

Actuary's Fiscal Note For EHB 1923

SUMMARY OF RESULTS

This bill expands future membership in the Public Safety Employees' Retirement System (PSERS) and allows eligible employees at the Department of Social and Health Services (DSHS), the Department of Corrections (DOC), city and county corrections departments, and public corrections entities to transfer from the Public Employees' Retirement System (PERS) to PSERS.

Our fiscal note for the engrossed version of this bill includes data for affected DOC employees and replaces an indeterminate fiscal note on the previous version of the bill with actuarial cost estimates for the latest version.

The following change in this engrossed version of the bill has not impacted the costs shown below: adds a study to be completed by the Office of the State Actuary (OSA) no later than December 1, 2013.

| Impact on Contribution Rates (Effective 09/01/2013) | | |
|--|-------|-------|
| 2013-2015 State Budget | PERS | PSERS |
| Employee (Plan 2) | 0.00% | 0.50% |
| Total Employer | 0.00% | 0.50% |

| Budget Impacts | | | |
|-----------------------|-----------|-----------|---------|
| (Dollars in Millions) | 2013-2015 | 2015-2017 | 25-Year |
| General Fund-State | \$4.8 | \$2.9 | \$71.0 |
| Local Government | \$0.9 | (\$0.9) | (\$5.7) |
| Total Employer | \$7.4 | \$2.1 | \$92.4 |

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

HIGHLIGHTS OF ACTUARIAL ANALYSIS

We expect at least a 25-year total employer cost of \$92 million (at least \$71 million from the state general fund) as a result of this bill. This estimated cost excludes impacts from affected local government employees due to lack of data for this covered group. The costs shown above include (1) the bill's estimated impact on PERS and PSERS for all system employers plus, (2) the estimated budget impacts for DSHS and DOC from the difference between projected PERS and PSERS employer contribution rates for the employees assumed to transfer under the bill. Please see **Appendix A – Budget Impact Details** for the fiscal costs of this bill excluding the impact of item (2).

The costs of this bill are sensitive to the number of people who actually transfer from PERS to PSERS. If we assume half/twice as many members transfer, the costs of this bill will approximately halve/double.

See the remainder of this fiscal note for additional details on the summary and highlights presented here.

WHAT IS THE PROPOSED CHANGE?

Summary Of Benefit Improvement

This bill impacts the following systems:

- ❖ Public Employees' Retirement System Plans 2/3 (PERS 2/3).
- ❖ Public Safety Employees' Retirement System Plan 2 (PSERS).

This bill expands PSERS membership by allowing employees who meet certain eligibility criteria and who are employed by one of the following employers to transfer from PERS 2/3 to PSERS 2.

- ❖ Department of Social and Health Services (DSHS).
- ❖ Department of Corrections (DOC).
- ❖ City and county corrections departments.
- ❖ Public corrections entities.

Under this bill, DSHS is added to the statutory list of PSERS employers. Employees at DSHS are eligible to transfer during the optional election period if they meet the following criteria.

- ❖ Primary responsibility to provide direct care to, or ensure the custody and safety of, offender and patient populations.
- ❖ In a position that requires the completion of defensive tactics or de-escalation training.
- ❖ Employed by one of the following state institutions or centers: Juvenile Rehabilitation Administration, mental health hospitals, Child Study and Treatment Center, Special Commitment Center, or an institution or residential site that serves developmentally disabled patients or offenders.
- ❖ Supervise eligible members that meet the above criteria.

Employees who are employed by city or county corrections departments, public corrections entities, or DOC must meet the following criteria to be eligible for transfer during the optional election period.

- ❖ Primary responsibility to provide direct care to, or ensure the custody and safety of, offender and patient populations.
- ❖ Supervise eligible members that meet the above criteria.

All employees who meet these eligibility requirements are allowed to transfer from PERS 2/3 to PSERS 2 between January 1, 2014, and March 1, 2014. If an employee elects to transfer they will become a dual member and no PERS service credit may be transferred. If a PERS member has had the opportunity to transfer to PSERS previously they are not allowed to transfer during the election period.

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All eligible new employees hired on or after January 1, 2014, will automatically become members of PSERS.

The engrossed version of the bill differs from the original version in that it requires OSA to study the change in covered employers and members of PSERS since the system's inception. The addition of this study does not affect the actuarial analysis presented in this fiscal note. Please see OSA's administrative fiscal note for EHB 1923 for information about the administrative impact to OSA.

Effective Date: 90 days after session.

What Is The Current Situation?

PSERS was established in 2006 for public safety type positions and is generally comprised of corrections officers and limited authority law enforcement officers.

DSHS is not currently included in the statutory list of PSERS employers. However, city and county corrections departments, public corrections entities, and the Department of Corrections are currently included. DSHS employees and employees of correctional facilities who provide direct care to offender and patient populations are generally members of PERS 2/3.

PERS employees have a normal retirement age of 65 with five years of service in Plan 2 or 65 with up to ten years of service (depending on hire age) in Plan 3. Early retirement eligibility begins at age 55 with 20 years of service for Plan 2 members or age 55 with ten years of service for Plan 3 and is subject to certain reduction factors.

PSERS generally has earlier normal retirement benefits and higher disability benefits than PERS 2/3. Normal retirement age in PSERS is 65 with five years of total service or 60 with ten years of PSERS service. Early retirement eligibility begins at age 53 with twenty years of total service and is subject to certain reduction factors. Disability benefits equal the accrued benefit, actuarially reduced from age 60 (age 65 in PERS 2/3).

Current PSERS membership eligibility requirements include:

- ❖ Certified criminal justice training with authority to arrest, conduct criminal investigations, enforce criminal laws of Washington, and carry a firearm as part of the job; or
- ❖ Ensure the custody and security of incarcerated or probationary individuals; or
- ❖ Function as a Peace Officer; or
- ❖ Supervise eligible members that meet the above criteria.

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Who Is Impacted And How?

We received data covering about 3,600 potentially eligible employees in DSHS. Of those 3,600 people, we identified 2,579 actives in PERS 2/3 who could benefit, at least in part, by a prospective transfer to PSERS.

We also received data showing 977 potentially eligible employees in DOC. Of those 977 people, we identified 575 actives in PERS 2/3 who could benefit, at least in part, by a prospective transfer to PSERS.

We have not received reliable data from county or municipal corrections agencies at this time; this fiscal note does not include an expected cost for those employees.

PSERS provides more valuable benefits than PERS 2/3 in terms of retirement eligibility and unreduced benefits at an earlier age. This bill would benefit a typical member by making at least part of their retirement benefit available earlier than under current law, resulting in a higher lifetime retirement benefit for that member.

For example, a future PERS 2 member who enters at age 30 could retire as early as age 55 in PERS under current law, with a total of 25 years of service at retirement. The benefit would be actuarially reduced to recognize retirement before age 65. If the member's average final compensation (AFC) is \$50,000, their retirement benefit would be as follows.

$$\$50,000 \times 25 \times 2\% \times 0.358 = \$8,950 \text{ per year}$$

The same future member who starts service in PSERS could retire as early age 53, with a more favorable early retirement factor. To keep this example consistent, the PSERS retirement benefit at age 55 with 25 years of service is calculated as follows.

$$\$50,000 \times 25 \times 2\% \times 0.85 = \$21,250 \text{ per year}$$

Current members who transfer to PSERS can also benefit from improved PSERS benefits on the service they earn in PSERS after the transfer. Members who plan to retire soon after the transfer would benefit less relative to those members who might retire years later.

This bill impacts all PSERS 2 members through increased contribution rates. The bill also impacts all PERS 2 members through decreased contribution rates. This bill will not affect member contribution rates in PERS 1 since they are fixed in statute. Additionally, this bill will not affect member contribution rates in PERS 3 since Plan 3 members do not contribute to their employer-provided defined benefit.

Please see the **Special Data Needed** section of this fiscal note for more details.

WHY THIS BILL HAS A COST AND WHO PAYS FOR IT

Why This Bill Has A Cost

We expect the bill will have an impact on all Plan 2 members and all employers in PERS and PSERS plus an additional impact on employers who employ affected members for the following reasons.

- ❖ **PERS Impact:** A savings due to an experience gain from the members who transfer from PERS to PSERS resulting in lower future benefits in PERS than expected under current law.
- ❖ **PSERS Impact:** A cost due to adding members to PSERS that are more expensive than the current covered population.
- ❖ **Affected Employers Impact:** A cost or savings depending on the time period equal to the difference between projected employer contribution rates in PERS and PSERS for (a) their employees who transfer under the bill and for (b) their affected new hires in the future. Please see the **How We Applied These Assumptions** section for further details.

Who Will Pay For These Costs?

The costs/savings to the affected retirement systems that result from this bill will be divided between members and employers according to standard funding methods that vary by plan.

- ❖ Plan 1: 100 percent employer.
- ❖ Plan 2: 50 percent member and 50 percent employer.
- ❖ Plan 3: 100 percent employer.

HOW WE VALUED THESE COSTS

Assumptions We Made

For the costs presented in this fiscal note, we assumed that members who would not benefit at least in some part from the prospective transfer would not elect to transfer. That is, we assumed members who are currently age 55 or older and could not benefit from the unreduced retirement in PSERS at age 60 would not transfer. We also assumed that people who entered PERS 2/3 at age 45 or older would not benefit from more generous early retirement in PSERS and would not choose to transfer. Otherwise, we assumed all other members would transfer under this bill.

For purposes of this pricing, we further assumed that the demographic profile of future new entrants in PERS and PSERS would not change as a result of this bill.

Otherwise, we developed these costs using the same assumptions as disclosed in the *June 30, 2011, Actuarial Valuation Report (AVR)*.

How We Applied These Assumptions

To find the costs of this bill, we changed the PERS records for members we thought would transfer by switching them from active status to inactive status and recalculating their PERS liabilities. Next, we created new active status records for the same members in PSERS and calculated the additional liabilities. These active records showed no beginning service or accumulated contributions in PSERS, but included their past PERS service for benefit eligibility purposes.

Using the resulting cost differences from the method described above, we found constant, or static, contribution rate differences for PERS and PSERS. This method identified the estimated impact to PERS and PSERS described in the **Why This Bill Has A Cost** section.

To identify the estimated impact to affected employers for their employees who transfer under the bill and for their affected new hires in the future, we applied the difference in projected PERS and PSERS employer contribution rates (under current law) to projected payroll for the affected members.

We expect the difference between PSERS and PERS contribution rates to decrease in the near future (PERS rates are expected to be higher than PSERS for six years) and then increase thereafter, ultimately ending in a larger difference than currently exists. The table below shows these varying contribution rate differences.

| Expected Difference Between PSERS and PERS Contribution Rates | | | |
|---|---------|------|-------|
| Year | | Year | |
| 2014 | 1.33% | 2027 | 0.51% |
| 2015 | 1.33% | 2028 | 0.93% |
| 2016 | 0.27% | 2029 | 0.93% |
| 2017 | 0.27% | 2030 | 1.31% |
| 2018 | (0.85%) | 2031 | 1.31% |
| 2019 | (0.82%) | 2032 | 1.64% |
| 2020 | (0.98%) | 2033 | 1.64% |
| 2021 | (0.98%) | 2034 | 1.95% |
| 2022 | (0.52%) | 2035 | 1.95% |
| 2023 | (0.52%) | 2036 | 2.22% |
| 2024 | 0.01% | 2037 | 2.22% |
| 2025 | 0.01% | 2038 | 2.41% |
| 2026 | 0.51% | | |

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Special Data Needed

The Department of Retirement Systems (DRS) provided us with the member data we used for this pricing. We checked the data for reasonableness. An audit of this data was not performed. We relied on all data provided by DRS as complete and accurate. In our opinion, the data is reasonable, adequate, and substantially complete for the purposes of this pricing.

We relied on data from DRS about employees of DSHS and DOC potentially eligible for transfer to PSERS. We matched this data to our valuation data and eliminated members we thought would not transfer, based on plan membership, employment status, and possible eligibility for PSERS retirement benefits. Beyond those actions, we did not audit the data for accuracy. It is possible that some of the members identified in the data will not actually qualify for transfer to PSERS, but we are unable to identify them. The table below shows some general information about the records we used for this pricing, along with similar information from PERS and PSERS.

| Active Membership | | | | | |
|----------------------------|---------|-------|---------|---------------|---------------------|
| | Average | | | | |
| | Count | Age | Service | Annual Salary | Accumulated Savings |
| PERS 2/3 | 144,684 | 47.19 | 11.47 | \$56,318 | \$24,921 |
| PSERS | 4,187 | 39.50 | 8.06* | 55,597 | 14,815 |
| DSHS and DOC Data for Bill | 3,154 | 44.73 | 11.86 | \$44,355 | \$22,144 |

**Includes 3.7 years of service in PSERS and 4.36 years of service from PERS. PERS service may be used for retirement eligibility.*

We have not received reliable data from county or municipal corrections agencies at this time, so we have not included best-estimate costs for them in this fiscal note.

Otherwise, we developed these costs using the same assets and data as disclosed in the AVR. In addition, we recognized investment returns of 1.39 percent through June 30, 2012, when estimating projected asset values.

ACTUARIAL RESULTS

How The Liabilities Changed

If all of the DSHS and DOC employees we identified above transferred from PERS to PSERS, this bill would impact the actuarial funding of PERS and PSERS by increasing/(decreasing) the present value of future benefits payable under the systems as shown below.

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| Impact on Pension Liability - DSHS & DOC Employees Only | | | |
|--|----------------|-----------------|----------------|
| <i>(Dollars in Millions)</i> | Current | Increase | Total |
| Actuarial Present Value of Projected Benefits | | | |
| <i>(The Value of the Total Commitment to all Current Members)</i> | | | |
| PERS 2/3 | 27,336 | (145.0) | 27,191 |
| PSERS 2 | \$455 | \$207.3 | \$662 |
| Unfunded Actuarial Accrued Liability | | | |
| <i>(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)*</i> | | | |
| PERS 1 | \$3,537 | \$0.0 | \$3,537 |
| Unfunded Projected Unit Credit Liability | | | |
| <i>(The Value of the Total Commitment to all Current Members Attributable to Past Service that is Not Covered by Current Assets)</i> | | | |
| PERS 2/3 | (2,182) | \$7.2 | (2,174) |
| PSERS 2 | (\$34) | \$0.1 | (\$34) |

Note: Totals may not agree due to rounding.

* PERS 1 is amortized over a ten-year period.

How The Present Value of Future Salaries (PVFS) Changed

If all of the DSHS and DOC employees we identified above transferred from PERS to PSERS, this bill would impact the actuarial funding of PERS and PSERS by increasing/(decreasing) the PVFS of the members of the systems as shown below.

| Present Value of Future Salaries – DSHS & DOC Employees Only | | | |
|--|-----------------|--------------------|-----------------|
| <i>(Dollars in Millions)</i> | Current | Increase | Total |
| Actuarial Present Value of Future Salaries | | | |
| <i>(The Value of the Future Salaries Expected to be Paid to Current Members)</i> | | | |
| PERS 2 | \$56,848 | (\$1,056.7) | \$55,791 |
| PERS 3 | 13,874 | (282.8) | 13,591 |
| PERS 2/3 | \$70,721 | (\$1,339.5) | \$69,382 |
| PSERS 2 | \$2,526 | \$1,353.7 | \$3,880 |

Note: Totals may not agree due to rounding.

How Contribution Rates Changed

The rounded increase/decrease in the required actuarial contribution rate results in the supplemental contribution rate for PSERS shown on page one that applies in the current biennium. We will use the un-rounded rate increase/decrease shown below to measure the budget changes in future biennia.

The change in PERS contribution rates does not result in a supplemental contribution rate because the bill does not provide a benefit improvement in PERS. The rate decrease in PERS occurs because of an experience gain due to assumed transfers from PERS to PSERS under this bill. As such, we excluded the change in PERS contribution rate from the 2013-15 Biennium and applied the decrease in PERS contribution rates to subsequent biennia to measure future budget changes.

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| Impact on Contribution Rates (Effective 09/01/2013 for PSERS) DSHS & DOC Employees Only | | |
|--|-----------------|---------------|
| System/Plan | PERS | PSERS |
| Current Members | | |
| Employee (Plan 2) | (0.022%) | 0.502% |
| Employer | | |
| Normal Cost | (0.022%) | 0.502% |
| Plan 1 UAAL | 0.000% | 0.000% |
| Total | (0.022%) | 0.502% |
| New Entrants* | | |
| Employee (Plan 2) | 0.000% | 0.000% |
| Employer | | |
| Normal Cost | 0.000% | 0.000% |
| Plan 1 UAAL | 0.000% | 0.000% |
| Total | 0.000% | 0.000% |

**Rate change applied to future new entrant payroll and used to determine budget impacts only. Current members and new entrants pay the same contribution rate.*

How This Impacts Budgets And Employees

If all of the DSHS and DOC employees we identified above transferred from PERS to PSERS, this bill would impact future budgets as shown below.

The budget impacts shown include additional compensation/benefit budget impacts on employers of transferring members. Please see **Appendix A – Budget Impact Details** for a separate listing of these impacts.

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| Budget Impacts – DSHS & DOC Employees Only | | | |
|---|------------------|----------------|----------------|
| <i>(Dollars in Millions)</i> | PERS | PSERS | Total |
| 2013-2015 | | | |
| General Fund | (\$7.3) | \$12.1 | \$4.8 |
| Non-General Fund | (4.4) | 6.2 | 1.7 |
| Total State | (\$11.8) | \$18.3 | \$6.5 |
| Local Government | 0.0 | 0.9 | 0.9 |
| Total Employer | (\$11.8) | \$19.2 | \$7.4 |
| Total Employee | (\$9.1) | \$19.2 | \$10.1 |
| 2015-2017 | | | |
| General Fund | (\$14.2) | \$17.1 | \$2.9 |
| Non-General Fund | (9.2) | 9.3 | 0.0 |
| Total State | (\$23.4) | \$26.4 | \$2.9 |
| Local Government | (1.7) | 0.8 | (0.9) |
| Total Employer | (\$25.1) | \$27.2 | \$2.1 |
| Total Employee | (\$18.7) | \$27.2 | \$8.5 |
| 2013-2038 | | | |
| General Fund | (\$256.8) | \$327.7 | \$71.0 |
| Non-General Fund | (160.8) | 187.9 | 27.1 |
| Total State | (\$417.5) | \$515.6 | \$98.1 |
| Local Government | (13.7) | 8.0 | (5.7) |
| Total Employer | (\$431.3) | \$523.6 | \$92.4 |
| Total Employee | (\$307.2) | \$523.6 | \$216.5 |

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

The analysis of this bill does not consider any other proposed changes to the systems. The combined effect of several changes to the systems could exceed the sum of each proposed change considered individually.

As with the costs developed in the actuarial valuation, the emerging costs of the systems will vary from those presented in the AVR or this fiscal note to the extent that actual experience differs from the actuarial assumptions.

How the Risk Measures Changed

We have not analyzed this bill using the risk assessment model.

How the Results Change When We Make Different Assumptions

If a different number of members with similar demographic makeup (including age, service, salary, and Plans 2/3 membership) transfer from PERS to PSERS, the results will vary accordingly. For example, if twice as many members transfer the costs of this example will approximately double; if half as many members transfer the costs of this example will be approximately half as much.

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WHAT THE READER SHOULD KNOW

The Office of the State Actuary ("we") prepared this fiscal note based on our understanding of the bill as of the date shown in the footer. We intend this fiscal note to be used by the Legislature during the 2013 Legislative Session only.

We advise readers of this fiscal note to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. Please read the analysis shown in this fiscal note as a whole. Distribution of, or reliance on, only parts of this fiscal note could result in its misuse, and may mislead others.

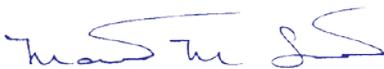
ACTUARY'S CERTIFICATION

The undersigned hereby certifies that:

1. The actuarial cost methods are appropriate for the purposes of this pricing exercise.
2. The actuarial assumptions used are appropriate for the purposes of this pricing exercise.
3. The data on which this fiscal note is based are sufficient and reliable for the purposes of this pricing exercise. The data excludes affected local government employees.
4. Use of another set of methods, assumptions, and data may also be reasonable, and might produce different results.
5. We prepared this fiscal note for the Legislature during the 2013 Legislative Session.
6. Because of missing or insufficient data on affected members, this fiscal note provides estimated impacts for affected DSHS and DOC employees only. Please do not use this fiscal note as an estimate of the impacts from affected local government employees.
7. We prepared this fiscal note and provided opinions in accordance with Washington State law and accepted actuarial standards of practice as of the date shown in the footer of this fiscal note.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

While this fiscal note is meant to be complete, the undersigned is available to provide extra advice and explanations as needed.



Matthew M. Smith, FCA, EA, MAAA
State Actuary

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APPENDIX A – BUDGET IMPACT DETAILS

As described in the **Why This Bill Has a Cost** section, we expect the bill will have an impact on all Plan 2 members and all employers in PERS and PSERS plus an additional impact on employers who employ affected members.

We break out the impacts (from the total impacts) on all employers in PERS and PSERS in the following table.

| Budget Impacts – Retirement System Changes | | | |
|---|-----------------|---------------|---------------|
| All Employers in PERS and PSERS | | | |
| <i>(Dollars in Millions)</i> | PERS | PSERS | Total |
| 2013-2015 | | | |
| General Fund | \$0.0 | \$2.8 | \$2.8 |
| Non-General Fund | 0.0 | 0.4 | 0.4 |
| Total State | \$0.0 | \$3.2 | \$3.2 |
| Local Government | 0.0 | 0.9 | 0.9 |
| Total Employer | \$0.0 | \$4.1 | \$4.1 |
| Total Employee | \$0.0 | \$4.1 | \$4.1 |
| 2015-2017 | | | |
| General Fund | (\$0.6) | \$2.6 | \$2.0 |
| Non-General Fund | (1.0) | 0.4 | (0.5) |
| Total State | (\$1.6) | \$3.0 | \$1.4 |
| Local Government | (1.7) | 0.8 | (0.9) |
| Total Employer | (\$3.3) | \$3.8 | \$0.6 |
| Total Employee | (\$2.6) | \$3.8 | \$1.2 |
| 2013-2038 | | | |
| General Fund | (\$5.0) | \$25.3 | \$20.3 |
| Non-General Fund | (7.8) | 4.1 | (3.7) |
| Total State | (\$12.8) | \$29.4 | \$16.5 |
| Local Government | (13.7) | 8.0 | (5.7) |
| Total Employer | (\$26.5) | \$37.4 | \$10.8 |
| Total Employee | (\$20.8) | \$37.4 | \$16.6 |

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

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We break out the impacts (from the total impacts) on employers of assumed transferring members in the following table. For this table, we assumed 100 percent of DOC's funding comes from the General Fund and 50 percent of DSHS' funding comes from the General Fund.

| Budget Impacts – Compensation/Benefits Budgets Employers of Assumed Transferring Members | | | |
|---|------------------|----------------|---------------|
| <i>(Dollars in Millions)</i> | PERS | PSERS | Total |
| 2013-2015 | | | |
| General Fund | (\$7.3) | \$9.4 | \$2.1 |
| Non-General Fund | (4.4) | 5.7 | 1.3 |
| Total State | (\$11.8) | \$15.1 | \$3.3 |
| Local Government | 0.0 | 0.0 | 0.0 |
| Total Employer | (\$11.8) | \$15.1 | \$3.3 |
| 2015-2017 | | | |
| General Fund | (\$13.6) | \$14.5 | \$0.9 |
| Non-General Fund | (8.3) | 8.8 | 0.6 |
| Total State | (\$21.9) | \$23.4 | \$1.5 |
| Local Government | 0.0 | 0.0 | 0.0 |
| Total Employer | (\$21.9) | \$23.4 | \$1.5 |
| 2013-2038 | | | |
| General Fund | (\$251.8) | \$302.5 | \$50.7 |
| Non-General Fund | (153.0) | 183.8 | 30.8 |
| Total State | (\$404.7) | \$486.3 | \$81.6 |
| Local Government | 0.0 | 0.0 | 0.0 |
| Total Employer | (\$404.7) | \$486.3 | \$81.6 |

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

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APPENDIX B – DATA AND RESULTS BY AGENCY

The analysis presented in the main body of this fiscal note combined results for DSHS and DOC. The tables below show similar information for the two agencies separately. The individual results in the following tables do not precisely sum to the total results shown in the body of this fiscal note.

Participant Data

| Active Membership | | | | | |
|-------------------------------|--------------|--------------|--------------|-----------------|---------------------|
| | | Average | | | |
| | Count | Age | Service | Annual Salary | Accumulated Savings |
| PERS Plans 2/3 | 144,684 | 47.19 | 11.47 | \$56,318 | \$24,921 |
| PSERS | 4,187 | 39.50 | 8.06* | 55,597 | 14,815 |
| DSHS Data for Bill | 2,579 | 44.70 | 12.34 | 41,002 | 22,335 |
| DOC Data for Bill | 575 | 44.82 | 9.71 | 59,391 | 21,286 |
| Combined Data for Bill | 3,154 | 44.73 | 11.86 | \$44,355 | \$22,144 |

*Includes 3.7 years of service in PSERS and 4.36 years of service from PERS. PERS service may be used for retirement eligibility.

How The Liabilities Changed

| Impact on Pension Liability - DSHS | | | |
|--|---------|----------|---------|
| (Dollars in Millions) | Current | Increase | Total |
| Actuarial Present Value of Projected Benefits | | | |
| <i>(The Value of the Total Commitment to all Current Members)</i> | | | |
| PERS 2/3 | 27,336 | (110.7) | 27,225 |
| PSERS 2 | \$455 | \$145.2 | \$600 |
| Unfunded Actuarial Accrued Liability | | | |
| <i>(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)*</i> | | | |
| PERS 1 | \$3,537 | \$0.0 | \$3,537 |
| Unfunded Projected Unit Credit Liability | | | |
| <i>(The Value of the Total Commitment to all Current Members Attributable to Past Service that is Not Covered by Current Assets)</i> | | | |
| PERS 2/3 | (2,182) | \$6.3 | (2,175) |
| PSERS 2 | (\$34) | \$0.1 | (\$34) |

Note: Totals may not agree due to rounding.

* PERS 1 is amortized over a ten-year period.

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| Impact on Pension Liability - DOC | | | |
|--|----------------|-----------------|----------------|
| <i>(Dollars in Millions)</i> | Current | Increase | Total |
| Actuarial Present Value of Projected Benefits | | | |
| <i>(The Value of the Total Commitment to all Current Members)</i> | | | |
| PERS 2/3 | 27,336 | (34.3) | 27,302 |
| PSERS 2 | \$455 | \$45.5 | \$500 |
| Unfunded Actuarial Accrued Liability | | | |
| <i>(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)*</i> | | | |
| PERS 1 | \$3,537 | \$0.0 | \$3,537 |
| Unfunded Projected Unit Credit Liability | | | |
| <i>(The Value of the Total Commitment to all Current Members Attributable to Past Service that is Not Covered by Current Assets)</i> | | | |
| PERS 2/3 | (2,182) | \$0.9 | (2,181) |
| PSERS 2 | (\$34) | \$0.0 | (\$34) |

Note: Totals may not agree due to rounding.

* PERS 1 is amortized over a ten-year period.

How The Present Value of Future Salaries (PVFS) Changed

| Present Value of Future Salaries - DSHS | | | |
|--|-----------------|--------------------|-----------------|
| <i>(Dollars in Millions)</i> | Current | Increase | Total |
| Actuarial Present Value of Future Salaries | | | |
| <i>(The Value of the Future Salaries Expected to be Paid to Current Members)</i> | | | |
| PERS 2 | \$56,848 | (\$807.8) | \$56,040 |
| PERS 3 | 13,874 | (209.3) | 13,665 |
| PERS 2/3 | \$70,721 | (\$1,017.0) | \$69,704 |
| PSERS 2 | \$2,526 | \$957.3 | \$3,483 |

Note: Totals may not agree due to rounding.

| Present Value of Future Salaries - DOC | | | |
|--|-----------------|------------------|-----------------|
| <i>(Dollars in Millions)</i> | Current | Increase | Total |
| Actuarial Present Value of Future Salaries | | | |
| <i>(The Value of the Future Salaries Expected to be Paid to Current Members)</i> | | | |
| PERS 2 | \$56,848 | (\$248.9) | \$56,599 |
| PERS 3 | 13,874 | (73.5) | 13,800 |
| PERS 2/3 | \$70,721 | (\$322.4) | \$70,399 |
| PSERS 2 | \$2,526 | \$300.6 | \$2,827 |

Note: Totals may not agree due to rounding.

Actuary's Fiscal Note For EHB 1923

How Contribution Rates Changed

| Impact on Contribution Rates - DSHS | | |
|-------------------------------------|-----------------|---------------|
| System/Plan | PERS | PSERS |
| Current Members | | |
| Employee (Plan 2) | (0.017%) | 0.375% |
| Employer | | |
| Normal Cost | (0.017%) | 0.375% |
| Plan 1 UAAL | 0.000% | 0.000% |
| Total | (0.017%) | 0.375% |
| New Entrants* | | |
| Employee (Plan 2) | 0.000% | 0.000% |
| Employer | | |
| Normal Cost | 0.000% | 0.000% |
| Plan 1 UAAL | 0.000% | 0.000% |
| Total | 0.000% | 0.000% |

**Rate change applied to future new entrant payroll and used to determine budget impacts only. Current members and new entrants pay the same contribution rate.*

| Impact on Contribution Rates - DOC | | |
|------------------------------------|-----------------|---------------|
| System/Plan | PERS | PSERS |
| Current Members | | |
| Employee (Plan 2) | (0.005%) | 0.143% |
| Employer | | |
| Normal Cost | (0.005%) | 0.143% |
| Plan 1 UAAL | 0.000% | 0.000% |
| Total | (0.005%) | 0.143% |
| New Entrants* | | |
| Employee (Plan 2) | 0.000% | 0.000% |
| Employer | | |
| Normal Cost | 0.000% | 0.000% |
| Plan 1 UAAL | 0.000% | 0.000% |
| Total | 0.000% | 0.000% |

**Rate change applied to future new entrant payroll and used to determine budget impacts only. Current members and new entrants pay the same contribution rate.*

Actuary's Fiscal Note For EHB 1923

How This Impacts Budgets And Employees

| Budget Impacts - DSHS | | | |
|------------------------------|------------------|----------------|----------------|
| <i>(Dollars in Millions)</i> | PERS | PSERS | Total |
| 2013-2015 | | | |
| General Fund | (\$5.1) | \$7.6 | \$2.5 |
| Non-General Fund | (5.5) | 6.0 | 0.5 |
| Total State | (\$10.6) | \$13.6 | \$3.0 |
| Local Government | (1.8) | 0.6 | (1.2) |
| Total Employer | (\$12.4) | \$14.2 | \$1.8 |
| Total Employee | (\$9.7) | \$14.2 | \$4.5 |
| 2015-2017 | | | |
| General Fund | (\$8.7) | \$10.6 | \$1.8 |
| Non-General Fund | (9.0) | 9.1 | 0.1 |
| Total State | (\$17.7) | \$19.7 | \$1.9 |
| Local Government | (1.3) | 0.6 | (0.7) |
| Total Employer | (\$19.0) | \$20.2 | \$1.2 |
| Total Employee | (\$14.1) | \$20.2 | \$6.1 |
| 2013-2038 | | | |
| General Fund | (\$156.7) | \$200.4 | \$43.7 |
| Non-General Fund | (158.9) | 186.2 | 27.3 |
| Total State | (\$315.6) | \$386.6 | \$71.0 |
| Local Government | (11.0) | 5.4 | (5.6) |
| Total Employer | (\$326.6) | \$392.0 | \$65.4 |
| Total Employee | (\$233.6) | \$392.0 | \$158.3 |

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

Actuary's Fiscal Note For EHB 1923

| Budget Impacts - DOC | | | |
|------------------------------|------------------|----------------|---------------|
| <i>(Dollars in Millions)</i> | PERS | PSERS | Total |
| 2013-2015 | | | |
| General Fund | (\$2.9) | \$4.3 | \$1.4 |
| Non-General Fund | 0.0 | 0.1 | 0.1 |
| Total State | (\$2.9) | \$4.4 | \$1.4 |
| Local Government | 0.0 | 0.2 | 0.2 |
| Total Employer | (\$2.9) | \$4.5 | \$1.6 |
| Total Employee | (\$2.2) | \$4.5 | \$2.3 |
| 2015-2017 | | | |
| General Fund | (\$5.6) | \$6.3 | \$0.7 |
| Non-General Fund | (0.2) | 0.1 | (0.1) |
| Total State | (\$5.8) | \$6.4 | \$0.6 |
| Local Government | (0.4) | 0.2 | (0.2) |
| Total Employer | (\$6.2) | \$6.5 | \$0.4 |
| Total Employee | (\$4.1) | \$6.5 | \$2.4 |
| 2013-2038 | | | |
| General Fund | (\$101.9) | \$125.1 | \$23.2 |
| Non-General Fund | (1.6) | 0.9 | (0.7) |
| Total State | (\$103.4) | \$125.9 | \$22.5 |
| Local Government | (2.7) | 1.7 | (1.1) |
| Total Employer | (\$106.2) | \$127.6 | \$21.4 |
| Total Employee | (\$75.9) | \$127.6 | \$51.7 |

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

GLOSSARY OF ACTUARIAL TERMS

Actuarial Accrued Liability: Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions (i.e. interest rate, rate of salary increases, mortality, etc.).

Aggregate Funding Method: The Aggregate Funding Method is a standard actuarial funding method. The annual cost of benefits under the Aggregate Method is equal to the normal cost. The method does not produce an unfunded actuarial accrued liability. The normal cost is determined for the actuarial accrued group rather than on an individual basis.

Entry Age Normal Cost Method (EANC): The EANC method is a standard actuarial funding method. The annual cost of benefits under EANC is comprised of two components:

- ❖ Normal cost.
- ❖ Amortization of the unfunded actuarial accrued liability.

The normal cost is determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

Normal Cost: Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

Projected Unit Credit (PUC) Liability: The portion of the Actuarial Present Value of future benefits attributable to service credit that has been earned to date (past service) based on the PUC method.

Projected Benefits: Pension benefit amounts that are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

Unfunded PUC Liability: The excess, if any, of the Present Value of Benefits calculated under the PUC cost method over the Valuation Assets. This is the portion of all benefits earned to date that are not covered by plan assets.

Unfunded Actuarial Accrued Liability (UAAL): The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date that are not covered by plan assets.