  | 86%  | 85%  | 87%       |  |  |  |  |
| 16-20            | 94%                                                 | 94%  | 93%  | 91%  | 90%  | 93%       |  |  |  |  |
| 21-25            | 94%                                                 | 94%  | 94%  | 94%  | 94%  | 94%       |  |  |  |  |
| 26-30            | 94%                                                 | 94%  | 94%  | 93%  | 93%  | 94%       |  |  |  |  |
| 31+              | 91%                                                 | 91%  | 87%  | 86%  | 80%  | 87%       |  |  |  |  |
| NA               | 46%                                                 | 45%  | 21%  | 18%  | 21%  | 45%       |  |  |  |  |
| Total            | 70%                                                 | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |  |

• Employee participation levels by calendar year and attained age

|              | State ICI Historical Experience From 2010 - 2014 |      |      |      |      |           |  |  |  |  |  |
|--------------|--------------------------------------------------|------|------|------|------|-----------|--|--|--|--|--|
| Attained Age | 2010                                             | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |  |
| Under 25     | 24%                                              | 20%  | 15%  | 16%  | 26%  | 20%       |  |  |  |  |  |
| 25-29        | 34%                                              | 32%  | 27%  | 27%  | 25%  | 29%       |  |  |  |  |  |
| 30-34        | 50%                                              | 49%  | 45%  | 43%  | 39%  | 45%       |  |  |  |  |  |
| 35-39        | 68%                                              | 66%  | 62%  | 60%  | 56%  | 62%       |  |  |  |  |  |
| 40-44        | 77%                                              | 75%  | 73%  | 71%  | 69%  | 73%       |  |  |  |  |  |
| 45-49        | 82%                                              | 81%  | 78%  | 77%  | 76%  | 79%       |  |  |  |  |  |
| 50-54        | 86%                                              | 85%  | 83%  | 83%  | 81%  | 84%       |  |  |  |  |  |
| 55-59        | 88%                                              | 87%  | 85%  | 84%  | 83%  | 85%       |  |  |  |  |  |
| 60-64        | 85%                                              | 85%  | 83%  | 82%  | 80%  | 83%       |  |  |  |  |  |
| 65+          | 61%                                              | 60%  | 60%  | 61%  | 61%  | 61%       |  |  |  |  |  |
| Total        | 70%                                              | 68%  | 65%  | 63%  | 63%  | 66%       |  |  |  |  |  |

### Appendix C – Percentage of State ICI Claimants Receiving LTDI or 40.63 Benefits

Percentage of State ICI claimants with LTDI or 40.63 by year of disability and employer group

|                            | State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |           |  |  |  |  |
|----------------------------|------------------------------------------------|------|------|------|------|-----------|--|--|--|--|
| Employer Group             | 2010                                           | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |
| Dept. of Administration    | 56%                                            | 13%  | 36%  | 21%  | 0%   | 25%       |  |  |  |  |
| Dept. of Corrections       | 20%                                            | 20%  | 18%  | 11%  | 1%   | 15%       |  |  |  |  |
| Dept. of Health Services   | 25%                                            | 23%  | 23%  | 15%  | 1%   | 18%       |  |  |  |  |
| Dept. of Natural Resources | 77%                                            | 0%   | 17%  | 0%   | 14%  | 33%       |  |  |  |  |
| Dept. of Revenue           | 38%                                            | 56%  | 33%  | 40%  | 14%  | 41%       |  |  |  |  |
| Dept. of Transportation    | 48%                                            | 35%  | 30%  | 29%  | 6%   | 32%       |  |  |  |  |
| Dept. of Veterans Affairs  | 9%                                             | 10%  | 14%  | 12%  | 1%   | 9%        |  |  |  |  |
| Dept. of Workforce Dev.    | 21%                                            | 26%  | 16%  | 8%   | 7%   | 16%       |  |  |  |  |
| UW System                  | 27%                                            | 30%  | 26%  | 14%  | 7%   | 22%       |  |  |  |  |
| UW Hospital Authority      | 12%                                            | 13%  | 11%  | 8%   | 0%   | 9%        |  |  |  |  |
| Other                      | 26%                                            | 22%  | 25%  | 16%  | 3%   | 19%       |  |  |  |  |
| Total                      | 22%                                            | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |  |  |

• Percentage of State ICI claimants with LTDI or 40.63 by year of disability and occupation

| State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |      |           |  |  |
|------------------------------------------------|------|------|------|------|------|-----------|--|--|
| Occupation                                     | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |
| General Employee                               | 22%  | 22%  | 20%  | 13%  | 2%   | 17%       |  |  |
| Court Reporters                                | 60%  | 20%  | 0%   | 0%   | 14%  | 25%       |  |  |
| Exec. Pay Plan                                 | 100% | NA   | NA   | 0%   | NA   | 50%       |  |  |
| Protective Occ. With S.S.                      | 21%  | 19%  | 16%  | 11%  | 1%   | 14%       |  |  |
| Legislator/Officer                             | 0%   | NA   | 100% | NA   | NA   | 67%       |  |  |
| Teachers                                       | 37%  | 21%  | 22%  | 16%  | 4%   | 21%       |  |  |
| Total                                          | 22%  | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |

• Percentage of State ICI claimants with LTDI or 40.63 by year of disability and coverage type

| State ICI Claims Integrated with LTDI or 40.63   |     |     |     |     |    |     |  |
|--------------------------------------------------|-----|-----|-----|-----|----|-----|--|
| Coverage Type 2010 2011 2012 2013 2014 2010-2014 |     |     |     |     |    |     |  |
| Basic only                                       | 22% | 21% | 18% | 12% | 2% | 16% |  |
| Supplemental                                     | 27% | 31% | 38% | 28% | 3% | 27% |  |
| Total                                            | 22% | 21% | 19% | 13% | 2% | 16% |  |

• Percentage of State ICI claimants with LTDI or 40.63 by year of disability and premium category

| State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |      |           |  |  |
|------------------------------------------------|------|------|------|------|------|-----------|--|--|
| Prem. Category                                 | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |
| 1                                              | 18%  | 20%  | 17%  | 12%  | 1%   | 14%       |  |  |
| 2                                              | 24%  | 22%  | 15%  | 12%  | 3%   | 16%       |  |  |
| 3                                              | 18%  | 12%  | 12%  | 12%  | 1%   | 11%       |  |  |
| 4                                              | 40%  | 45%  | 43%  | 18%  | 13%  | 33%       |  |  |
| 5                                              | 60%  | 44%  | 63%  | 47%  | 11%  | 49%       |  |  |
| 6                                              | 73%  | 70%  | 39%  | 27%  | 31%  | 48%       |  |  |
| 7                                              | 43%  | 14%  | 17%  | 10%  | 0%   | 21%       |  |  |
| 8                                              | 38%  | 56%  | 9%   | 50%  | 40%  | 38%       |  |  |
| 9                                              | NA   | NA   | NA   | 0%   | NA   | 0%        |  |  |
| 10                                             | 40%  | 100% | 100% | 0%   | 0%   | 46%       |  |  |
| NA                                             | 11%  | 10%  | 10%  | 5%   | 1%   | 7%        |  |  |
| Total                                          | 22%  | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |

• Percentage of State ICI claimants with LTDI or 40.63 by year of disability and gender

| State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |      |           |  |  |
|------------------------------------------------|------|------|------|------|------|-----------|--|--|
| Gender                                         | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |
| Female                                         | 20%  | 19%  | 17%  | 12%  | 1%   | 15%       |  |  |
| Male                                           | 28%  | 26%  | 24%  | 15%  | 6%   | 21%       |  |  |
| Total                                          | 22%  | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |

• Percentage of State ICI claimants with LTDI or 40.63 by year of disability and sick leave balance

| State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |      |           |  |  |  |
|------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| SL Balance                                     | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 0-99 hours                                     | 21%  | 20%  | 17%  | 12%  | 1%   | 15%       |  |  |  |
| 100-199 hours                                  | 9%   | 13%  | 9%   | 9%   | 2%   | 8%        |  |  |  |
| 200-299 hours                                  | 25%  | 15%  | 20%  | 6%   | 4%   | 15%       |  |  |  |
| 300-399 hours                                  | 29%  | 21%  | 40%  | 10%  | 8%   | 23%       |  |  |  |
| 400-499 hours                                  | 38%  | 33%  | 32%  | 25%  | 7%   | 28%       |  |  |  |
| 500-599 hours                                  | 81%  | 76%  | 58%  | 25%  | 13%  | 60%       |  |  |  |
| 600-699 hours                                  | 71%  | 60%  | 60%  | 50%  | 20%  | 54%       |  |  |  |
| 700-799 hours                                  | 40%  | 20%  | 62%  | 31%  | 0%   | 36%       |  |  |  |
| 800-899 hours                                  | 57%  | 72%  | 33%  | 71%  | 50%  | 63%       |  |  |  |
| 900-999 hours                                  | 100% | 75%  | 83%  | 83%  | 0%   | 83%       |  |  |  |
| 1,000+ hours                                   | 71%  | 79%  | 58%  | 50%  | 36%  | 61%       |  |  |  |
| Total                                          | 22%  | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |  |

 Percentage of State ICI claimants with LTDI or 40.63 by year of disability and sick leave used in the prior year

| State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |      |           |  |  |  |
|------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| SL Used                                        | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 0-24 hours                                     | 27%  | 13%  | 13%  | 9%   | 4%   | 13%       |  |  |  |
| 25-49 hours                                    | 19%  | 13%  | 16%  | 12%  | 3%   | 13%       |  |  |  |
| 50-74 hours                                    | 18%  | 19%  | 24%  | 9%   | 2%   | 15%       |  |  |  |
| 75-99 hours                                    | 21%  | 24%  | 21%  | 14%  | 2%   | 17%       |  |  |  |
| 100-124 hours                                  | 27%  | 29%  | 25%  | 12%  | 2%   | 21%       |  |  |  |
| 125-149 hours                                  | 21%  | 19%  | 16%  | 15%  | 1%   | 16%       |  |  |  |
| 150-174 hours                                  | 11%  | 24%  | 15%  | 18%  | 2%   | 15%       |  |  |  |
| 175-199 hours                                  | 14%  | 23%  | 0%   | 15%  | 0%   | 13%       |  |  |  |
| 200-224 hours                                  | 26%  | 33%  | 45%  | 38%  | 5%   | 31%       |  |  |  |
| 225-249 hours                                  | 45%  | 17%  | 22%  | 8%   | 0%   | 19%       |  |  |  |
| 250+ hours                                     | 33%  | 29%  | 27%  | 16%  | 2%   | 23%       |  |  |  |
| Total                                          | 22%  | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |  |

• Percentage of State ICI claimants with LTDI or 40.63 by year of disability and years of service

| State ICI Claims Integrated with LTDI or 40.63 |      |      |      |      |      |           |  |  |  |
|------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| Years of Service                               | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| Less than 1                                    | 6%   | 7%   | 3%   | 0%   | 0%   | 3%        |  |  |  |
| 1                                              | 4%   | 2%   | 10%  | 1%   | 0%   | 4%        |  |  |  |
| 2                                              | 6%   | 8%   | 10%  | 6%   | 0%   | 6%        |  |  |  |
| 3                                              | 10%  | 8%   | 8%   | 11%  | 0%   | 8%        |  |  |  |
| 4                                              | 9%   | 15%  | 22%  | 9%   | 0%   | 13%       |  |  |  |
| 5                                              | 19%  | 20%  | 21%  | 14%  | 3%   | 16%       |  |  |  |
| 6-10                                           | 29%  | 25%  | 25%  | 14%  | 2%   | 20%       |  |  |  |
| 11-15                                          | 39%  | 30%  | 34%  | 20%  | 4%   | 26%       |  |  |  |
| 16-20                                          | 31%  | 35%  | 23%  | 26%  | 5%   | 26%       |  |  |  |
| 21-25                                          | 38%  | 43%  | 26%  | 16%  | 8%   | 27%       |  |  |  |
| 26-30                                          | 32%  | 28%  | 37%  | 18%  | 9%   | 26%       |  |  |  |
| 31+                                            | 24%  | 29%  | 9%   | 26%  | 0%   | 19%       |  |  |  |
| NA                                             | 18%  | 16%  | 0%   | 0%   | 0%   | 11%       |  |  |  |
| Total                                          | 22%  | 21%  | 19%  | 13%  | 2%   | 16%       |  |  |  |

### Appendix D – State ICI Payment Lag

• Number of months before first benefit payment by year of disability and employment category

| Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |      |           |  |  |
|---------------------------------------------------------------|------|------|------|------|------|-----------|--|--|
| Employment Category                                           | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |
| UW Faculty                                                    | 4.92 | 3.24 | 3.87 | 4.24 | 2.23 | 4.00      |  |  |
| Non-UW Faculty                                                | 2.82 | 2.52 | 2.72 | 2.70 | 1.17 | 2.45      |  |  |
| NA                                                            | 2.92 | 2.55 | 2.37 | 2.44 | 1.08 | 2.21      |  |  |
| Total                                                         | 2.91 | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |

• Number of months before first benefit payment by year of disability and employer group

| Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |      |      |  |  |  |
|---------------------------------------------------------------|------|------|------|------|------|------|--|--|--|
| Employer Group 2010 2011 2012 2013 2014 2010-20               |      |      |      |      |      |      |  |  |  |
| Dept. of Administration                                       | 5.29 | 2.77 | 4.77 | 3.12 | 0.99 | 3.53 |  |  |  |
| Dept. of Corrections                                          | 2.77 | 2.50 | 2.82 | 2.73 | 1.20 | 2.48 |  |  |  |
| Dept. of Health Services                                      | 2.68 | 2.47 | 2.55 | 2.49 | 1.18 | 2.32 |  |  |  |
| Dept. of Natural Resources                                    | 6.44 | 3.23 | 3.61 | 6.48 | 1.84 | 4.33 |  |  |  |
| Dept. of Revenue                                              | 3.28 | 3.47 | 4.69 | 3.76 | 1.44 | 3.36 |  |  |  |
| Dept. of Transportation                                       | 3.67 | 3.22 | 2.91 | 4.08 | 1.33 | 3.24 |  |  |  |
| Dept. of Veterans Affairs                                     | 2.62 | 1.89 | 2.87 | 3.11 | 1.32 | 2.37 |  |  |  |
| Dept. of Workforce Dev.                                       | 3.29 | 2.83 | 2.83 | 2.16 | 1.04 | 2.48 |  |  |  |
| UW System                                                     | 3.46 | 3.15 | 3.27 | 3.27 | 1.37 | 3.07 |  |  |  |
| UW Hospital Authority                                         | 2.34 | 1.94 | 1.91 | 2.19 | 1.05 | 1.88 |  |  |  |
| Other                                                         | 3.31 | 2.63 | 3.04 | 2.69 | 1.09 | 2.60 |  |  |  |
| NA                                                            | 2.20 | 3.92 | 2.72 | 2.99 | 1.04 | 2.22 |  |  |  |
| Total                                                         | 2.91 | 2.54 | 2.73 | 2.75 | 1.18 | 2.48 |  |  |  |

• Number of months before first benefit payment by year of disability and occupation

| Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |      |           |  |  |  |
|---------------------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| Occupation                                                    | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| General Employee                                              | 2.84 | 2.53 | 2.67 | 2.67 | 1.14 | 2.43      |  |  |  |
| Court Reporters                                               | 4.48 | 3.19 | 0.97 | 1.02 | 1.10 | 2.45      |  |  |  |
| Exec. Pay Plan                                                | 3.57 | NA   | NA   | 1.00 | NA   | 2.28      |  |  |  |
| Protective Occ. With S.S.                                     | 2.73 | 2.31 | 2.76 | 2.76 | 1.24 | 2.43      |  |  |  |
| Legislator/Officer                                            | 3.40 | NA   | 6.48 | NA   | NA   | 5.46      |  |  |  |
| Teachers                                                      | 4.71 | 3.57 | 3.59 | 3.69 | 1.65 | 3.54      |  |  |  |
| Non-WRS Participant                                           | NA   | 0.97 | 0.97 | 1.07 | NA   | 1.00      |  |  |  |
| NA                                                            | 2.20 | 3.92 | 2.72 | 2.99 | 1.04 | 2.22      |  |  |  |
| Total                                                         | 2.91 | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |  |

• Number of months before first benefit payment by year of disability and premium category

| Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |      |           |  |  |  |
|---------------------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| Prem. Category                                                | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 1                                                             | 2.40 | 2.22 | 2.25 | 2.44 | 1.03 | 2.12      |  |  |  |
| 2                                                             | 3.91 | 2.74 | 2.89 | 3.32 | 1.57 | 2.98      |  |  |  |
| 3                                                             | 2.72 | 2.33 | 2.52 | 2.71 | 1.15 | 2.34      |  |  |  |
| 4                                                             | 3.89 | 4.77 | 4.67 | 3.06 | 2.17 | 3.89      |  |  |  |
| 5                                                             | 5.60 | 4.75 | 6.02 | 5.33 | 2.41 | 5.10      |  |  |  |
| 6                                                             | 7.32 | 7.31 | 7.64 | 5.05 | 2.65 | 6.30      |  |  |  |
| 7                                                             | 4.35 | 1.63 | 2.41 | 3.35 | 1.40 | 2.99      |  |  |  |
| 8                                                             | 6.70 | 6.99 | 6.68 | 6.70 | 3.49 | 6.41      |  |  |  |
| 9                                                             | NA   | NA   | NA   | 6.07 | NA   | 6.07      |  |  |  |
| 10                                                            | 7.11 | 8.92 | 9.50 | 4.29 | 5.90 | 7.01      |  |  |  |
| NA                                                            | 2.92 | 2.55 | 2.37 | 2.44 | 1.08 | 2.21      |  |  |  |
| Total                                                         | 2.91 | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |  |

• Number of months before first benefit payment by year of disability and coverage type

| Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |      |           |  |  |
|---------------------------------------------------------------|------|------|------|------|------|-----------|--|--|
| Coverage Type                                                 | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |
| Basic only                                                    | 2.89 | 2.50 | 2.65 | 2.71 | 1.18 | 2.44      |  |  |
| Supplemental                                                  | 3.52 | 2.98 | 3.82 | 3.27 | 1.37 | 3.07      |  |  |
| NA                                                            | 2.20 | 3.92 | 2.72 | 2.99 | 1.04 | 2.22      |  |  |
| Total                                                         | 2.91 | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |

• Number of months before first benefit payment by year of disability and gender

| Historical Lag (in Months) in First State ICI Benefit Payment |                                           |      |      |      |      |      |  |  |
|---------------------------------------------------------------|-------------------------------------------|------|------|------|------|------|--|--|
| Gender                                                        | Gender 2010 2011 2012 2013 2014 2010-2014 |      |      |      |      |      |  |  |
| Female                                                        | 2.77                                      | 2.42 | 2.44 | 2.55 | 1.16 | 2.31 |  |  |
| Male                                                          | 3.32                                      | 2.79 | 3.29 | 3.18 | 1.28 | 2.91 |  |  |
| NA                                                            | 2.20                                      | 3.92 | 2.63 | 2.99 | 1.09 | 2.22 |  |  |
| Total                                                         | 2.91                                      | 2.54 | 2.73 | 2.75 | 1.18 | 2.48 |  |  |

• Number of months before first benefit payment by year of disability and sick leave balance

|               | Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |           |  |  |  |  |
|---------------|---------------------------------------------------------------|------|------|------|------|-----------|--|--|--|--|
| SL Balance    | 2010                                                          | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |
| 0-99 hours    | 2.58                                                          | 2.28 | 2.33 | 2.57 | 1.01 | 2.21      |  |  |  |  |
| 100-199 hours | 2.10                                                          | 2.00 | 2.10 | 1.94 | 1.15 | 1.88      |  |  |  |  |
| 200-299 hours | 3.59                                                          | 2.62 | 3.01 | 3.11 | 1.49 | 2.84      |  |  |  |  |
| 300-399 hours | 4.69                                                          | 2.79 | 4.52 | 3.89 | 1.77 | 3.74      |  |  |  |  |
| 400-499 hours | 6.04                                                          | 3.40 | 4.24 | 4.58 | 2.41 | 4.22      |  |  |  |  |
| 500-599 hours | 6.86                                                          | 6.34 | 6.44 | 4.51 | 3.68 | 5.97      |  |  |  |  |
| 600-699 hours | 6.14                                                          | 4.97 | 6.40 | 6.82 | 3.34 | 5.65      |  |  |  |  |
| 700-799 hours | 5.21                                                          | 4.80 | 6.17 | 7.29 | 2.77 | 5.93      |  |  |  |  |
| 800-899 hours | 7.99                                                          | 7.54 | 7.49 | 4.77 | 2.92 | 6.89      |  |  |  |  |
| 900-999 hours | 9.08                                                          | 7.83 | 6.85 | 6.02 | 8.20 | 7.51      |  |  |  |  |
| 1,000+ hours  | 7.05                                                          | 8.03 | 7.75 | 6.56 | 2.86 | 6.86      |  |  |  |  |
| NA            | 2.20                                                          | 3.92 | 2.72 | 2.99 | 1.04 | 2.22      |  |  |  |  |
| Total         | 2.91                                                          | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |  |  |

• Number of months before first benefit payment by year of disability and sick leave used in the prior year

| Historical Lag (in Months) in First State ICI Benefit Payment |      |      |      |      |      |           |  |  |  |
|---------------------------------------------------------------|------|------|------|------|------|-----------|--|--|--|
| SL Used                                                       | 2010 | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |
| 0-24 hours                                                    | 3.76 | 2.49 | 2.64 | 2.77 | 1.28 | 2.55      |  |  |  |
| 25-49 hours                                                   | 2.70 | 2.46 | 2.81 | 2.81 | 1.21 | 2.48      |  |  |  |
| 50-74 hours                                                   | 2.84 | 2.41 | 2.94 | 2.84 | 1.30 | 2.47      |  |  |  |
| 75-99 hours                                                   | 2.90 | 2.46 | 2.46 | 2.60 | 1.16 | 2.36      |  |  |  |
| 100-124 hours                                                 | 2.95 | 2.55 | 2.49 | 2.55 | 1.08 | 2.44      |  |  |  |
| 125-149 hours                                                 | 2.72 | 2.37 | 2.52 | 2.83 | 1.09 | 2.38      |  |  |  |
| 150-174 hours                                                 | 2.47 | 3.02 | 2.59 | 2.73 | 1.18 | 2.52      |  |  |  |
| 175-199 hours                                                 | 1.73 | 2.55 | 3.36 | 3.65 | 1.12 | 2.55      |  |  |  |
| 200-224 hours                                                 | 2.99 | 3.29 | 4.88 | 4.41 | 1.07 | 3.44      |  |  |  |
| 225-249 hours                                                 | 4.31 | 2.50 | 2.53 | 2.72 | 1.22 | 2.80      |  |  |  |
| 250+ hours                                                    | 3.02 | 2.68 | 3.13 | 2.03 | 1.12 | 2.50      |  |  |  |
| NA                                                            | 2.20 | 3.92 | 2.72 | 2.99 | 1.04 | 2.22      |  |  |  |
| Total                                                         | 2.91 | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |  |

## • Number of months before first benefit payment by year of disability and years of service

| Histo            | Historical Lag (in Months) in First State ICI Benefit Payment From 2010 - 2014 |      |      |      |      |           |  |  |  |  |
|------------------|--------------------------------------------------------------------------------|------|------|------|------|-----------|--|--|--|--|
| Years of Service | 2010                                                                           | 2011 | 2012 | 2013 | 2014 | 2010-2014 |  |  |  |  |
| Less than 1      | 2.47                                                                           | 1.54 | 1.57 | 2.14 | 1.03 | 1.70      |  |  |  |  |
| 1                | 1.70                                                                           | 2.16 | 2.35 | 1.91 | 1.04 | 1.83      |  |  |  |  |
| 2                | 1.94                                                                           | 1.91 | 2.83 | 2.64 | 1.11 | 2.12      |  |  |  |  |
| 3                | 2.10                                                                           | 1.75 | 2.11 | 2.74 | 1.07 | 1.98      |  |  |  |  |
| 4                | 1.84                                                                           | 2.05 | 2.75 | 2.44 | 1.26 | 2.21      |  |  |  |  |
| 5                | 2.54                                                                           | 2.26 | 2.44 | 2.22 | 1.29 | 2.19      |  |  |  |  |
| 6-10             | 3.15                                                                           | 2.53 | 2.87 | 2.45 | 1.21 | 2.50      |  |  |  |  |
| 11-15            | 3.75                                                                           | 2.94 | 3.24 | 3.54 | 1.30 | 3.03      |  |  |  |  |
| 16-20            | 3.42                                                                           | 3.51 | 3.11 | 3.63 | 1.25 | 3.12      |  |  |  |  |
| 21-25            | 4.38                                                                           | 3.78 | 3.58 | 3.84 | 1.22 | 3.47      |  |  |  |  |
| 26-30            | 3.62                                                                           | 3.40 | 3.76 | 1.48 | 1.42 | 2.93      |  |  |  |  |
| 31+              | 2.61                                                                           | 2.22 | 3.11 | 2.77 | 1.12 | 2.45      |  |  |  |  |
| NA               | 3.72                                                                           | 3.19 | 2.72 | 2.88 | 1.09 | 2.89      |  |  |  |  |
| Total            | 2.91                                                                           | 2.54 | 2.73 | 2.75 | 1.18 | 2.48      |  |  |  |  |

## Disability Benefit Programs Redesign

# Group Insurance Board February 8, 2017

Deb Roemer, Director
Jim Guidry, Gina Fischer
Benefit Services Bureau
Department of Employee Trust
Funds

Dan Skwire, FSA, MAAA
Paul Correia, FSA, MAAA
Consulting Actuaries
Milliman, Inc.



## Disability Benefits at a Glance

- 40.63 Disability Annuity (40.63)
- Long-Term Disability Insurance (LTDI)
- Income Continuation Insurance (ICI)
- 40.65 Duty Disability (40.65)



# Redesigning Disability Benefits

- 2013: First phase
  - Comprehensive technical update to ICI plan language
- 2015/2016: Second phase
  - Closing LTDI
  - Redesigning ICI



#### State ICI Plan

- Provides Short-term and Long-term disability benefits
  - Standard coverage of 75% of monthly earnings up to \$64K
  - Supplemental coverage up to \$120K
    - Supplemental premiums are 100% employee paid
  - \$75 Long-term add-on after one year of benefits
  - Premiums determined by employee's salary and accumulated sick leave (premium "categories")
  - Benefit terminates at age 65 (for most)



### State ICI Plan

- Benefits begin after a state employee serves the longer of:
  - 30 day elimination period (EP) or
  - Exhaust sick leave up to a maximum of 130 days
- Benefits do not duplicate other benefits or earned income
  - Duplicate benefits must be repaid to ETF



# State ICI Plan - UW Faculty and Academic Staff

- Premiums determined by salary and employee selected EP
  - 30, 90, 125, or 180 days
  - Employer pays 100% of 180-day premium, employee pays differential for shorter EP
  - Employee must have one year of state service to be eligible for employer share
- Benefits begin after a UW Faculty/Academic Staff employee serves the longer of:
  - Employee selected EP or
  - Exhaust sick leave up to a maximum of 130 days



#### Local ICI Plan

- Similar to UW plan
  - Employee selects EP
    - 30, 60, 90, 120, or 180 days
    - Employer pays 100% of 180-day EP premium,
       employee pays differential for shorter EP
  - Benefits begin after a employee serves the employee selected EP
    - No requirement to use sick leave



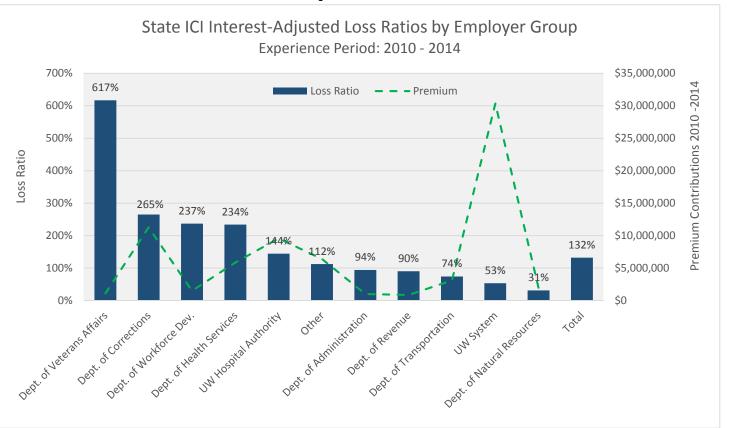
#### State ICI Experience Studies Performed by Milliman

#### **Limitations of Analysis**

- Milliman relied on information provided by ETF. If it is inaccurate or incomplete, the results may be affected.
- The analysis uses actuarial assumptions that are individually reasonable and which, in combination, offer a best estimate of anticipated experience.
- To the extent that actual experience varies from the assumptions, the emerging costs of the plan will vary from the projections prepared by Milliman.
- Milliman's work product was prepared exclusively for ETF for a specific and limited purpose. It is not for the use or benefit of any third party for any purpose.



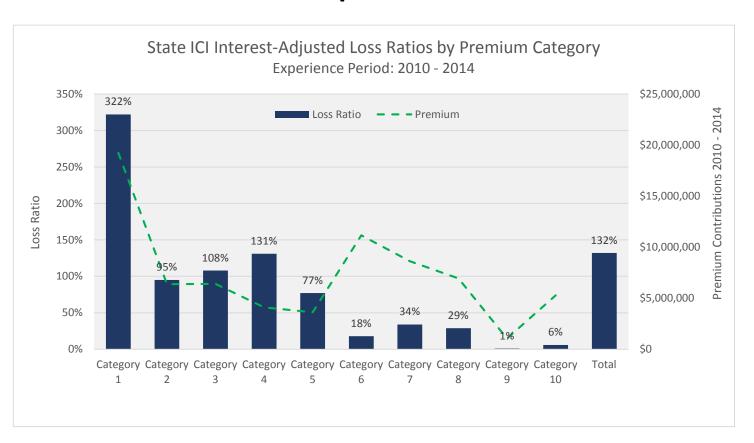
### State ICI Experience Studies



- Loss ratios greater than 100% represent experience for which claims incurred in 2010-2014 exceeded premium contributions in those years.
- Departments of Veterans Affairs, Corrections, Workforce Development, Health Services, and the UW Hospital Authority had loss ratios greater than 100%.
- UW System represents nearly half of the program in terms of premium, and its experience from 2010-2014 resulted in a low loss ratio.



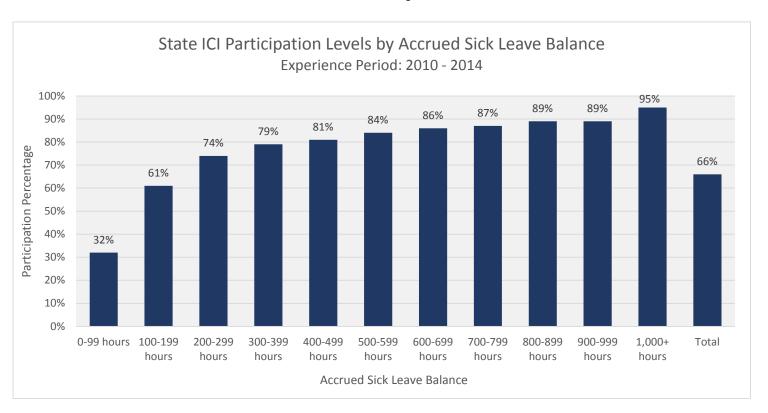
## State ICI Experience Studies



- Highest loss ratio experience was from members in premium category 1, and to a lesser degree from members in categories 3 and 4.
- Premium categories 7 10 correspond to UW faculty members, who had low loss ratio experience from 2010 2014.



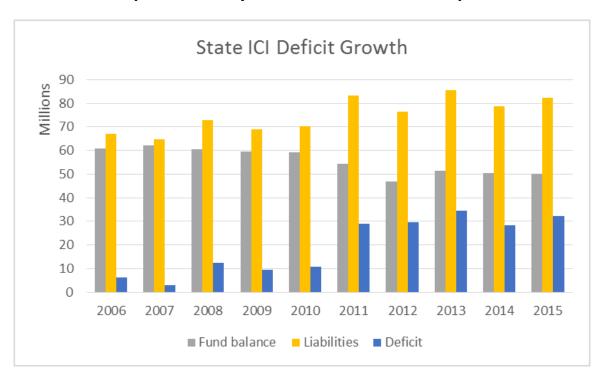
### State ICI Participation Levels



- Employees with the least amount of accrued sick leave have the lowest levels of participation.
   These employees contribute toward their premium payments.
- Employees who have accumulated a large sick leave bank have the highest levels of participation. Many of these employees either do not contribute towards premiums or only contribute partially.

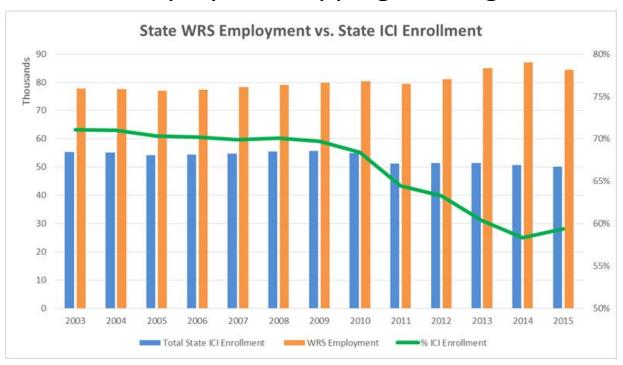


- Actuarial deficit since 2006
  - Local ICI plan fully funded and on premium holiday



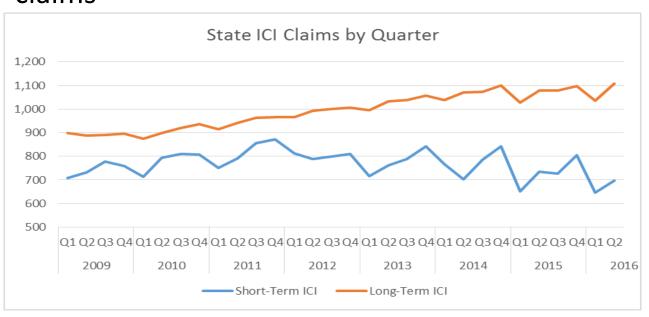


- Declining Enrollment
  - New employees not enrolling
  - Current employees dropping coverage





- Growth in Long-Term Disability Claims
  - Long-term claim payments exceeding short-term claims





- Premiums:
  - 2016: 20% increase in premiums from 2015
  - 2017: 20% increase (approved by Board)
  - 2018-2020: expect 20% increases each year
- Premium increases alone are inadequate to address enrollment and deficit problems
- Sustainability of the program in jeopardy



## Disability Programs Redesign Goals

- Holistic approach
  - Reduce overall program duplication
  - Reduce complexity for members & employers
  - Cost savings
- Minimize the effect on
  - Members and employers
  - Agency
  - ICI Administrator
  - WRS Trust



# **ICI Specific Goals**

- Address financial stability of program
- Encourage employee enrollment
- Keep employers' overall premiums costneutral
- Reduce complexity within program
- Reduce confusion for employees and employers



# **ICI Redesign Summary**

- Replace current premium structure for State employees (i.e. "premium categories") with an EP-based structure
- Decouple sick leave
- EP based premium structure
- Eliminate long-term ICI benefits
- Increase short-term ICI benefit duration to 18 months after completion of employee-selected EP
- Eliminate \$75 long-term add-on
- Reduce the benefit amount from 75% of salary to 70%.
- Eliminate supplemental coverage
  - Increase the maximum monthly benefit for standard coverage to \$7,000 for \$120K of annual income
- Eliminate UW employee 12-month waiting period for employer contribution
- Change return to work/rehabilitative income offset from 75% to 70%



# Redesign Specifics

- Elimination Period (EP) based premium structure for State ICI plan
  - 30, 60, 90, and 180-day elimination periods
    - Including UW Faculty and Academic Staff
    - Also eliminates 120 day EP for Local Plan
  - 180-day EP is 100% employer-paid
    - Similar to Category 6, which is free to employees with 1040 hours (130 work days) of sick leave
    - Employees would pay the premium differential for electing a shorter EP
- Sick leave requirements eliminated from premium structure and benefit process
- Resulting state plan will mirror local ICI plan



# Redesign Specifics

 Short-term disability (STD) benefits paid for a maximum of 18 months following the EP

#### Examples:

- 30-day EP: Payable through the 19<sup>th</sup> month of disability
- 180-day EP: Payable through the 24<sup>th</sup> month of disability
- Long-term disability benefits eliminated from the ICI program
  - Employees with long-term disabilities extending beyond the STD-ICI period could apply for benefits under the § 40.63 Disability
     Retirement program or Social Security Disability Insurance (SSDI)
  - Current LTD claimants will not lose benefits



# Redesign Specifics

- Eliminate Supplemental coverage
  - Plan cover salaries up to \$120,000/year
  - Benefit payments would be 70% of average monthly earnings (down from 75%)
    - Maximum \$7,000 monthly benefit
  - Offset for earnings during part-time return to work reduced to 70%
    - 100% offset for non-WRS employment



# **Expected Redesign Results**

- Members who do not currently participate in the plan will now have coverage with a 180-day elimination period that is fully funded by the employer.
- The availability of employer-paid coverage for all members will improve the overall risk pool by reducing anti-selection, since many healthy members now decline coverage due to the out-of-pocket cost.
- The revised plan has lower expected costs than the current plan, due in part to a reduced benefit percentage, a shorter benefit period, and the removal of the \$75 long-term add-on benefit.
- The plan design changes and the improved risk pool are important changes that mitigate the currently required rate increases for the existing plan.
- Due to the extent of the plan changes, there is considerable volatility in the projected pricing. Short term disability experience becomes credible quickly, however, and can be used to update premium rates in a timely fashion. The initial pricing should be reviewed annually and revised as needed, particularly in the early years of the program.



# Fiscal Impact

- Achieves goal of reducing actuarial liability and deficit
- Significant cost savings for members due to reduced premium rates
- Cost savings for employers, even with increase in program participation
- ICI program debt eliminated by 2022 or 2023



# Feedback from Employers on the Current ICI Program and Proposed Changes

- New hires comment that:
  - program is too expensive
  - they have to use sick leave before benefit is payable → not worth the cost
  - take home pay already being lowered by mandatory WRS contributions
- As the premium rates increase, insured individuals are dropping coverage and an increasing number of new hires not enrolling
- Like the concept of elimination periods (vs. the current premium categories) and that premiums and benefits wouldn't be tied to sick leave
- Employees dropping coverage after incidents where they thought they were eligible for benefits, but never received payments because they hadn't exhausted their sick leave
- In response to proposal to discontinue long-term ICI: Most employees think of ICI as a short-term program



# **Next Steps**

- Group Insurance Board approval to move ahead
- Statute changes
  - Approval from GIB, Governor's office, and Legislature required
- Communicate information to key players
  - Employers, members, staff
- Changes would take effect January 1, 2019 or 2020



# Questions?

