

# State of Washington Department of Labor and Industries

Rate Level Analysis for the 2008 Exposure Period

December 3, 2007



December 3, 2007

Mr. Steve Wendling  
Washington State Auditor's Office  
Sunset Building  
3200 Capital Way  
Olympia, Washington 98501

Dear Mr. Wendling:

Attached is our report on the rate level indications for the 2008 underwriting year of the State of Washington Department of Labor and Industries (the "Department") based on data evaluated as of June 30, 2007.

Attention is called to the section of the report entitled *Distribution and Use*, which sets out the limits on distribution and use of the report and, in particular, the conditions that permitted recipients must recognize and are deemed to have accepted by retaining a copy of the report.

We have enjoyed working with you and the Department in the preparation of this report. Please call if you have any questions.

Sincerely,

TOWERS PERRIN

Russell Greig, FCAS, MAAA, CFA  
Direct Dial: 404-365-1707

David F. Mohrman, FCAS, MAAA  
Direct Dial: 860-843-7041

RG:kn

Attachment

cc: William Vasek, Department of Labor & Industries

---

# Table of Contents

<b>PURPOSE .....</b>	<b>1</b>
<b>DISTRIBUTION AND USE .....</b>	<b>2</b>
<b>FINDINGS.....</b>	<b>3</b>
<b>RELIANCES .....</b>	<b>6</b>
Inherent Uncertainty .....	6
Data Reliance .....	7
Extraordinary Future Emergence.....	8
<b>BACKGROUND.....</b>	<b>9</b>
<b>DATA AND INFORMATION.....</b>	<b>10</b>
<b>METHODOLOGY .....</b>	<b>11</b>
Summary of Methodology .....	11
Estimated Ultimate Losses for Prior Occurrence Periods.....	11
Modeling of 2008 .....	11
Statutory Benefit Changes .....	12
Rate Level Changes .....	12
Trends.....	12
Indicated and Selected 2008 Loss Ratios (to Earned Premiums) .....	13
Other Components of Rate Indications.....	13
Present Value Factors .....	14

Loss Adjustment Expense .....	14
Premium, General and Other Administration Expenses .....	14
Investment Income on Equity (Contingency Reserve).....	14
Projected Contribution to Equity .....	15
Other Rating Programs .....	15
Break-even Rate Level Changes .....	15
<b>DESCRIPTION OF EXHIBITS.....</b>	<b>16</b>
Exhibit 7 – Analysis of Trend .....	16
Exhibit 6 – Benefit Level Changes .....	17
Exhibit 5 – Summary of Selected Ultimate Losses and Selected Ultimate Claims Counts... 17	
Exhibit 4 – Present Value Factors.....	17
Exhibit 3 – Expenses, Retrospective Rating Program Impact and Other Income.....	17
Exhibit 2 – Projection to 2008 Loss Ratios .....	18
Exhibit 1 – Summary of Results.....	18

## PURPOSE

The Tillinghast business of Towers Perrin (“Tillinghast”) was engaged by the State Auditor’s Office of the State of Washington (“SAO”) to prepare and independent actuarial analysis of the State of Washington Department of Labor and Industries’ (the “Department”) rate level change for the 2008 underwriting year for the Medical Aid Fund (“MAF”) and Accident Fund (“AF”).

We conducted our analysis based on the MAF’s and AF’s experience, using data evaluated as of June 30, 2007, projected to expected 2008 economic conditions and cost levels. This report summarizes our analysis and results. We have presented our results by estimating the break-even rate level change that would result from one of several illustrative assumed investment yields on the premium cash flow. We have presented our results as a best estimate, together with a low estimate and a high estimate of the rate level change.

The choice of an overall rate level change depends on decisions regarding the assumed rate of investment income to anticipate on the underwriting cash flow. The SAO should consider not only our best estimate indications, but also our low and high estimates, in considering a particular rate level decision.

## DISTRIBUTION AND USE

This report has been prepared for the internal use of SAO's and the Department's management solely for the purpose of evaluating the Department's selected rate level change for 2008 based on data as of June 30, 2007. It is not intended, nor necessarily suitable for any other purpose.

No further distribution of this report or reference, either oral or written, to Tillinghast, our analysis or findings related to this report may be made without our prior written consent.

The report contains workpapers, trade secrets, and confidential information of both the Department and Tillinghast. Because of the nature of the material contained in the report, it is not intended to be subject to disclosure requirements under any Freedom of Information Act or similar laws.

The exhibits attached in support of our conclusions are an integral part of this report. These sections have been prepared so that our actuarial assumptions and judgments are documented. Judgments about the findings presented in this report should be made only after considering the report in its entirety. We are available to answer any questions that may arise regarding this report. We assume that the user of this report will seek such explanation on any matter in question.

This indications set forth in this report are predicated on a number of assumptions as to future conditions and events. These assumptions are documented in subsequent sections of this report, and should be understood in order to place the actuarial estimates in their appropriate context. In addition, the estimates are subject to inherent limitations, as discussed herein.

## FINDINGS

Based on our analysis of the Department’s experience as of June 30, 2007, and subject to the considerations set forth in the *Reliances and Limitations* section, we have reached the following conclusions.

Our Low, Best and High estimate loss projections, together with various assumed investment yields on the underwriting cash flow produce the following break-even rate level changes.

Our loss projections are documented in a separate report based on loss experience evaluated as of June 30, 2007. The break-even rate level change is the required rate level change to balance costs (expenses and benefits) with revenue (premiums, investment income and other income).

---

### Medical Aid Fund Indicated Break-even Rate Level Change

---

Investment Yield	Tillinghast			Department
	Low Estimate	Best Estimate	High Estimate	Best Estimate
0.00%	55.4%	60.9%	66.4%	N/A
2.50%	25.1	29.5	33.9	18.8%
3.00%	21.4	25.6	29.9	NA
3.50%	18.1	22.3	26.4	NA
4.00%	15.3	19.3	23.4	NA
4.24%	14.0	18.0	22.0	NA
4.50%	12.7	16.7	20.6	NA
5.00%	10.4	14.3	18.2	NA
5.50%	8.4	12.2	16.0	NA

---

Assuming an investment yield in the range of 4.00% to 4.50% for discounting the MAF’s 2008 losses, we believe the Department’s indication of 18.8% is within a range of reasonable estimates. Assuming an investment yield in the range of 4.00% to 4.50%, our “Best” estimate indications are approximately equal to the Department’s indication.

**Accident Fund  
 Indicated Break-even Rate Level Change**

Investment Yield	Tillinghast			Department
	Low Estimate	Best Estimate	High Estimate	Best Estimate
0.00%	21.2%	27.5%	33.7%	N/A
2.50%	6.7	12.3	17.8	NA
3.00%	4.3	9.7	15.1	NA
3.50%	2.0	7.2	12.5	NA
4.00%	-0.3	4.9	10.1	NA
4.24%	-1.3	3.8	9.0	-4.5%
4.50%	-2.4	2.7	7.8	NA
5.00%	-4.4	0.6	5.6	NA
5.50%	-6.3	-1.4	3.5	NA

Assuming an investment yield in the range of 5.00% to 5.50% for discounting the AF’s 2008 losses, we believe the Department’s indication of -4.5% is within a range of reasonable estimates. Assuming an investment yield in the range of 5.00% to 5.50%, our “Best” estimate indications are higher than the Department’s indication.

The primary reason for our differences in the rate level change is from the Department’s “extra” investment income and our Investment Income on Equity (contingency reserve). For the MAF, the Department’s rate level change reflects 25.6% of “extra” investment income, while our rate level change reflects only 6.0% of Investment Income on Equity. For the AF, the Department’s rate level change reflects 20.0% of “extra” investment income, while our rate level change reflects only 4.9% of Investment Income on Equity.

The Department’s calculation of “extra” investment income includes one calendar year of excess investment income from the difference of the projected 2008 rate of return and the discount rate on losses. This is approximately the same effect as discounting the losses at

their projected 2008 rate of return of 5.68% for MAF and 6.04% for the AF. We believe a discount rate of about 4.00% to 5.50% is appropriate for discounting the 2008 losses.

Also note, our calculation of Investment Income on Equity uses the Department's projected 2008 ratios of Equity to Premium of 1.49 and 0.97 for the MAF and AF, and forecasted rates of return of 4.00% and 5.00% for the MAF and the AF, respectively.

Also note that reflecting investment income from equity in the rate level change means that equity will not grow. Therefore, the MAF's and AF's leverage, (reserve to equity and premium to equity ratios) will increase.

Also note that the distribution of on level premiums between the AF and the MAF have been constant across the accident years, while the distribution of on level losses have been shifting more to the MAF in the recent accident years. The premium distribution also should be shifting along with the losses. Therefore, the Department should revisit the allocation of premium between the MAF and the AF.

## RELIANCES

### Inherent Uncertainty

There is a limitation upon the accuracy of rate indications for prospective periods in that there are inherent uncertainties involved. The ultimate disposition of claims incurred prior to the financial statement date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions, court interpretations, legislative changes, changes in the medical condition of claimants, public attitudes, and social/economic conditions such as inflation. Any estimate of future costs is subject to the inherent limitation on one's ability to predict the aggregate course of future events. It should therefore be expected that the actual emergence of losses and loss adjustment expense ("LAE") will vary, perhaps materially, from any estimate. Thus, no assurance can be given that the Department's actual 2008 costs will not ultimately exceed the estimates contained herein. In our judgment, we have employed techniques and assumptions that are appropriate, and the indications presented herein are reasonable, given the information currently available.

The inherent uncertainty associated with estimated rate level changes is magnified in this case due to the following circumstances:

- The long-tailed nature of workers' compensation claims. Payments on workers' compensation can occur over as many as thirty or forty years. Medical payments, in particular, are difficult to predict far into the future, as medical inflation and the nature of medical treatments vary over time.
- The large number of total permanent disability claims, which average over \$200,000 per case. A small change in the number of projected total permanent disability claims results in a large change in the ultimate estimate for this component. The awarding of total permanent disability benefits appears to be subject to delays and subsequent catch-up, which increases the uncertainty in estimating the total number of claims.

- The lack of available case reserve estimates. The Department only establishes case reserves for experience rating purposes and does not maintain a history of case reserves. The lack of case reserve data limits possible methodologies to those which rely solely on paid losses. While the paid losses generally provide a stable history upon which to base estimates of ultimate losses, the lack of incurred loss methods increases the uncertainty associated with those estimates.

Other sources of uncertainty are introduced in estimating rate level indications on a present value basis and reflecting investment income on equity. That is, besides the risk of underestimating or overestimating the overall amount of the loss, there is the additional risk that the timing of the future payment of those losses will differ from the estimated payout, or that the future yield on the underlying assets will differ from the assumed investment yield rates. Actual loss payments could occur materially more rapidly or more slowly than projected, due to random variations and the timing of large claim payments. The yield on assets supporting the liabilities may be affected by capital gains or losses, or significant changes in economic conditions.

Recognizing the uncertainties associated with the projections, we have presented our results as a “Best Estimate” together with a range around the “Best Estimate” labeled as “Low” and “High.” We believe there is a high likelihood that the Department’s experience will be within this range, but the “Low” and “High” estimates are not intended as best case or worst case scenarios. Actual results may be outside this range.

### Data Reliance

Throughout this analysis, we have relied on historical data and other quantitative and qualitative information supplied by the Department. We have not independently audited or verified this information, however, we have reviewed it for reasonableness and internal consistency, and our evaluation did not reveal any issues materially affecting our analysis. We have assumed that the information is complete and accurate, and that we have been provided with all information relevant to the analysis of the Department’s ultimate losses, LAE, expenses and other income. The accuracy of our results is dependent upon the

accuracy and completeness of the underlying data; therefore, any material discrepancies discovered in this data should be reported to us and this report amended accordingly, if warranted.

### Extraordinary Future Emergence

We have not anticipated any extraordinary changes to the legal, social or economic environment that might affect the cost, frequency, or future reporting of claims. In addition, our estimates make no provision for potential future claims arising from loss causes not represented in the historical data (e.g., new types of mass torts or latent injuries, terrorist acts, etc.) except insofar as claims of these types are included but not identified in the reported claims and are implicitly analyzed.

## BACKGROUND

The Department is a state agency which administers the Washington State Fund, which provides medical and limited wage-replacement coverage to workers who suffer job-related injuries and illness. The Medical Aid Fund pays for medical care and related services, including some vocational rehabilitation. The Accident Fund provides money to pay non-medical claim costs such as wage-replacement benefits, most vocational rehabilitation costs, disability pensions and survivor benefits.

In 2005, the Washington State Legislature passed a law (RCW 51.44.115) requiring the State Auditor's Office to conduct annual audits of the workers' compensation funds beginning in 2006. A portion of the required audit includes an actuarial opinion on whether the rate level analysis was prepared in accordance with generally accepted actuarial principles. Tillinghast was engaged by the State Auditor's Office to prepare that opinion. This report serves as support for the opinion.

## DATA AND INFORMATION

The Department provided among other items, the following data and information for use in this analysis:

- On-level Earned Premium for the MAF and AF separately
- Unallocated loss adjustment expense payments for the MAF and AF separately
- Other income for the MAF and AF separately
- Premium, general and other administrative expenses for the MAF and AF separately
- Retrospective rating program premium and losses for the MAF and AF combined
- Benefit level changes for the AF
- Statewide average annual wages.

The Department also provided us with a variety of other data elements which we did not use directly in our analysis, but provided background information and insights into their actuarial process. We also conducted interviews with members of the Department's staff.

For our regression analysis of trends we relied on the following data:

- Unemployment rates and the change in unemployment compiled by the U. S. Department of Labor, Bureau of Labor Statistics for the State of Washington
- Change in medical cost per lost-time claim based on Tillinghast analysis of industry data.

For the expected long term rates of return used in estimating Investment Income on Equity, we relied on our internal economic forecasts. Economic scenarios, including interest rates, inflation rates, asset-specific yields and total returns, were generated by Tillinghast software called Global CAP:Link. This software is designed to general real world economic scenarios based on statistical analysis of historical performance, yield curves, and correlations between different types of assets, such as equities and bonds.

## METHODOLOGY

### Summary of Methodology

In deriving the estimated break-even rate level change produced by various investment yields for the 2008 underwriting year, historical occurrence periods are first projected to an ultimate basis. Then, each historical period is adjusted to the rate level, benefit level, and cost level for the prospective period. These results provide the basis for estimating the 2008 loss ratio in the absence of a rate level change. Next, this projected loss ratio is combined with projected expense levels, and adjusted for projected levels of income and potential alternative investment yields. As detailed on Exhibit 1, Sheets 1, 2a and 2b, these components are used to calculate the estimated rate level change by balancing (a) the total income which will be generated to (b) projected expenses and losses.

### Estimated Ultimate Losses for Prior Occurrence Periods

The first step in our analysis is to project ultimate losses for the historical periods. Our analysis of ultimate losses is documented in a separate report using data evaluated as of June 30, 2007.

### Modeling of 2008

The historical periods projected as described in our *Analysis of Loss and LAE Reserves as of June 30, 2007* report are the 1996 through 2006 accident years. Each of these periods can be used to model the expected performance of the 2008 accident year. We do this by calculating the ultimate loss ratio for the historical periods, and then adjusting those loss ratios for changes in conditions:

- Statutory benefit changes
- Rate level changes
- Claim frequency and claim severity changes, e.g., as influenced by inflation and unemployment.

## ***Statutory Benefit Changes***

### ***Routine change***

Many statutory benefit changes, such as routine updates to maximum weekly benefits, can be quantified mechanically. For these types of benefit changes, we have used estimates provided by the Department.

### ***Rate Level Changes***

Rate level changes are among the factors that will cause future loss ratios to be different from historical loss ratios. Rate level changes include not only modifications to manual rates, but also the effects of other rating programs such as experience rating or schedule rating.

The effects of historical rate level changes are reflected in the on-level earned premium provided by the Department.

For purposes of the current analysis, our loss ratios and expense ratios are being expressed in relationship to manual premium (retrospective rating program effects are captured elsewhere). Therefore, the rate changes included in this stage of the analysis are for manual rate changes only.

### ***Trends***

After specific effects such as those described above have been incorporated to place historical loss ratios on 2008 levels, a residual pattern in the loss ratios may exist due to the forces of inflation, changes in employment rates or other factors.

We tested for residual patterns by applying regression analysis to the loss ratios (and their components, claim frequency and claim severity) which have been adjusted by the factors described previously. We tested various formulations which attempt to explain movements in claims experience as a function of various explanatory variables.

Based on the results of these various analyses, we selected trend factors to adjust each historical accident period loss ratio to 2008 levels.

Exhibit 7, Sheet 1a summarizes the selected trend factors; Exhibit 7, Sheets 2 through 15 detail the analyses underlying our selections.

In our selection of trend factors, we relied primarily on the movement of loss ratios in Exhibit 17, Sheets 8 and 11 for the MAF and Sheets 12 and 13 for the AF.

We have calculated and selected trend factors from each historical period to the 2008 accident year.

#### Indicated and Selected 2008 Loss Ratios (to Earned Premiums)

Exhibit 2, Sheets 2a and 2b details the projected on-level ultimate loss ratios by historical accident year. The resulting indicated 2007-2008 loss ratios are summarized in Exhibit 1, Sheets 2a through 2b, column 2, and serve as the basis for the selection of the estimated accident year 2008 ultimate loss ratio (to manual premium) in the absence of a 2008 rate level change.

##### MAF

Range: 141.0% to 151.0%  
Best estimate: 146.0% (Exhibit 1, Sheet 2a)

##### AF

Range: 96.5% to 106.5%  
Best estimate: 101.5% (Exhibit 1, Sheet 2b)

The range of projected loss ratios is not intended to represent worst case or best case scenarios, but to recognize a reasonable range of likely outcomes in projected future experience.

#### Other Components of Rate Indications

Several additional considerations and calculations are required to determine the indicated rate level change.

### ***Present Value Factors***

For workers' compensation insurance, premiums are collected during the coverage period, while claims are paid out over many years or decades. Exhibit 4 estimates the pattern of payments.

This extended payment period for benefits creates an opportunity to invest the premium dollars from time of collection until claim payment. Thus, it is only necessary to collect the present value of claim payments, with the investment income making up the difference between the present value and the ultimate value. Exhibit 4, Sheets 1a through 3g detail the calculation of present value factors at seven investment yield rates 2.50%, 3.00%, 3.50%, 4.00%, 4.24%, 4.50%, 5.00% and 5.50%.

### ***Loss Adjustment Expense***

One of the significant expense items for an insurer is claim adjustment expense, the cost of handling claims.

Based on historical data provided by the Department (Exhibit 3, Sheets 4a and 4b), we have selected unallocated claim adjustment expense provisions of 9.5% and 6.0% for the MAF and AF, respectively. We accepted the Department's allocated loss adjustment expense provisions of 0.5% and 0.002% for the MAF and AF, respectively. Both of these provisions are expressed as a percentage of losses.

### ***Premium, General and Other Administration Expenses***

Based on historical data provided by the Department (Exhibit 3, Sheet 1), we have selected a provision for premium, general and other administration expenses of 7.0% and 6.0% for the MAF and AF, respectively. Both of these provisions are expressed as a percentage of earned premium.

### ***Investment Income on Equity (Contingency Reserve)***

Based on Tillinghast forecast of expected returns on the Fund's equity of 4.0% and 6.0% and premium to equity ratios of 1.49 and 0.97 for the MAF and AF, respectively, we have

estimated provisions of 5.96% and 4.85% for investment income on equity for the MAF and AF, respectively.

### ***Projected Contribution to Equity***

Typically, insurance premiums should include a margin above what is needed to pay the (present value) cost of claims and the expenses. This margin is viewed in several ways:

- A margin to provide for growth of equity in order to be able to support future premium growth
- A provision for adverse deviation. In our experience, it is more likely that unexpected events will produce higher than expected losses, rather than lower than expected. A provision for adverse deviation sometimes is viewed as the average likely shortfall between expected losses and actual losses. Actual results may fall outside the selected range.

Since we calculated break-even rate level changes, the resulting projected contributions to equity are zero.

### ***Other Rating Programs***

We have calculated rate level indications net of retrospective rating program impacts in the AF. The Department has historically returned premium through its retrospective rating program. As a result, the net credits have to be reflected in estimating the rate level change. Our selection based on historical impacts is 15.7% (credit).

### **Break-even Rate Level Changes**

Exhibit 1, Sheets 1 through 2b summarize the calculation of the break-even rate level changes based on

- Alternative investment yields
- Best estimate, and low and high estimates of loss experience.

Exhibit 1, Sheet 1 provides an overall summary of the break-even rate level changes.

## DESCRIPTION OF EXHIBITS

This section briefly outlines the exhibits to this report.

We have organized the exhibits so that the most detailed information is at the back of the report, with summary results shown in Exhibit 1.

### Exhibit 7 – Analysis of Trend

Even after known factors such as statutory changes and rate changes are quantified, a residual trend may be observed in the historical loss data. Exhibit 7 documents our analysis of these residual trends, and our selection of trend factors to project historical data to 2008 levels.

- Sheet 1a of Exhibit 7 summarizes our selected trend factors to 2008; Sheet 1b displays the implied year-to-year trends. We have allowed the trend factors to vary by year in accordance with the indications produced by our analysis.
- In Sheet 2 of Exhibit 7, we derive claim count trend factors. These are based on the analysis of claim frequency (per on-level earned premium) and the changing volume of business insured.
- In Sheets 3 and 4, we document the regression analyses of claim frequency trends. We used unemployment rates, changes in the employed population in Washington, and a time trend as explanatory variables. These variables explain almost all the movements in claim frequency.
- Sheets 5 through 7 display the regression analysis of claim severity trends. In these analyses, we evaluate the movement of severity trends relative to time and broader inflation measures – average annual wages for the AF.
- Sheets 8 through 13 display the regression analyses for MAF and AF loss ratios, based on alternative regression relationships.

The final selected loss ratio trends (Exhibit 7, Sheet 1a, Columns 10 and 11) are based on the results of our trend analysis of the loss ratios (Sheets 8 and 11 and Sheets 12 through 13), and judgments.

#### Exhibit 6 – Benefit Level Changes

Exhibit 6, Sheets 2a and 2b, summarizes the effects of historical movements in statutory benefits for the time-loss and permanent partial disability benefits. The effect of each change is quantified, and accumulated to estimate a factor to adjust each historical year's experience to current benefit levels. On Sheet 1, the separate on-level benefit factors are weighted by ultimate losses.

#### Exhibit 5 – Summary of Selected Ultimate Losses and Selected Ultimate Claims Counts

Sheet 2 summarizes our selected ultimate claim counts for the MAF and AF by accident year. Sheet 1 summarizes our selected ultimate losses and on-level ultimate loss ratios. The ultimate losses and counts are from our liability analysis as of June 30, 2007 and are documented in a separate report.

#### Exhibit 4 – Present Value Factors

Exhibit 4 documents the payment pattern implied by our analysis, and derives present value discount factors using several investment yield rates.

#### Exhibit 3 – Expenses, Retrospective Rating Program Impact and Other Income

Selected provisions for expenses in the 2008 rates are based on our review of historical MAF and AF expense data. Sheet 1 addresses premium, general and other administrative expenses; Sheet 2 addresses the other income provision. Sheet 3 addresses the Retrospective Rating Program Provision; and Sheet 4 addresses unallocated loss adjustment expense. All provisions except ULAE are expressed as a percentage of earned premium, before the impact of the retrospective rating program.

## Exhibit 2 – Projection to 2008 Loss Ratios

In Exhibit 2, we adjust the ultimate loss ratios for each of the historical experience periods to 2008 conditions. Specifically, we adjust for loss ratio trend.

Sheet 2 provide the details of this analysis for MAF and AF separately, and Sheet 1 provides a summary of combined MAF and AF results.

## Exhibit 1 – Summary of Results

Sheets 2a through 2b of Exhibit 1 derive the indicated break-even rate level changes using (a) the selected range of 2008 loss ratios, (b) selected expense provisions, (c), investment income on equity, and (d) discount factors to reflect investment income on the cash flow.

Sheet 1 of Exhibit 1 summarizes the indicated rate level changes for MAF and AF combined.

The remaining sheets of Exhibit 1 summarize other key elements of our analysis.

- Sheet 3 graphically displays the projected on-level ultimate loss ratios for historical experience periods.
- Sheet 4 displays the movement of benefit levels over the years.

**Calculation of Break Even Rate Level Change - 2008  
Based on Data as of 6/30/2007  
Medical Aid Fund and Accident Fund**

**Ia) Projected Earned Loss Ratio With No Rate Change**

Accident Year	Projected 2008 Loss Ratio With No Additional Rate Change
(1)	(2)
1996	1.201
1997	1.200
1998	1.161
1999	1.174
2000	1.194
2001	1.199
2002	1.196
2003	1.176
2004	1.181
2005	1.179
2006	1.201

**Ib) Selected 2008 Earned Loss Ratio With No Additional Rate Change**

Low	Best Estimate	High
(3)	(4)	(5)
1.140	1.190	1.240

**II) Expense Provisions, Investment Income and Other Income**

a) Claim Adjustment Expense	7.36%
b) Premium and General Expenses	6.39%
c) Investment Income on Equity	5.28%
d) Other Income	1.47%

**III) Retrospective Rating Program**

a) Retrospective Rating Program	9.60%
---------------------------------	-------

**IV) Indicated Break Even Rate Level Change**

Investment Yield	Present Value Disc. Factor at t=0.5	Rate Level Change		
		Low Estimate	Best Estimate	High Estimate
(6)	(7)	(8)	(9)	(10)
0.00%	1.000	35.7%	41.6%	47.6%
2.50%	0.851	15.5%	20.6%	25.6%
3.00%	0.829	12.6%	17.5%	22.4%
3.50%	0.809	9.9%	14.7%	19.5%
4.00%	0.791	7.4%	12.1%	16.8%
4.24%	0.783	6.3%	10.9%	15.6%
4.50%	0.774	5.1%	9.7%	14.3%
5.00%	0.758	3.0%	7.5%	12.0%
5.50%	0.743	1.0%	5.4%	9.8%

- Notes:
- Ia) Exhibit 2, Sheet 1, Col (3).
  - Ib) Selected judgmentally based on (Ia).
  - IIa) Weighted average of IIa from Exhibit 1, Sheet 2a and Sheet 2b, based on 2007 on level earned premium.
  - IIb) Weighted average of IIb from Exhibit 1, Sheet 2a and Sheet 2b, based on 2007 on level earned premium.
  - IIc) Weighted average of IIc from Exhibit 1, Sheet 2a and Sheet 2b, based on 2007 on level earned premium.
  - IId) Weighted average of IId from Exhibit 1, Sheet 2a and Sheet 2b, based on 2007 on level earned premium.
  - IIIa) Weighted average of IIIa from Exhibit 1, Sheet 2a and Sheet 2b, based on 2007 on level earned premium.
  - IV)  $\{(Ib) \times [1.0 + (IIa)] \times \text{Column (7)} + (IIb)\} / [1.0 - (IIIa)] - (IIc) - (IId) - 1.0$ .

**Calculation of Break Even Rate Level Change - 2008  
Based on Data as of 6/30/2007  
Medical Aid Fund**

**Ia) Projected Earned Loss Ratio With No Rate Change**

Accident Year	Projected 2008 Loss Ratio With No Additional Rate Change
(1)	(2)
1996	1.497
1997	1.462
1998	1.422
1999	1.424
2000	1.473
2001	1.483
2002	1.464
2003	1.446
2004	1.444
2005	1.443
2006	1.486

**Ib) Selected 2008 Earned Loss Ratio With No Additional Rate Change**

Low	Best Estimate	High
(3)	(4)	(5)
1.410	1.460	1.510

**II) Expense Provisions, Investment Income and Other Income**

a) Claim Adjustment Expense	9.50%
b) Premium and General Expenses	7.00%
c) Investment Income on Equity	5.96%
d) Other Income	0.00%

**III) Retrospective Rating Program**

a) Retrospective Rating Program	0.0%
---------------------------------	------

**IV) Indicated Break Even Rate Level Change**

Investment Yield	Present Value Disc. Factor at t=0.5	Rate Level Change		
		Low Estimate	Best Estimate	High Estimate
(6)	(7)	(8)	(9)	(10)
0.00%	1.000	55.4%	60.9%	66.4%
2.50%	0.804	25.1%	29.5%	33.9%
3.00%	0.779	21.4%	25.6%	29.9%
3.50%	0.758	18.1%	22.3%	26.4%
4.00%	0.740	15.3%	19.3%	23.4%
4.24%	0.732	14.0%	18.0%	22.0%
4.50%	0.723	12.7%	16.7%	20.6%
5.00%	0.709	10.4%	14.3%	18.2%
5.50%	0.695	8.4%	12.2%	16.0%

- Notes:
- Ia) Exhibit 2, Sheet 2a, Col (4).
  - Ib) Selected judgmentally based on (Ia).
  - Ila) Exhibit 3, Sheet 4a, Item (7), includes an additional 0.5% for Allocated Claim Adjustment Expense selected by Washington Department of Labor & Industries.
  - Ilb) Exhibit 3, Sheet 1, Column (4) Selected.
  - Ilc) Expected long term rate of return of 4.0% x Equity to Net Premium Ratio of 1.49. Rate of return based on Tillinghast's forecast.
  - Ild) Exhibit 3, Sheet 2, Column (2) Selected.
  - Illa) Provided by Washington Department of Labor & Industries.
  - IV)  $\{(Ib) \times [1.0 + (Ila)] \times \text{Column (7)} + (Ilb)\} / [1.0 - (Ila)] - (Ilc) - (Ild) - 1.0$ .

**Calculation of Break Even Rate Level Change - 2008**  
Based on Data as of 6/30/2007  
Accident Fund

**Ia) Projected Earned Loss Ratio With No Rate Change**

Accident Year (1)	Projected 2008 Loss Ratio With No Additional Rate Change (2)
1996	1.012
1997	1.032
1998	0.995
1999	1.015
2000	1.017
2001	1.018
2002	1.026
2003	1.004
2004	1.014
2005	1.011
2006	1.020

**Ib) Selected 2008 Earned Loss Ratio With No Additional Rate Change**

Low (3)	Best Estimate (4)	High (5)
0.965	1.015	1.065

**II) Expense Provisions, Investment Income and Other Income**

a) Claim Adjustment Expense	6.00%
b) Premium and General Expenses	6.00%
c) Investment Income on Equity	4.85%
d) Other Income	2.40%

**III) Retrospective Rating Program**

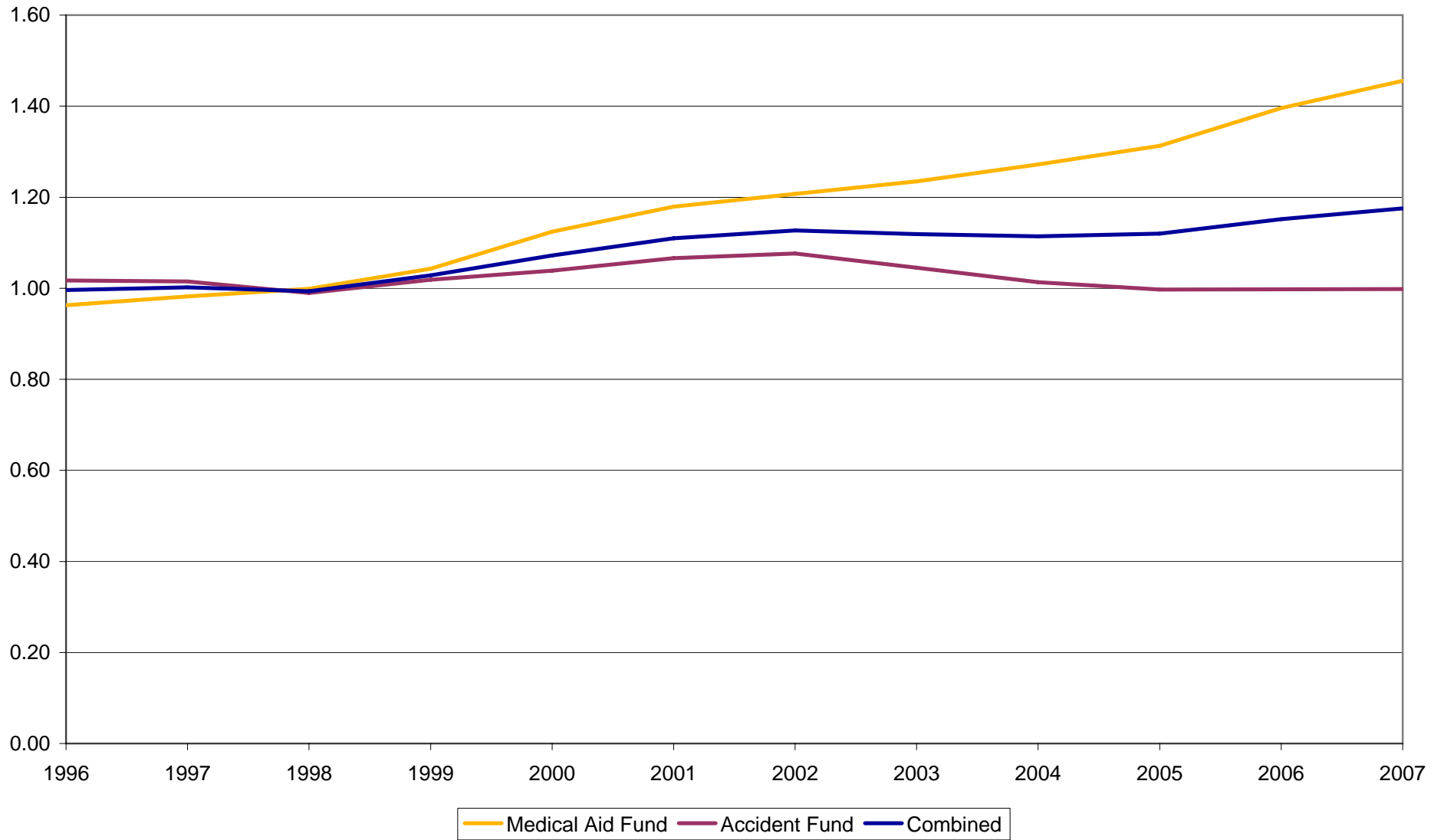
a) Retrospective Rating Program	15.7%
---------------------------------	-------

**IV) Indicated Break Even Rate Level Change**

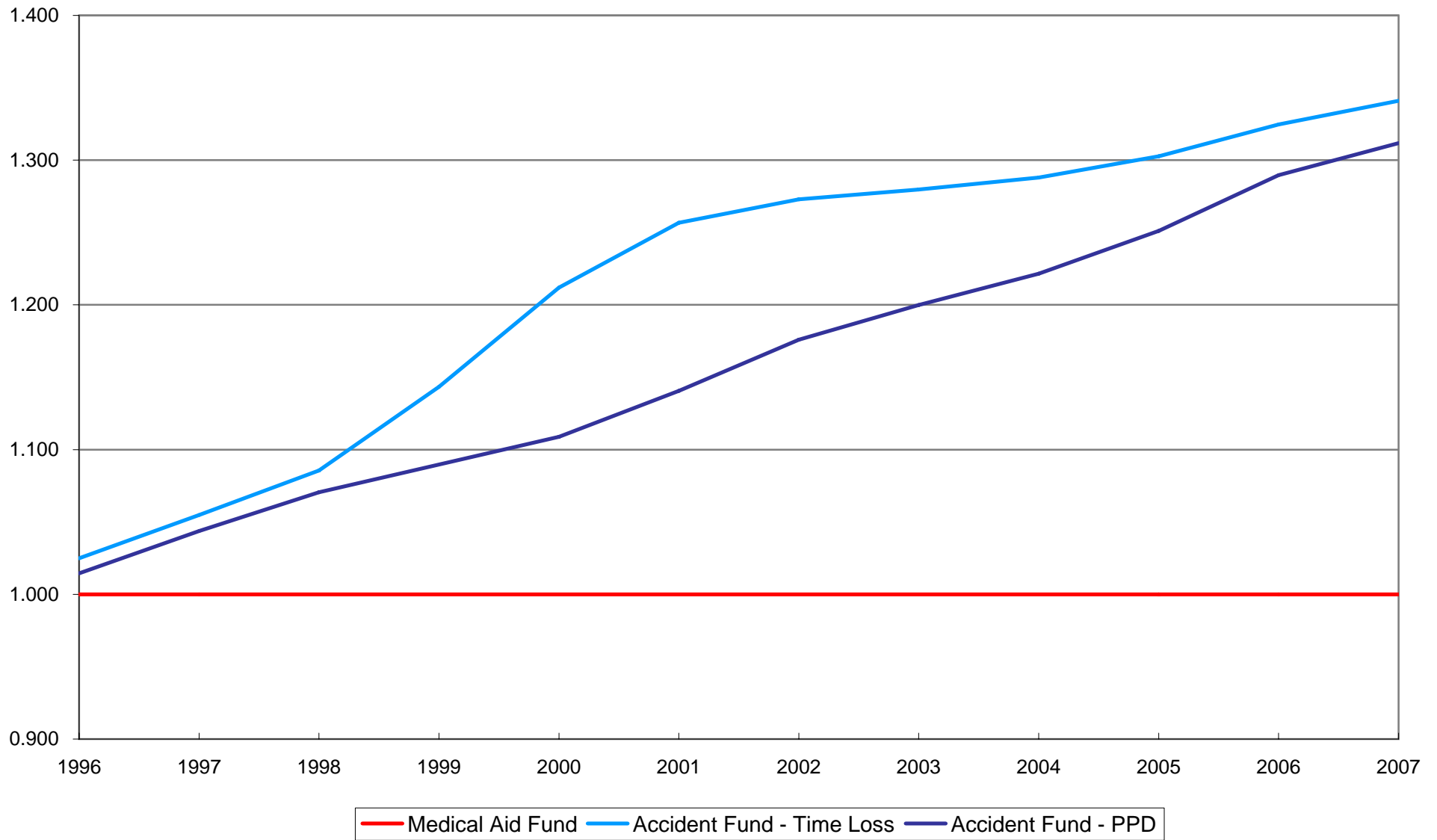
Investment Yield (6)	Present Value Disc. Factor at t=0.5 (7)	Rate Level Change		
		Low Estimate (8)	Best Estimate (9)	High Estimate (10)
0.00%	1.000	21.2%	27.5%	33.7%
2.50%	0.881	6.7%	12.3%	17.8%
3.00%	0.861	4.3%	9.7%	15.1%
3.50%	0.842	2.0%	7.2%	12.5%
4.00%	0.823	-0.3%	4.9%	10.1%
4.24%	0.815	-1.3%	3.8%	9.0%
4.50%	0.806	-2.4%	2.7%	7.8%
5.00%	0.790	-4.4%	0.6%	5.6%
5.50%	0.774	-6.3%	-1.4%	3.5%

- Notes:
- Ia) Exhibit 2, Sheet 2b, Col (4).
  - Ib) Selected judgmentally based on (Ia).
  - IIa) Exhibit 3, Sheet 4b, Item (7), includes an additional 0.002% for Allocated Claim Adjustment Expense selected by Washington Department of Labor & Industries.
  - IIb) Exhibit 3, Sheet 1, Column (7) Selected.
  - IIc) Expected long term rate of return of 5.0% x Equity to Net Premium Ratio of 0.97. Rate of return based on Tillinghast's forecast.
  - IId) Exhibit 3, Sheet 2, Column (3) Selected.
  - IIIa) Exhibit 3, Sheet 3, Item (13).
  - IV)  $\{(Ib) \times [1.0 + (IIa)] \times \text{Column (7)} + (IIb)\} / [1.0 - (IIIa)] - (IIc) - (IId) - 1.0$ .

Projected On Level Loss Ratios



History of Cumulative Benefit Levels



**Loss Ratios Projected to 2008 Levels  
Medical Aid Fund and Accident Fund**

Accident Year <u>(1)</u>	Projected Ultimate Loss Ratio to On Level Earned Premium <u>(2)</u>	On Level Loss Ratio Trended to 2008 <u>(3)</u>
1996	0.996	1.201
1997	1.002	1.200
1998	0.993	1.161
1999	1.028	1.174
2000	1.072	1.194
2001	1.110	1.199
2002	1.127	1.196
2003	1.119	1.176
2004	1.114	1.181
2005	1.120	1.179
2006	1.152	1.201
2007	1.176	1.197

Notes: (2) Exhibit 2, Sheet 2a, Col (2) x Exhibit 5, Sheet 1, Col (6) + Exhibit 2, Sheet 2b, Col (2) x Exhibit 5, Sheet 1, Col (11) .  
(3) Exhibit 2, Sheet 2a, Col (4) x Exhibit 5, Sheet 1, Col (6) + Exhibit 2, Sheet 2b, Col (4) x Exhibit 5, Sheet 1, Col (11).

**Loss Ratios Projected to 2008 Levels  
Medical Aid Fund**

Accident Year	Projected Ultimate Loss Ratio to On Level Earned Premium	Loss Ratio Trend Factor to 2008	On Level Loss Ratio Trended to 2008	% Distribution based on the On Level Loss Ratios
(1)	(2)	(3)	(4)	(5)
1996	0.963	1.555	1.497	37.6%
1997	0.982	1.489	1.462	38.1%
1998	0.999	1.424	1.422	39.2%
1999	1.043	1.365	1.424	39.4%
2000	1.124	1.310	1.473	40.7%
2001	1.179	1.258	1.483	41.3%
2002	1.207	1.213	1.464	41.6%
2003	1.235	1.171	1.446	43.0%
2004	1.272	1.135	1.444	44.5%
2005	1.313	1.099	1.443	45.6%
2006	1.396	1.065	1.486	47.0%
2007	1.455	1.031	1.501	48.0%

- Notes: (2) Exhibit 5, Sheet 1, Col (5).  
 (3) Exhibit 7, Sheet 1a, Col (10).  
 (4) Column (2) x Column (3).  
 (5) Column (2) x Exhibit 5, Sheet 1, Column (6) / Exhibit 2, Sheet 1, Column (2).

**Loss Ratios Projected to 2008 Levels  
Accident Fund**

Accident Year	Projected Ultimate Loss Ratio to On Level Earned Premium	Loss Ratio Trend Factor to 2008	On Level Loss Ratio Trended to 2008	% Distribution based on the On Level Loss Ratios
(1)	(2)	(3)	(4)	(5)
1996	1.017	0.995	1.012	62.4%
1997	1.015	1.017	1.032	61.9%
1998	0.990	1.005	0.995	60.8%
1999	1.019	0.996	1.015	60.6%
2000	1.039	0.979	1.017	59.3%
2001	1.066	0.955	1.018	58.7%
2002	1.076	0.953	1.026	58.4%
2003	1.045	0.961	1.004	57.0%
2004	1.014	1.000	1.014	55.5%
2005	0.997	1.014	1.011	54.4%
2006	0.997	1.023	1.020	53.0%
2007	0.998	1.006	1.004	52.0%

- Notes: (2) Exhibit 5, Sheet 1, Col (10).  
 (3) Exhibit 7, Sheet 1a, Col (11).  
 (4) Column (2) x Column (3).  
 (5) Column (2) x Exhibit 5, Sheet 1, Column (11) / Exhibit 2, Sheet 1, Column (2).

**Expense Provisions  
In Thousands**

Calendar Year	Medical Aid Fund			Accident Fund		
	Earned Premium	Premium, General & Other Admin Expense	Expense Ratio	Earned Premium	Premium, General & Other Admin Expense	Expense Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2004	\$ 574,031	\$ 39,609	6.9%	\$ 773,005	\$ 49,934	6.5%
2005	632,721	37,298	5.9%	837,814	48,307	5.8%
2006	582,832	36,033	6.2%	967,818	54,694	5.7%
2007	566,015	41,436	7.3%	894,095	56,021	6.3%
Total All Years	\$ 2,355,599	\$ 154,376	6.6%	\$ 3,472,731	\$ 208,956	6.0%
Selected			7.0%			6.0%

Notes:

- (2), (5) Provided by Washington Department of Labor & Industries.
- (3), (6) Provided by Washington Department of Labor & Industries.
- (4) Column (3) / Column (2).
- (7) Column (6) / Column (5).

Other Income Provisions  
In Thousands

Calendar Year	Medical Aid Fund Other Income Ratio	Accident Fund		
		Standard Premium	Other Income	Other Income Ratio
(1)	(2)	(3)	(4)	(3)
2003	0.0%	\$ 564,686	\$ 14,472	2.6%
2004	0.0%	656,324	15,404	2.3%
2005	0.0%	775,215	17,916	2.3%
2006	0.0%	827,385	45,943	5.6%
2007	0.0%	940,497	22,455	2.4%
Total	0.0%	\$ 3,764,106	\$ 116,190	3.1%
Total excl 2006	0.0%	\$ 2,936,721	\$ 70,246	2.4%
Selected	0.0%			2.4%

## Notes:

Provided by Washington Department of Labor & Industries.

2006 reflects a change in accounting procedure on premium application to outstanding debt.

**Medical Aid Fund and Accident Fund  
Retrospective Rating Program Provisions  
In Thousands**

Enrollment Quarter (1)	Group Insurance			State Fund Only			% Refund (8)	4 Quarter Weighted Average (9)
	Premium (2)	Losses (3)	Loss Ratio (4)	Premium (5)	Losses (6)	Loss Ratio (7)		
1998 1Q	\$ 72,761	\$ 47,984	65.9%	\$ 510,979	\$ 480,262	94.0%	29.8%	
1998 2Q	32,166	21,242	66.0%	508,929	482,084	94.7%	30.3%	
1998 3Q	302,135	221,534	73.3%	506,039	485,913	96.0%	23.6%	
1998 4Q	20,116	19,721	98.0%	500,735	499,956	99.8%	1.8%	24.2%
1999 1Q	75,631	60,295	79.7%	499,292	505,710	101.3%	21.3%	22.7%
1999 2Q	35,726	26,847	75.1%	502,600	510,152	101.5%	26.0%	22.4%
1999 3Q	307,701	278,176	90.4%	500,708	538,880	107.6%	16.0%	17.1%
1999 4Q	22,931	20,154	87.9%	497,395	551,758	110.9%	20.8%	18.0%
2000 1Q	77,943	63,939	82.0%	494,647	570,130	115.3%	28.8%	19.3%
2000 2Q	33,285	31,389	94.3%	488,476	592,263	121.2%	22.2%	19.0%
2000 3Q	288,040	272,819	94.7%	480,209	587,838	122.4%	22.6%	23.6%
2000 4Q	21,717	21,527	99.1%	470,110	588,970	125.3%	20.9%	23.7%
2001 1Q	72,640	66,500	91.5%	458,195	590,642	128.9%	29.0%	23.6%
2001 2Q	30,776	36,248	117.8%	452,192	576,892	127.6%	7.7%	22.5%
2001 3Q	263,746	267,528	101.4%	448,307	575,551	128.4%	21.0%	21.4%
2001 4Q	21,524	24,847	115.4%	448,026	564,925	126.1%	8.5%	20.7%
2002 1Q	73,000	74,709	102.3%	448,963	551,521	122.8%	16.7%	18.4%
2002 2Q	34,956	27,766	79.4%	487,007	536,354	110.1%	27.9%	20.1%
2002 3Q	315,419	255,941	81.1%	526,878	512,789	97.3%	16.6%	17.1%
2002 4Q	25,791	19,296	74.8%	565,437	506,139	89.5%	16.4%	17.5%
2003 1Q	100,135	75,262	75.2%	603,131	501,445	83.1%	9.6%	16.0%
2003 2Q	49,116	34,471	70.2%	615,008	507,581	82.5%	15.0%	15.0%
2003 3Q	416,716	254,566	61.1%	633,584	499,499	78.8%	22.5%	19.4%
2003 4Q	35,045	22,807	65.1%	657,266	485,581	73.9%	11.9%	19.1%
2004 1Q	121,893	72,689	59.6%	688,066	472,674	68.7%	13.2%	19.5%
2004 2Q	40,598	19,903	49.0%	708,580	463,779	65.5%	25.1%	20.2%
2004 3Q	481,477	240,081	49.9%	732,137	471,239	64.4%	22.5%	20.5%
2004 4Q	36,980	19,600	53.0%	757,626	467,507	61.7%	14.1%	20.6%
2005 1Q	122,163	58,019	47.5%	773,283	459,394	59.4%	20.1%	21.8%
2005 2Q	35,438	11,720	33.1%	791,379	450,686	56.9%	41.9%	22.6%
2005 3Q	533,484	223,136	41.8%	805,980	432,436	53.7%	22.0%	22.3%
2005 4Q	36,034	17,003	47.2%	814,750	408,938	50.2%	6.0%	21.9%
2006 1Q	120,993	44,976	37.2%	823,774	348,108	42.3%	12.0%	20.5%
2006 2Q	4,075	1,225	30.1%	831,251	278,967	33.6%	10.5%	19.4%
2006 3Q	423,870	105,276	24.8%	621,462	179,186	28.8%	13.9%	13.0%
Total / Avg	\$ 4,686,021	\$ 3,059,194	65.3%	\$ 20,652,401	\$ 17,235,748	83.5%	19.8%	
(10)	Selected						20.0%	
(11)	Retrospective Participation						48.0%	
(12)	Retrospective Adjustment as a % of Medical Aid & Accident Fund						9.6%	
(13)	Retrospective Adjustment as a % of Accident Fund						15.7%	

Notes: (2),(3),(5),(6) Provided by Washington Department of Labor & Industries.  
 (4) Column (3) / Column (2).  
 (7) Column (6) / Column (5).  
 (8) 100% - Column (4) / Column (7).  
 (9) Column (2) x Column (8) / Column (2) of 4 consecutive quarters.  
 (10) Judgmentally selected.  
 (11) Provided by Washington Department of Labor & Industries.  
 (12) Item (10) x Item (11).  
 (13) Item (12) x sum of 2007 Medical Aid and Accident Fund On Level Earned Premium / 2007 Accident Fund On Level Earned Premium from Exhibit 5, Sheet 1.



**Medical Aid Fund**  
**Unallocated Claim Adjustment Expense Provisions**  
**In Thousands**

Fiscal Year (1)	Fiscal Year Paid		Fiscal Year Ultimate Loss at 6/30/2007 (4)	Indicated ULAE % to	
	Loss (2)	ULAE (3)		Paid Loss (5)	Ultimate Loss (6)
7/1/2003 - 2004	\$ 454,674	\$ 50,501	\$ 641,274	11.1%	7.9%
7/1/2004 - 2005	471,141	66,745	695,777	14.2%	9.6%
7/1/2005 - 2006	509,368	66,482	758,504	13.1%	8.8%
7/1/2006 - 2007	538,530	68,692	808,429	12.8%	8.5%
Total	\$ 1,973,713	\$ 252,420	\$ 2,903,984	12.8%	8.7%
	(7)	Selected			9.0%

- Notes:
- (2),(3) Provided by Washington Department of Labor & Industries.
  - (4) From Tillinghast's Reserve Study as of 6/30/2007.
  - (5) Column (3) / Column (2).
  - (6) Column (3) / Column (4).

**Accident Fund  
Unallocated Claim Adjustment Expense Provisions  
In Thousands**

Fiscal Year (1)	Fiscal Year Paid		Fiscal Year Ultimate Loss at 6/30/2007 (4)	Indicated ULAE % to	
	Loss (2)	ULAE (3)		Paid Loss (5)	Ultimate Loss (6)
7/1/2003 - 2004	\$ 711,429	\$ 38,655	\$ 784,870	5.4%	4.9%
7/1/2004 - 2005	716,475	53,429	816,371	7.5%	6.5%
7/1/2005 - 2006	742,907	48,611	859,226	6.5%	5.7%
7/1/2006 - 2007	772,431	52,732	887,603	6.8%	5.9%
Total	\$ 2,943,243	\$ 193,427	\$ 3,348,070	6.6%	5.8%
	(7)	Selected			6.0%

- Notes:
- (2),(3) Provided by Washington Department of Labor & Industries.
  - (4) From Tillinghast's Reserve Study as of 6/30/2007.
  - (5) Column (3) / Column (2).
  - (6) Column (3) / Column (4).

Medical Aid Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis

Months (1)	Loss Payment Pattern		Selected Loss & LAE Pattern		Yield Rate for Discounting (6)	PV Disc. Ftr @ t=0.5 (7)
	Medical All Other (2)	Vocational Rehabilitation (3)	Cumulative (4)	Incremental (5)		
12	0.238536	0.122056	0.231200	0.231200	2.50%	0.803559
24	0.420038	0.364704	0.416553	0.185353	3.00%	0.779440
36	0.498622	0.555545	0.502207	0.085654	3.50%	0.758366
48	0.544011	0.685326	0.552911	0.050704	4.00%	0.739810
60	0.576371	0.768955	0.588500	0.035589	4.24%	0.731629
72	0.601321	0.824639	0.615385	0.026886	4.50%	0.723346
84	0.622966	0.864296	0.638165	0.022780	5.00%	0.708632
96	0.641196	0.892505	0.657024	0.018859	5.50%	0.695389
108	0.656496	0.913109	0.672658	0.015634		
120	0.669575	0.927493	0.685818	0.013161		
132	0.680880	0.938850	0.697127	0.011308		
144	0.691466	0.947071	0.707564	0.010437		
156	0.700458	0.953392	0.716388	0.009824		
168	0.708735	0.958881	0.724489	0.009101		
180	0.716327	0.963292	0.731881	0.008392		
192	0.723849	0.967059	0.739166	0.007785		
204	0.730684	0.970394	0.745781	0.007285		
216	0.736744	0.973220	0.751638	0.006814		
228	0.743348	0.975727	0.757983	0.006369		
240	0.750002	0.977860	0.764353	0.005946		
252	0.755964	0.979234	0.770026	0.005542		
264	0.761676	0.980409	0.775452	0.005164		
276	0.766125	0.981585	0.779694	0.004810		
288	0.770018	0.982763	0.783416	0.004478		
300	0.774890	0.983942	0.788056	0.004166		
312	0.779532	0.985123	0.792480	0.003874		
324	0.784517	0.986305	0.797226	0.003600		
336	0.790177	0.987489	0.802603	0.003343		
348	0.796739	0.988674	0.808827	0.003102		
360	0.803218	0.989860	0.814973	0.002875		
372	0.809644	0.991048	0.821069	0.002662		
384	0.816121	0.992225	0.827212	0.002462		
396	0.822598	0.993465	0.833359	0.002274		
408	0.829387	0.994521	0.839787	0.002100		
420	0.835451	0.995515	0.845531	0.001938		
432	0.841298	0.996505	0.851073	0.001788		
444	0.847163	0.997527	0.856632	0.001648		
456	0.85234	0.998469	0.862255	0.001518		
468	0.855144	0.999212	0.867358	0.001397		
480	0.874702	0.999710	0.882575	0.001284		
492	0.883909	0.999964	0.891218	0.001178		
504	0.892765	1.000000	0.899519	0.001078		
516	0.901270	1.000000	0.907488	0.001000		
528	0.909423	1.000000	0.915127	0.000938		
540	0.917224	1.000000	0.922438	0.000888		
552	0.924675	1.000000	0.929419	0.000847		
564	0.931774	1.000000	0.936071	0.000813		
576	0.938522	1.000000	0.942394	0.000784		
588	0.944919	1.000000	0.948388	0.000759		
600	0.950964	1.000000	0.954052	0.000737		
612	0.956658	1.000000	0.959388	0.000717		
624	0.962001	1.000000	0.964394	0.000700		
636	0.966992	1.000000	0.969071	0.000684		
648	0.971632	1.000000	0.973419	0.000670		
660	0.975921	1.000000	0.977438	0.000657		
672	0.979859	1.000000	0.981127	0.000645		
684	0.983445	1.000000	0.984488	0.000634		
696	0.986680	1.000000	0.987519	0.000624		
708	0.989563	1.000000	0.990221	0.000615		
720	0.992096	1.000000	0.992594	0.000606		
732	0.994277	1.000000	0.994637	0.000598		
744	0.996106	1.000000	0.996352	0.000591		
756	0.997585	1.000000	0.997737	0.000584		
768	0.998712	1.000000	0.998793	0.000578		
780	0.999488	1.000000	0.999520	0.000572		
792	0.999912	1.000000	0.999918	0.000566		
804	1.000000	1.000000	1.000000	0.000561		
Total				1.000000		
(8) Weight	93.70%	6.30%				

- Notes: (2) From Tillinghast's Reserve Study as of 6/30/2007.
- (3) From Tillinghast's Reserve Study as of 6/30/2007.
- (4) Column (2) and Column (3) multiplied by corresponding weights in Item (8).
- (5) Column (4) - prior Column (4).
- (6) Selected by Washington Department of Labor & Industries Management.
- (7) Present value of Column (5), discounted at values shown in Column (6), assuming all payments average mid-year.
- (8) Judgmentally selected, based on distribution of ultimate losses from Tillinghast's Reserve Study as of 6/30/2007.

Accident Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis

Months (1)	Loss Payment Pattern						Selected Loss & LAE Pattern		Yield Rate for Discounting (10)	PV Disc. Ftr @ t=0.5 (11)
	Fatals (2)	Misc. (3)	PPD xl. HL (4)	PPD HL (5)	Time Loss (6)	TPD (7)	Cumulative (8)	Incremental (9)		
12	0.466052	0.011745	0.050828	0.350438	0.172171	0.003197	0.102883	0.102883	2.50%	0.880840
24	0.667638	0.097076	0.330676	0.757250	0.382190	0.008148	0.252795	0.149912	3.00%	0.860701
36	0.747340	0.282087	0.573884	0.917813	0.528725	0.041905	0.374131	0.121336	3.50%	0.841575
48	0.809371	0.459822	0.722803	0.969938	0.635549	0.109702	0.473567	0.099435	4.00%	0.823386
60	0.847324	0.582221	0.817374	0.986375	0.715569	0.195300	0.557001	0.083435	4.24%	0.814926
72	0.869505	0.666835	0.876789	0.992063	0.777814	0.290985	0.629420	0.072418	4.50%	0.806068
84	0.898138	0.724005	0.914310	0.995875	0.825184	0.378091	0.688364	0.058944	5.00%	0.789560
96	0.923756	0.768829	0.939420	0.997438	0.861369	0.462836	0.739068	0.050704		
108	0.934992	0.804951	0.955295	0.998688	0.890127	0.539854	0.781902	0.042834		
120	0.942472	0.827318	0.966399	0.999000	0.912612	0.602133	0.815798	0.033896		
132	0.949832	0.848406	0.973329	0.999000	0.929590	0.656528	0.843745	0.027947		
144	0.958151	0.867345	0.978533	0.999731	0.943085	0.710869	0.869705	0.025960		
156	0.963836	0.877394	0.982458	1.000000	0.953536	0.762429	0.892882	0.023177		
168	0.968655	0.885957	0.985293	1.000000	0.962188	0.801817	0.910916	0.018034		
180	0.973406	0.892043	0.987008	1.000000	0.969100	0.843978	0.928828	0.017911		
192	0.978641	0.897620	0.988438	1.000000	0.974810	0.872635	0.941593	0.012765		
204	0.982523	0.902387	0.990094	1.000000	0.979383	0.900035	0.953371	0.011778		
216	0.985807	0.906899	0.991083	1.000000	0.982647	0.920243	0.961993	0.008623		
228	0.989877	0.911376	0.991951	1.000000	0.985208	0.937293	0.969208	0.007215		
240	0.991638	0.916163	0.992540	1.000000	0.987588	0.947851	0.974092	0.004884		
252	0.992630	0.920113	0.993036	1.000000	0.989204	0.959318	0.978864	0.004772		
264	0.993623	0.923793	0.993532	1.000000	0.990408	0.965952	0.981814	0.002949		
276	0.994616	0.927488	0.994017	1.000000	0.991409	0.972835	0.984744	0.002930		
288	0.995580	0.931198	0.994564	1.000000	0.992234	0.977251	0.986770	0.002026		
300	0.996700	0.934923	0.994924	1.000000	0.993046	0.981773	0.988804	0.002034		
312	0.997354	0.938663	0.995223	1.000000	0.993797	0.985209	0.990428	0.001625		
324	0.997828	0.942358	0.995521	1.000000	0.994424	0.986869	0.991394	0.000966		
336	0.998426	0.946365	0.995820	1.000000	0.995015	0.990481	0.993001	0.001606		
348	0.998651	0.949499	0.996118	1.000000	0.995637	0.992243	0.993986	0.000986		
360	0.998751	0.952347	0.996411	1.000000	0.996153	0.993192	0.994641	0.000654		
372	0.998851	0.955204	0.996735	1.000000	0.996701	0.994359	0.995388	0.000747		
384	0.998951	0.958070	0.996965	1.000000	0.997062	0.994875	0.995813	0.000425		
396	0.999051	0.960944	0.997165	1.000000	0.997355	0.995173	0.996127	0.000314		
408	0.999151	0.963827	0.997364	1.000000	0.997679	0.995472	0.996456	0.000330		
420	0.999250	0.966718	0.997564	1.000000	0.997910	0.995771	0.996740	0.000284		
432	0.999350	0.969617	0.997763	1.000000	0.998110	0.996069	0.997008	0.000268		
444	0.999451	0.972547	0.997964	1.000000	0.998311	0.996370	0.997278	0.000270		
456	0.999549	0.975420	0.998161	1.000000	0.998507	0.996665	0.997543	0.000265		
468	0.999638	0.978168	0.998350	1.000000	0.998694	0.996950	0.997797	0.000254		
480	0.999718	0.980753	0.998528	1.000000	0.998869	0.997223	0.998036	0.000239		
492	0.999788	0.983175	0.998697	1.000000	0.999030	0.997482	0.998261	0.000225		
504	0.999848	0.985435	0.998855	1.000000	0.999180	0.997729	0.998472	0.000211		
516	0.999898	0.987531	0.999003	1.000000	0.999317	0.997964	0.998669	0.000197		
528	0.999938	0.989465	0.999141	1.000000	0.999441	0.998185	0.998851	0.000182		
540	0.999968	0.991236	0.999268	1.000000	0.999553	0.998394	0.999019	0.000168		
552	0.999988	0.992844	0.999386	1.000000	0.999653	0.998590	0.999173	0.000154		
564	0.999999	0.994289	0.999493	1.000000	0.999739	0.998773	0.999312	0.000139		
576	1.000000	0.995572	0.999589	1.000000	0.999814	0.998944	0.999437	0.000125		
588	1.000000	0.996691	0.999676	1.000000	0.999876	0.999101	0.999548	0.000111		
600	1.000000	0.997648	0.999752	1.000000	0.999925	0.999246	0.999645	0.000097		
612	1.000000	0.998442	0.999818	1.000000	0.999962	0.999378	0.999727	0.000083		
624	1.000000	0.999073	0.999874	1.000000	0.999987	0.999498	0.999796	0.000068		
636	1.000000	0.999541	0.999920	1.000000	0.999999	0.999605	0.999850	0.000054		
648	1.000000	0.999846	0.999955	1.000000	1.000000	0.999699	0.999891	0.000041		
660	1.000000	0.999989	0.999980	1.000000	1.000000	0.999780	0.999924	0.000033		
672	1.000000	1.000000	0.999995	1.000000	1.000000	0.999849	0.999949	0.000025		
684	1.000000	1.000000	1.000000	1.000000	1.000000	0.999904	0.999968	0.000019		
696	1.000000	1.000000	1.000000	1.000000	1.000000	0.999947	0.999982	0.000014		
708	1.000000	1.000000	1.000000	1.000000	1.000000	0.999978	0.999993	0.000010		
720	1.000000	1.000000	1.000000	1.000000	1.000000	0.999995	0.999998	0.000006		
732	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	0.000002		
744	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	0.000000		
756	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	0.000000		
768	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	0.000000		
780	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	0.000000		
Total								1.000000		
(12) Weight	1.66%	1.41%	13.43%	0.48%	49.60%	33.41%				

Notes: (2) - (7) From Tillinghast's Reserve Study as of 6/30/2007.  
 (8) Column (2) through Column (7) multiplied by corresponding weights in Item (12).  
 (9) Column (8) - prior Column (8).  
 (10) Selected by Washington Department of Labor & Industries Management.  
 (11) Present value of Column (9), discounted at values shown in Column (10), assuming all payments average mid-year.  
 (12) Judgmentally selected, based on distribution of ultimate losses from Tillinghast's Reserve Study as of 6/30/2007.



Medical Aid Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis  
Investment Yield 2.50% per Annum

Months (1)	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 2.50% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.231200	0.231200	0.987730	0.228363	0.5	0.803559
24	0.416553	0.185353	0.963639	0.178614	1.5	0.763096
36	0.502207	0.085654	0.940135	0.080526	2.5	0.705031
48	0.552911	0.050704	0.917205	0.046506	3.5	0.670633
60	0.588500	0.035589	0.894834	0.031846	4.5	0.649112
72	0.615385	0.026886	0.873009	0.023471	5.5	0.634235
84	0.638165	0.022780	0.851716	0.019402	6.5	0.623883
96	0.657024	0.018859	0.830943	0.015671	7.5	0.615210
108	0.672658	0.015634	0.810676	0.012674	8.5	0.608903
120	0.685818	0.013161	0.790903	0.010409	9.5	0.604980
132	0.697127	0.011308	0.771613	0.008726	10.5	0.603144
144	0.707564	0.010437	0.752793	0.007857	11.5	0.603035
156	0.716388	0.008824	0.734432	0.006481	12.5	0.603589
168	0.724489	0.008101	0.716519	0.005804	13.5	0.606036
180	0.731881	0.007392	0.699043	0.005167	14.5	0.609314
192	0.739166	0.007285	0.681993	0.004969	15.5	0.613506
204	0.745781	0.006614	0.665359	0.004401	16.5	0.617779
216	0.751638	0.005857	0.649131	0.003802	17.5	0.623030
228	0.757983	0.006346	0.633299	0.004019	18.5	0.629493
240	0.764353	0.006369	0.617852	0.003935	19.5	0.635273
252	0.770026	0.005673	0.602783	0.003420	20.5	0.641050
264	0.775452	0.005426	0.588081	0.003191	21.5	0.648000
276	0.779694	0.004243	0.573737	0.002434	22.5	0.655482
288	0.783416	0.003722	0.559744	0.002083	23.5	0.665069
300	0.788056	0.004640	0.546091	0.002534	24.5	0.675796
312	0.792480	0.004424	0.532772	0.002357	25.5	0.685416
324	0.797226	0.004746	0.519778	0.002467	26.5	0.695677
336	0.802603	0.005378	0.507100	0.002727	27.5	0.705769
348	0.808827	0.006224	0.494732	0.003079	28.5	0.715197
360	0.814973	0.006146	0.482665	0.002966	29.5	0.723573
372	0.821069	0.006096	0.470893	0.002870	30.5	0.732251
384	0.827212	0.006143	0.459408	0.002822	31.5	0.741207
396	0.833359	0.006147	0.448203	0.002755	32.5	0.750306
408	0.839787	0.006427	0.437271	0.002811	33.5	0.759623
420	0.845531	0.005745	0.426606	0.002451	34.5	0.768729
432	0.851073	0.005542	0.416201	0.002306	35.5	0.779131
444	0.856632	0.005560	0.406049	0.002257	36.5	0.790186
456	0.864255	0.007623	0.396146	0.003020	37.5	0.801601
468	0.873588	0.009332	0.386484	0.003607	38.5	0.810221
480	0.882575	0.008988	0.377057	0.003389	39.5	0.816116
492	0.891218	0.008643	0.367861	0.003179	40.5	0.822092
504	0.899519	0.008300	0.358889	0.002979	41.5	0.828156
516	0.907488	0.007969	0.350135	0.002790	42.5	0.834310
528	0.915127	0.007640	0.341595	0.002610	43.5	0.840538
540	0.922438	0.007310	0.333264	0.002436	44.5	0.846839
552	0.929419	0.006981	0.325135	0.002270	45.5	0.853213
564	0.936071	0.006652	0.317205	0.002110	46.5	0.859662
576	0.942394	0.006323	0.309468	0.001957	47.5	0.866186
588	0.948388	0.005994	0.301920	0.001810	48.5	0.872785
600	0.954052	0.005665	0.294557	0.001669	49.5	0.879462
612	0.959388	0.005335	0.287372	0.001533	50.5	0.886217
624	0.964394	0.005006	0.280363	0.001404	51.5	0.893050
636	0.969071	0.004677	0.273525	0.001279	52.5	0.899963
648	0.973419	0.004348	0.266854	0.001160	53.5	0.906957
660	0.977438	0.004019	0.260345	0.001046	54.5	0.914031
672	0.981127	0.003690	0.253995	0.000937	55.5	0.921187
684	0.984488	0.003360	0.247800	0.000833	56.5	0.928423
696	0.987519	0.003031	0.241756	0.000733	57.5	0.935741
708	0.990221	0.002702	0.235860	0.000637	58.5	0.943139
720	0.992594	0.002373	0.230107	0.000546	59.5	0.950614
732	0.994637	0.002044	0.224495	0.000459	60.5	0.958162
744	0.996352	0.001714	0.219019	0.000376	61.5	0.965774
756	0.997737	0.001385	0.213677	0.000296	62.5	0.973433
768	0.998793	0.001056	0.208466	0.000220	63.5	0.981100
780	0.999520	0.000727	0.203381	0.000148	64.5	0.988677
792	0.999918	0.000398	0.198421	0.000079	65.5	0.995819
804	1.000000	0.000082	0.193581	0.000016	66.5	1.000000
Total		1.000000		0.793699		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.025^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Medical Aid Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 3.00% per Annum**

Months (1)	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 3.00% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.231200	0.231200	0.985329	0.227808	0.5	0.779440
24	0.416553	0.185353	0.956630	0.177315	1.5	0.734504
36	0.502207	0.085654	0.928767	0.079553	2.5	0.669665
48	0.552911	0.050704	0.901716	0.045721	3.5	0.631210
60	0.588500	0.035589	0.875452	0.031156	4.5	0.607067
72	0.615385	0.026886	0.849954	0.022851	5.5	0.590276
84	0.638165	0.022780	0.825198	0.018798	6.5	0.578485
96	0.657024	0.018859	0.801163	0.015109	7.5	0.568506
108	0.672658	0.015634	0.777828	0.012160	8.5	0.561124
120	0.685818	0.013161	0.755173	0.009939	9.5	0.556368
132	0.697127	0.011308	0.733178	0.008291	10.5	0.553918
144	0.707564	0.010437	0.711823	0.007429	11.5	0.553381
156	0.716388	0.008824	0.691090	0.006098	12.5	0.553565
168	0.724489	0.008101	0.670961	0.005435	13.5	0.555864
180	0.731881	0.007392	0.651419	0.004815	14.5	0.559090
192	0.739166	0.007285	0.632445	0.004608	15.5	0.563342
204	0.745781	0.006614	0.614025	0.004061	16.5	0.567680
216	0.751638	0.005857	0.596140	0.003492	17.5	0.573124
228	0.757983	0.006346	0.578777	0.003673	18.5	0.579949
240	0.764353	0.006369	0.561920	0.003579	19.5	0.586003
252	0.770026	0.005673	0.545553	0.003095	20.5	0.592058
264	0.775452	0.005426	0.529663	0.002874	21.5	0.599454
276	0.779694	0.004243	0.514236	0.002182	22.5	0.607469
288	0.783416	0.003722	0.499258	0.001858	23.5	0.617907
300	0.788056	0.004640	0.484717	0.002249	24.5	0.629681
312	0.792480	0.004424	0.470599	0.002082	25.5	0.640222
324	0.797226	0.004746	0.456892	0.002168	26.5	0.651528
336	0.802603	0.005378	0.443584	0.002385	27.5	0.662674
348	0.808827	0.006224	0.430665	0.002680	28.5	0.673088
360	0.814973	0.006146	0.418121	0.002570	29.5	0.682319
372	0.821069	0.006096	0.405943	0.002475	30.5	0.691920
384	0.827212	0.006143	0.394119	0.002421	31.5	0.701867
396	0.833359	0.006147	0.382640	0.002352	32.5	0.712005
408	0.839787	0.006427	0.371495	0.002388	33.5	0.722423
420	0.845531	0.005745	0.360675	0.002072	34.5	0.732625
432	0.851073	0.005542	0.350170	0.001941	35.5	0.744362
444	0.856632	0.005560	0.339971	0.001890	36.5	0.756895
456	0.862455	0.007623	0.330068	0.002516	37.5	0.769892
468	0.873588	0.009332	0.320455	0.002991	38.5	0.779680
480	0.882575	0.008988	0.311121	0.002796	39.5	0.786317
492	0.891218	0.008643	0.302059	0.002611	40.5	0.793061
504	0.899519	0.008300	0.293262	0.002434	41.5	0.799917
516	0.907488	0.007969	0.284720	0.002269	42.5	0.806891
528	0.915127	0.007640	0.276427	0.002112	43.5	0.813965
540	0.922438	0.007310	0.268376	0.001962	44.5	0.821136
552	0.929419	0.006981	0.260559	0.001819	45.5	0.828405
564	0.936071	0.006652	0.252970	0.001683	46.5	0.835776
576	0.942394	0.006323	0.245602	0.001553	47.5	0.843248
588	0.948388	0.005994	0.238449	0.001429	48.5	0.850824
600	0.954052	0.005665	0.231503	0.001311	49.5	0.858505
612	0.959388	0.005335	0.224761	0.001199	50.5	0.866293
624	0.964394	0.005006	0.218214	0.001092	51.5	0.874189
636	0.969071	0.004677	0.211858	0.000991	52.5	0.882195
648	0.973419	0.004348	0.205688	0.000894	53.5	0.890312
660	0.977438	0.004019	0.199697	0.000803	54.5	0.898541
672	0.981127	0.003690	0.193880	0.000715	55.5	0.906883
684	0.984488	0.003360	0.188233	0.000633	56.5	0.915340
696	0.987519	0.003031	0.182751	0.000554	57.5	0.923911
708	0.990221	0.002702	0.177428	0.000479	58.5	0.932595
720	0.992594	0.002373	0.172260	0.000409	59.5	0.941390
732	0.994637	0.002044	0.167243	0.000342	60.5	0.950292
744	0.996352	0.001714	0.162372	0.000278	61.5	0.959290
756	0.997737	0.001385	0.157643	0.000218	62.5	0.968364
768	0.998793	0.001056	0.153051	0.000162	63.5	0.977469
780	0.999520	0.000727	0.148593	0.000108	64.5	0.986488
792	0.999918	0.000398	0.144265	0.000057	65.5	0.995007
804	1.000000	0.000082	0.140063	0.000012	66.5	1.000000
Total		1.000000		0.768005		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.030^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Medical Aid Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 3.50% per Annum**

Months	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 3.50%	Present Value of Payment	Payment Year t	Discount Factor at Time t
	Cumulative (2)	Incremental (3)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)
12	0.231200	0.231200	0.982946	0.227257	0.5	0.758366
24	0.416553	0.185353	0.949707	0.176031	1.5	0.709700
36	0.502207	0.085654	0.917591	0.078595	2.5	0.639087
48	0.552911	0.050704	0.886561	0.044952	3.5	0.597180
60	0.588500	0.035589	0.856581	0.030485	4.5	0.570799
72	0.615385	0.026886	0.827614	0.022251	5.5	0.552358
84	0.638165	0.022780	0.799628	0.018215	6.5	0.539304
96	0.657024	0.018859	0.772587	0.014570	7.5	0.528161
108	0.672658	0.015634	0.746461	0.011670	8.5	0.519794
120	0.685818	0.013161	0.721218	0.009492	9.5	0.514249
132	0.697127	0.011308	0.696829	0.007880	10.5	0.511188
144	0.707564	0.010437	0.673265	0.007027	11.5	0.510191
156	0.716388	0.008824	0.650497	0.005740	12.5	0.509954
168	0.724489	0.008101	0.628500	0.005091	13.5	0.512022
180	0.731881	0.007392	0.607246	0.004489	14.5	0.515092
192	0.739166	0.007285	0.586711	0.004274	15.5	0.519284
204	0.745781	0.006614	0.566871	0.003750	16.5	0.523562
216	0.751638	0.005857	0.547701	0.003208	17.5	0.529056
228	0.757983	0.006346	0.529180	0.003358	18.5	0.536079
240	0.764353	0.006369	0.511285	0.003257	19.5	0.542251
252	0.770026	0.005673	0.493995	0.002802	20.5	0.548425
264	0.775452	0.005426	0.477290	0.002590	21.5	0.556090
276	0.779694	0.004243	0.461150	0.001957	22.5	0.564452
288	0.783416	0.003722	0.445555	0.001658	23.5	0.575526
300	0.788056	0.004640	0.430488	0.001997	24.5	0.588119
312	0.792480	0.004424	0.415931	0.001840	25.5	0.599372
324	0.797226	0.004746	0.401866	0.001907	26.5	0.611509
336	0.802603	0.005378	0.388276	0.002088	27.5	0.623502
348	0.808827	0.006224	0.375146	0.002335	28.5	0.634709
360	0.814973	0.006146	0.362460	0.002228	29.5	0.644615
372	0.821069	0.006096	0.350203	0.002135	30.5	0.654959
384	0.827212	0.006143	0.338360	0.002079	31.5	0.665716
396	0.833359	0.006147	0.326918	0.002010	32.5	0.676715
408	0.839787	0.006427	0.315863	0.002030	33.5	0.688057
420	0.845531	0.005745	0.305181	0.001753	34.5	0.699186
432	0.851073	0.005542	0.294861	0.001634	35.5	0.712079
444	0.856632	0.005560	0.284890	0.001584	36.5	0.725913
456	0.862455	0.007623	0.275256	0.002098	37.5	0.740320
468	0.873588	0.009332	0.265948	0.002482	38.5	0.751138
480	0.882575	0.008988	0.256954	0.002309	39.5	0.758413
492	0.891218	0.008643	0.248265	0.002146	40.5	0.765819
504	0.899519	0.008300	0.239870	0.001991	41.5	0.773365
516	0.907488	0.007969	0.231758	0.001847	42.5	0.781056
528	0.915127	0.007640	0.223921	0.001711	43.5	0.788874
540	0.922438	0.007310	0.216349	0.001582	44.5	0.796815
552	0.929419	0.006981	0.209033	0.001459	45.5	0.804883
564	0.936071	0.006652	0.201964	0.001343	46.5	0.813079
576	0.942394	0.006323	0.195134	0.001234	47.5	0.821406
588	0.948388	0.005994	0.188535	0.001130	48.5	0.829866
600	0.954052	0.005665	0.182160	0.001032	49.5	0.838462
612	0.959388	0.005335	0.176000	0.000939	50.5	0.847197
624	0.964394	0.005006	0.170048	0.000851	51.5	0.856071
636	0.969071	0.004677	0.164298	0.000768	52.5	0.865089
648	0.973419	0.004348	0.158742	0.000690	53.5	0.874252
660	0.977438	0.004019	0.153374	0.000616	54.5	0.883562
672	0.981127	0.003690	0.148187	0.000547	55.5	0.893022
684	0.984488	0.003360	0.143176	0.000481	56.5	0.902632
696	0.987519	0.003031	0.138334	0.000419	57.5	0.912393
708	0.990221	0.002702	0.133656	0.000361	58.5	0.922307
720	0.992594	0.002373	0.129137	0.000306	59.5	0.932370
732	0.994637	0.002044	0.124770	0.000255	60.5	0.942577
744	0.996352	0.001714	0.120550	0.000207	61.5	0.952919
756	0.997737	0.001385	0.116474	0.000161	62.5	0.963373
768	0.998793	0.001056	0.112535	0.000119	63.5	0.973886
780	0.999520	0.000727	0.108730	0.000079	64.5	0.984323
792	0.999918	0.000398	0.105053	0.000042	65.5	0.994203
804	1.000000	0.000082	0.101500	0.000008	66.5	1.000000
Total		1.000000		0.745433		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.035^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

Medical Aid Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis  
Investment Yield 4.00% per Annum

Months (1)	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 4.00% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.231200	0.231200	0.980581	0.226710	0.5	0.739810
24	0.416553	0.185353	0.942866	0.174763	1.5	0.688026
36	0.502207	0.085654	0.906602	0.077654	2.5	0.612473
48	0.552911	0.050704	0.871733	0.044200	3.5	0.567624
60	0.588500	0.035589	0.838204	0.029831	4.5	0.539332
72	0.615385	0.026886	0.805966	0.021669	5.5	0.519470
84	0.638165	0.022780	0.774967	0.017653	6.5	0.505315
96	0.657024	0.018859	0.745161	0.014053	7.5	0.493139
108	0.672658	0.015634	0.716501	0.011202	8.5	0.483880
120	0.685818	0.013161	0.688943	0.009067	9.5	0.477599
132	0.697127	0.011308	0.662445	0.007491	10.5	0.473945
144	0.707564	0.010437	0.636967	0.006648	11.5	0.472476
156	0.716388	0.008824	0.612468	0.005405	12.5	0.471795
168	0.724489	0.008101	0.588911	0.004771	13.5	0.473574
180	0.731881	0.007392	0.566261	0.004186	14.5	0.476420
192	0.739166	0.007285	0.544482	0.003967	15.5	0.480464
204	0.745781	0.006614	0.523540	0.003463	16.5	0.484591
216	0.751638	0.005857	0.503404	0.002948	17.5	0.490028
228	0.757983	0.006346	0.484042	0.003072	18.5	0.497122
240	0.764353	0.006369	0.465425	0.002964	19.5	0.503293
252	0.770026	0.005673	0.447524	0.002539	20.5	0.509463
264	0.775452	0.005426	0.430312	0.002335	21.5	0.517256
276	0.779694	0.004243	0.413761	0.001755	22.5	0.525816
288	0.783416	0.003722	0.397847	0.001481	23.5	0.537351
300	0.788056	0.004640	0.382546	0.001775	24.5	0.550576
312	0.792480	0.004424	0.367832	0.001627	25.5	0.562368
324	0.797226	0.004746	0.353685	0.001678	26.5	0.575159
336	0.802603	0.005378	0.340082	0.001829	27.5	0.587825
348	0.808827	0.006224	0.327002	0.002035	28.5	0.599660
360	0.814973	0.006146	0.314425	0.001932	29.5	0.610092
372	0.821069	0.006096	0.302331	0.001843	30.5	0.621026
384	0.827212	0.006143	0.290703	0.001786	31.5	0.632440
396	0.833359	0.006147	0.279522	0.001718	32.5	0.644146
408	0.839787	0.006427	0.268771	0.001728	33.5	0.656260
420	0.845531	0.005745	0.258434	0.001485	34.5	0.668168
432	0.851073	0.005542	0.248494	0.001377	35.5	0.682061
444	0.856632	0.005560	0.238937	0.001328	36.5	0.697040
456	0.862455	0.007623	0.229747	0.001751	37.5	0.712703
468	0.873588	0.009332	0.220911	0.002062	38.5	0.724433
480	0.882575	0.008988	0.212414	0.001909	39.5	0.732253
492	0.891218	0.008643	0.204244	0.001765	40.5	0.740230
504	0.899519	0.008300	0.196389	0.001630	41.5	0.748373
516	0.907488	0.007969	0.188835	0.001505	42.5	0.756691
528	0.915127	0.007640	0.181572	0.001387	43.5	0.765162
540	0.922438	0.007310	0.174589	0.001276	44.5	0.773785
552	0.929419	0.006981	0.167874	0.001172	45.5	0.782562
564	0.936071	0.006652	0.161417	0.001074	46.5	0.791497
576	0.942394	0.006323	0.155209	0.000981	47.5	0.800593
588	0.948388	0.005994	0.149239	0.000895	48.5	0.809854
600	0.954052	0.005665	0.143499	0.000813	49.5	0.819284
612	0.959388	0.005335	0.137980	0.000736	50.5	0.828884
624	0.964394	0.005006	0.132673	0.000664	51.5	0.838660
636	0.969071	0.004677	0.127570	0.000597	52.5	0.848615
648	0.973419	0.004348	0.122664	0.000533	53.5	0.858751
660	0.977438	0.004019	0.117946	0.000474	54.5	0.869073
672	0.981127	0.003690	0.113410	0.000418	55.5	0.879583
684	0.984488	0.003360	0.109048	0.000366	56.5	0.890284
696	0.987519	0.003031	0.104854	0.000318	57.5	0.901178
708	0.990221	0.002702	0.100821	0.000272	58.5	0.912266
720	0.992594	0.002373	0.096943	0.000230	59.5	0.923546
732	0.994637	0.002044	0.093214	0.000190	60.5	0.935014
744	0.996352	0.001714	0.089629	0.000154	61.5	0.946660
756	0.997737	0.001385	0.086182	0.000119	62.5	0.958457
768	0.998793	0.001056	0.082867	0.000088	63.5	0.970349
780	0.999520	0.000727	0.079680	0.000058	64.5	0.982181
792	0.999918	0.000398	0.076615	0.000030	65.5	0.993407
804	1.000000	0.000082	0.073669	0.000006	66.5	1.000000
Total		1.000000		0.725443		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.040^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

Medical Aid Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis  
Investment Yield 4.24% per Annum

Months (1)	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 4.24% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.231200	0.231200	0.979445	0.226448	0.5	0.731629
24	0.416553	0.185353	0.939595	0.174157	1.5	0.678529
36	0.502207	0.085654	0.901366	0.077205	2.5	0.600849
48	0.552911	0.050704	0.864693	0.043844	3.5	0.554738
60	0.588500	0.035589	0.829511	0.029521	4.5	0.525627
72	0.615385	0.026886	0.795761	0.021394	5.5	0.505154
84	0.638165	0.022780	0.763384	0.017390	6.5	0.490520
96	0.657024	0.018859	0.732325	0.013811	7.5	0.477889
108	0.672658	0.015634	0.702529	0.010983	8.5	0.468232
120	0.685818	0.013161	0.673945	0.008870	9.5	0.461616
132	0.697127	0.011308	0.646525	0.007311	10.5	0.457685
144	0.707564	0.010437	0.620220	0.006473	11.5	0.455990
156	0.716388	0.008824	0.594985	0.005250	12.5	0.455090
168	0.724489	0.008101	0.570777	0.004624	13.5	0.456718
180	0.731881	0.007392	0.547554	0.004048	14.5	0.459437
192	0.739166	0.007285	0.525276	0.003827	15.5	0.463388
204	0.745781	0.006614	0.503904	0.003333	16.5	0.467417
216	0.751638	0.005857	0.483402	0.002831	17.5	0.472796
228	0.757983	0.006346	0.463734	0.002943	18.5	0.479889
240	0.764353	0.006369	0.444866	0.002833	19.5	0.486026
252	0.770026	0.005673	0.426766	0.002421	20.5	0.492158
264	0.775452	0.005426	0.409403	0.002221	21.5	0.499972
276	0.779694	0.004243	0.392745	0.001666	22.5	0.508583
288	0.783416	0.003722	0.376766	0.001402	23.5	0.520288
300	0.788056	0.004640	0.361437	0.001677	24.5	0.533761
312	0.792480	0.004424	0.346731	0.001534	25.5	0.545760
324	0.797226	0.004746	0.332624	0.001579	26.5	0.558812
336	0.802603	0.005378	0.319090	0.001716	27.5	0.571749
348	0.808827	0.006224	0.306108	0.001905	28.5	0.583836
360	0.814973	0.006146	0.293653	0.001805	29.5	0.594475
372	0.821069	0.006096	0.281705	0.001717	30.5	0.605647
384	0.827212	0.006143	0.270244	0.001660	31.5	0.617329
396	0.833359	0.006147	0.259248	0.001594	32.5	0.629329
408	0.839787	0.006427	0.248700	0.001599	33.5	0.641767
420	0.845531	0.005745	0.238582	0.001371	34.5	0.654004
432	0.851073	0.005542	0.228875	0.001268	35.5	0.668329
444	0.856632	0.005560	0.219562	0.001221	36.5	0.683809
456	0.862455	0.007623	0.210629	0.001606	37.5	0.700030
468	0.873588	0.009332	0.202059	0.001886	38.5	0.712161
480	0.882575	0.008988	0.193838	0.001742	39.5	0.720214
492	0.891218	0.008643	0.185952	0.001607	40.5	0.728437
504	0.899519	0.008300	0.178386	0.001481	41.5	0.736839
516	0.907488	0.007969	0.171128	0.001364	42.5	0.745430
528	0.915127	0.007640	0.164165	0.001254	43.5	0.754187
540	0.922438	0.007310	0.157486	0.001151	44.5	0.763109
552	0.929419	0.006981	0.151078	0.001055	45.5	0.772200
564	0.936071	0.006652	0.144932	0.000964	46.5	0.781463
576	0.942394	0.006323	0.139035	0.000879	47.5	0.790902
588	0.948388	0.005994	0.133378	0.000799	48.5	0.800522
600	0.954052	0.005665	0.127951	0.000725	49.5	0.810326
612	0.959388	0.005335	0.122745	0.000655	50.5	0.820318
624	0.964394	0.005006	0.117751	0.000589	51.5	0.830503
636	0.969071	0.004677	0.112960	0.000528	52.5	0.840884
648	0.973419	0.004348	0.108364	0.000471	53.5	0.851466
660	0.977438	0.004019	0.103955	0.000418	54.5	0.862252
672	0.981127	0.003690	0.099726	0.000368	55.5	0.873246
684	0.984488	0.003360	0.095668	0.000321	56.5	0.884452
696	0.987519	0.003031	0.091776	0.000278	57.5	0.895872
708	0.990221	0.002702	0.088042	0.000238	58.5	0.907507
720	0.992594	0.002373	0.084460	0.000200	59.5	0.919357
732	0.994637	0.002044	0.081023	0.000166	60.5	0.931418
744	0.996352	0.001714	0.077727	0.000133	61.5	0.943678
756	0.997737	0.001385	0.074564	0.000103	62.5	0.956113
768	0.998793	0.001056	0.071531	0.000076	63.5	0.968660
780	0.999520	0.000727	0.068620	0.000050	64.5	0.981157
792	0.999918	0.000398	0.065828	0.000026	65.5	0.993025
804	1.000000	0.000082	0.063150	0.000005	66.5	1.000000
Total		1.000000		0.716590		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.042^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Medical Aid Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 4.50% per Annum**

Months	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 4.50%	Present Value of Payment	Payment Year t	Discount Factor at Time t
	Cumulative (2)	Incremental (3)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)
12	0.231200	0.231200	0.978232	0.226167	0.5	0.723346
24	0.416553	0.185353	0.936107	0.173511	1.5	0.668955
36	0.502207	0.085654	0.895796	0.076728	2.5	0.589157
48	0.552911	0.050704	0.857221	0.043465	3.5	0.541796
60	0.588500	0.035589	0.820308	0.029194	4.5	0.511873
72	0.615385	0.026886	0.784983	0.021105	5.5	0.490792
84	0.638165	0.022780	0.751180	0.017112	6.5	0.475681
96	0.657024	0.018859	0.718833	0.013556	7.5	0.462593
108	0.672658	0.015634	0.687878	0.010754	8.5	0.452530
120	0.685818	0.013161	0.658257	0.008663	9.5	0.445570
132	0.697127	0.011308	0.629911	0.007123	10.5	0.441351
144	0.707564	0.010437	0.602785	0.006291	11.5	0.439415
156	0.716388	0.008824	0.576828	0.005090	12.5	0.438281
168	0.724489	0.008101	0.551989	0.004472	13.5	0.439740
180	0.731881	0.007392	0.528219	0.003905	14.5	0.442314
192	0.739166	0.007285	0.505472	0.003683	15.5	0.446151
204	0.745781	0.006614	0.483706	0.003199	16.5	0.450062
216	0.751638	0.005857	0.462876	0.002711	17.5	0.455362
228	0.757983	0.006346	0.442944	0.002811	18.5	0.462431
240	0.764353	0.006369	0.423870	0.002700	19.5	0.468511
252	0.770026	0.005673	0.405617	0.002301	20.5	0.474582
264	0.775452	0.005426	0.388150	0.002106	21.5	0.482394
276	0.779694	0.004243	0.371436	0.001576	22.5	0.491032
288	0.783416	0.003722	0.355441	0.001323	23.5	0.502885
300	0.788056	0.004640	0.340135	0.001578	24.5	0.516588
312	0.792480	0.004424	0.325488	0.001440	25.5	0.528776
324	0.797226	0.004746	0.311471	0.001478	26.5	0.542072
336	0.802603	0.005378	0.298059	0.001603	27.5	0.555266
348	0.808827	0.006224	0.285224	0.001775	28.5	0.567592
360	0.814973	0.006146	0.272941	0.001677	29.5	0.578423
372	0.821069	0.006096	0.261188	0.001592	30.5	0.589819
384	0.827212	0.006143	0.249941	0.001535	31.5	0.601758
396	0.833359	0.006147	0.239178	0.001470	32.5	0.614040
408	0.839787	0.006427	0.228878	0.001471	33.5	0.626794
420	0.845531	0.005745	0.219022	0.001258	34.5	0.639353
432	0.851073	0.005542	0.209591	0.001161	35.5	0.654109
444	0.856632	0.005560	0.200565	0.001115	36.5	0.670094
456	0.862455	0.007623	0.191928	0.001463	37.5	0.686879
468	0.873588	0.009332	0.183663	0.001714	38.5	0.699414
480	0.882575	0.008988	0.175755	0.001580	39.5	0.707699
492	0.891218	0.008643	0.168186	0.001454	40.5	0.716166
504	0.899519	0.008300	0.160944	0.001336	41.5	0.724826
516	0.907488	0.007969	0.154013	0.001227	42.5	0.733690
528	0.915127	0.007640	0.147381	0.001126	43.5	0.742734
540	0.922438	0.007310	0.141034	0.001031	44.5	0.751958
552	0.929419	0.006981	0.134961	0.000942	45.5	0.761365
564	0.936071	0.006652	0.129149	0.000859	46.5	0.770961
576	0.942394	0.006323	0.123588	0.000781	47.5	0.780749
588	0.948388	0.005994	0.118266	0.000709	48.5	0.790734
600	0.954052	0.005665	0.113173	0.000641	49.5	0.800922
612	0.959388	0.005335	0.108300	0.000578	50.5	0.811315
624	0.964394	0.005006	0.103636	0.000519	51.5	0.821921
636	0.969071	0.004677	0.099173	0.000464	52.5	0.832742
648	0.973419	0.004348	0.094903	0.000413	53.5	0.843785
660	0.977438	0.004019	0.090816	0.000365	54.5	0.855053
672	0.981127	0.003690	0.086905	0.000321	55.5	0.866552
684	0.984488	0.003360	0.083163	0.000279	56.5	0.878284
696	0.987519	0.003031	0.079582	0.000241	57.5	0.890254
708	0.990221	0.002702	0.076155	0.000206	58.5	0.902464
720	0.992594	0.002373	0.072875	0.000173	59.5	0.914913
732	0.994637	0.002044	0.069737	0.000143	60.5	0.927598
744	0.996352	0.001714	0.066734	0.000114	61.5	0.940508
756	0.997737	0.001385	0.063860	0.000088	62.5	0.953616
768	0.998793	0.001056	0.061110	0.000065	63.5	0.966858
780	0.999520	0.000727	0.058479	0.000043	64.5	0.980063
792	0.999918	0.000398	0.055961	0.000022	65.5	0.992618
804	1.000000	0.000082	0.053551	0.000004	66.5	1.000000
Total		1.000000		0.707600		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.045^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

Medical Aid Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis  
Investment Yield 5.00% per Annum

Months (1)	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 5.00% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.231200	0.231200	0.975900	0.225628	0.5	0.708632
24	0.416553	0.185353	0.929429	0.172273	1.5	0.652060
36	0.502207	0.085654	0.885170	0.075818	2.5	0.568600
48	0.552911	0.050704	0.843019	0.042745	3.5	0.519089
60	0.588500	0.035589	0.802875	0.028573	4.5	0.487776
72	0.615385	0.026886	0.764643	0.020558	5.5	0.465650
84	0.638165	0.022780	0.728232	0.016589	6.5	0.449713
96	0.657024	0.018859	0.693554	0.013080	7.5	0.435822
108	0.672658	0.015634	0.660528	0.010327	8.5	0.425041
120	0.685818	0.013161	0.629074	0.008279	9.5	0.417460
132	0.697127	0.011308	0.599118	0.006775	10.5	0.412711
144	0.707564	0.010437	0.570589	0.005955	11.5	0.410323
156	0.716388	0.008824	0.543418	0.004795	12.5	0.408741
168	0.724489	0.008101	0.517541	0.004192	13.5	0.409862
180	0.731881	0.007392	0.492896	0.003643	14.5	0.412136
192	0.739166	0.007285	0.469425	0.003420	15.5	0.415725
204	0.745781	0.006614	0.447071	0.002957	16.5	0.419375
216	0.751638	0.005857	0.425782	0.002494	17.5	0.424482
228	0.757983	0.006346	0.405507	0.002573	18.5	0.431455
240	0.764353	0.006369	0.386197	0.002460	19.5	0.437375
252	0.770026	0.005673	0.367806	0.002087	20.5	0.443276
264	0.775452	0.005426	0.350292	0.001901	21.5	0.451020
276	0.779694	0.004243	0.333611	0.001415	22.5	0.459643
288	0.783416	0.003722	0.317725	0.001183	23.5	0.471698
300	0.788056	0.004640	0.302595	0.001404	24.5	0.485750
312	0.792480	0.004424	0.288186	0.001275	25.5	0.498217
324	0.797226	0.004746	0.274463	0.001303	26.5	0.511896
336	0.802603	0.005378	0.261393	0.001406	27.5	0.525496
348	0.808827	0.006224	0.248946	0.001549	28.5	0.538197
360	0.814973	0.006146	0.237091	0.001457	29.5	0.549321
372	0.821069	0.006096	0.225801	0.001376	30.5	0.561069
384	0.827212	0.006143	0.215049	0.001321	31.5	0.573421
396	0.833359	0.006147	0.204808	0.001259	32.5	0.586167
408	0.839787	0.006427	0.195056	0.001254	33.5	0.599447
420	0.845531	0.005745	0.185767	0.001067	34.5	0.612546
432	0.851073	0.005542	0.176921	0.000980	35.5	0.628044
444	0.856632	0.005560	0.168496	0.000937	36.5	0.644913
456	0.864255	0.007623	0.160473	0.001223	37.5	0.662701
468	0.873588	0.009332	0.152831	0.001426	38.5	0.675948
480	0.882575	0.008988	0.145554	0.001308	39.5	0.684627
492	0.891218	0.008643	0.138622	0.001198	40.5	0.693512
504	0.899519	0.008300	0.132021	0.001096	41.5	0.702618
516	0.907488	0.007969	0.125735	0.001002	42.5	0.711956
528	0.915127	0.007640	0.119747	0.000915	43.5	0.721501
540	0.922438	0.007310	0.114045	0.000834	44.5	0.731255
552	0.929419	0.006981	0.108614	0.000758	45.5	0.741221
564	0.936071	0.006652	0.103442	0.000688	46.5	0.751406
576	0.942394	0.006323	0.098516	0.000623	47.5	0.761815
588	0.948388	0.005994	0.093825	0.000562	48.5	0.772455
600	0.954052	0.005665	0.089357	0.000506	49.5	0.783332
612	0.959388	0.005335	0.085102	0.000454	50.5	0.794451
624	0.964394	0.005006	0.081050	0.000406	51.5	0.805820
636	0.969071	0.004677	0.077190	0.000361	52.5	0.817443
648	0.973419	0.004348	0.073514	0.000320	53.5	0.829329
660	0.977438	0.004019	0.070014	0.000281	54.5	0.841483
672	0.981127	0.003690	0.066680	0.000246	55.5	0.853911
684	0.984488	0.003360	0.063505	0.000213	56.5	0.866619
696	0.987519	0.003031	0.060480	0.000183	57.5	0.879612
708	0.990221	0.002702	0.057600	0.000156	58.5	0.892894
720	0.992594	0.002373	0.054858	0.000130	59.5	0.906466
732	0.994637	0.002044	0.052245	0.000107	60.5	0.920326
744	0.996352	0.001714	0.049757	0.000085	61.5	0.934462
756	0.997737	0.001385	0.047388	0.000066	62.5	0.948847
768	0.998793	0.001056	0.045131	0.000048	63.5	0.963413
780	0.999520	0.000727	0.042982	0.000031	64.5	0.977968
792	0.999918	0.000398	0.040936	0.000016	65.5	0.991837
804	1.000000	0.000082	0.038986	0.000003	66.5	1.000000
Total		1.000000		0.691554		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.050^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Medical Aid Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 5.50% per Annum**

Months (1)	Medical Aid Fund Loss Payment Pattern		Present Value Factor at 5.50% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.231200	0.231200	0.973585	0.225093	0.5	0.695389
24	0.416553	0.185353	0.922829	0.171049	1.5	0.636992
36	0.502207	0.085654	0.874720	0.074923	2.5	0.550361
48	0.552911	0.050704	0.829118	0.042040	3.5	0.499008
60	0.588500	0.035589	0.785894	0.027969	4.5	0.466511
72	0.615385	0.026886	0.744923	0.020028	5.5	0.443492
84	0.638165	0.022780	0.706088	0.016084	6.5	0.426843
96	0.657024	0.018859	0.669278	0.012622	7.5	0.412252
108	0.672658	0.015634	0.634387	0.009918	8.5	0.400830
120	0.685818	0.013161	0.601314	0.007914	9.5	0.392686
132	0.697127	0.011308	0.569966	0.006445	10.5	0.387444
144	0.707564	0.010437	0.540252	0.005639	11.5	0.384625
156	0.716388	0.008824	0.512088	0.004519	12.5	0.382609
168	0.724489	0.008101	0.485391	0.003932	13.5	0.383387
180	0.731881	0.007392	0.460086	0.003401	14.5	0.385346
192	0.739166	0.007285	0.436101	0.003177	15.5	0.388662
204	0.745781	0.006614	0.413366	0.002734	16.5	0.392023
216	0.751638	0.005857	0.391816	0.002295	17.5	0.396896
228	0.757983	0.006346	0.371389	0.002357	18.5	0.403720
240	0.764353	0.006369	0.352028	0.002242	19.5	0.409430
252	0.770026	0.005673	0.333676	0.001893	20.5	0.415109
264	0.775452	0.005426	0.316280	0.001716	21.5	0.422718
276	0.779694	0.004243	0.299792	0.001272	22.5	0.431251
288	0.783416	0.003722	0.284163	0.001058	23.5	0.443414
300	0.788056	0.004640	0.269349	0.001250	24.5	0.457711
312	0.792480	0.004424	0.255307	0.001130	25.5	0.470361
324	0.797226	0.004746	0.241997	0.001148	26.5	0.484318
336	0.802603	0.005378	0.229381	0.001234	27.5	0.498223
348	0.808827	0.006224	0.217423	0.001353	28.5	0.511204
360	0.814973	0.006146	0.206088	0.001267	29.5	0.522532
372	0.821069	0.006096	0.195344	0.001191	30.5	0.534539
384	0.827212	0.006143	0.185160	0.001138	31.5	0.547209
396	0.833359	0.006147	0.175507	0.001079	32.5	0.560322
408	0.839787	0.006427	0.166358	0.001069	33.5	0.574028
420	0.845531	0.005745	0.157685	0.000906	34.5	0.587571
432	0.851073	0.005542	0.149464	0.000828	35.5	0.603706
444	0.856632	0.005560	0.141672	0.000788	36.5	0.621352
456	0.864255	0.007623	0.134287	0.001024	37.5	0.640036
468	0.873588	0.009332	0.127286	0.001188	38.5	0.659312
480	0.882575	0.008988	0.120650	0.001084	39.5	0.662923
492	0.891218	0.008643	0.114360	0.000988	40.5	0.672164
504	0.899519	0.008300	0.108398	0.000900	41.5	0.681653
516	0.907488	0.007969	0.102747	0.000819	42.5	0.691400
528	0.915127	0.007640	0.097391	0.000744	43.5	0.701383
540	0.922438	0.007310	0.092314	0.000675	44.5	0.711601
552	0.929419	0.006981	0.087501	0.000611	45.5	0.722062
564	0.936071	0.006652	0.082939	0.000552	46.5	0.732772
576	0.942394	0.006323	0.078615	0.000497	47.5	0.743739
588	0.948388	0.005994	0.074517	0.000447	48.5	0.754970
600	0.954052	0.005665	0.070632	0.000400	49.5	0.766473
612	0.959388	0.005335	0.066950	0.000357	50.5	0.778255
624	0.964394	0.005006	0.063460	0.000318	51.5	0.790325
636	0.969071	0.004677	0.060151	0.000281	52.5	0.802691
648	0.973419	0.004348	0.057016	0.000248	53.5	0.815361
660	0.977438	0.004019	0.054043	0.000217	54.5	0.828344
672	0.981127	0.003690	0.051226	0.000189	55.5	0.841646
684	0.984488	0.003360	0.048555	0.000163	56.5	0.855277
696	0.987519	0.003031	0.046024	0.000140	57.5	0.869243
708	0.990221	0.002702	0.043625	0.000118	58.5	0.883549
720	0.992594	0.002373	0.041350	0.000098	59.5	0.898200
732	0.994637	0.002044	0.039195	0.000080	60.5	0.913193
744	0.996352	0.001714	0.037151	0.000064	61.5	0.928519
756	0.997737	0.001385	0.035214	0.000049	62.5	0.944150
768	0.998793	0.001056	0.033379	0.000035	63.5	0.960011
780	0.999520	0.000727	0.031639	0.000023	64.5	0.975896
792	0.999918	0.000398	0.029989	0.000012	65.5	0.991063
804	1.000000	0.000082	0.028426	0.000002	66.5	1.000000
Total		1.000000		0.677020		

Notes:

- (2) Exhibit 4, Sheet 1a, Col (4).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.055^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 2.50% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 2.50% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.987730	0.101621	0.5	0.880840
24	0.252795	0.149912	0.963639	0.144461	1.5	0.888854
36	0.374131	0.121336	0.940135	0.114072	2.5	0.888218
48	0.473567	0.099435	0.917205	0.091203	3.5	0.888211
60	0.557001	0.083435	0.894834	0.074660	4.5	0.888773
72	0.629420	0.072418	0.873009	0.063222	5.5	0.889520
84	0.688364	0.058944	0.851716	0.050204	6.5	0.889629
96	0.739068	0.050704	0.830943	0.042132	7.5	0.890472
108	0.781902	0.042834	0.810676	0.034725	8.5	0.890918
120	0.815798	0.033896	0.790903	0.026809	9.5	0.891232
132	0.843745	0.027947	0.771613	0.021564	10.5	0.892997
144	0.869705	0.025960	0.752793	0.019542	11.5	0.895705
156	0.892882	0.023177	0.734432	0.017022	12.5	0.896799
168	0.910916	0.018034	0.716519	0.012922	13.5	0.896331
180	0.928828	0.017911	0.699043	0.012521	14.5	0.897228
192	0.941593	0.012765	0.681993	0.008706	15.5	0.893149
204	0.953371	0.011778	0.665359	0.007837	16.5	0.891540
216	0.961993	0.008623	0.649131	0.005597	17.5	0.885748
228	0.969208	0.007215	0.633299	0.004569	18.5	0.881323
240	0.974092	0.004884	0.617852	0.003018	19.5	0.874855
252	0.978864	0.004772	0.602783	0.002877	20.5	0.872545
264	0.981814	0.002949	0.588081	0.001734	21.5	0.864862
276	0.984744	0.002930	0.573737	0.001681	22.5	0.864019
288	0.986770	0.002026	0.559744	0.001134	23.5	0.858850
300	0.988804	0.002034	0.546091	0.001111	24.5	0.858162
312	0.990428	0.001625	0.532772	0.000865	25.5	0.853209
324	0.991394	0.000966	0.519778	0.000502	26.5	0.849003
336	0.993001	0.001606	0.507100	0.000815	27.5	0.852852
348	0.993986	0.000986	0.494732	0.000488	28.5	0.839561
360	0.994641	0.000654	0.482665	0.000316	29.5	0.833598
372	0.995388	0.000747	0.470893	0.000352	30.5	0.833612
384	0.995813	0.000425	0.459408	0.000195	31.5	0.826817
396	0.996127	0.000314	0.448203	0.000141	32.5	0.829486
408	0.996456	0.000330	0.437271	0.000144	33.5	0.836051
420	0.996740	0.000284	0.426606	0.000121	34.5	0.841314
432	0.997008	0.000268	0.416201	0.000112	35.5	0.848200
444	0.997278	0.000270	0.406049	0.000110	36.5	0.855460
456	0.997543	0.000265	0.396146	0.000105	37.5	0.862137
468	0.997797	0.000254	0.386484	0.000098	38.5	0.868456
480	0.998036	0.000239	0.377057	0.000090	39.5	0.874640
492	0.998261	0.000225	0.367861	0.000083	40.5	0.880840
504	0.998472	0.000211	0.358889	0.000076	41.5	0.887046
516	0.998669	0.000197	0.350135	0.000069	42.5	0.893245
528	0.998851	0.000182	0.341595	0.000062	43.5	0.899423
540	0.999019	0.000168	0.333264	0.000056	44.5	0.905559
552	0.999173	0.000154	0.325135	0.000050	45.5	0.911630
564	0.999312	0.000139	0.317205	0.000044	46.5	0.917603
576	0.999437	0.000125	0.309468	0.000039	47.5	0.923443
588	0.999548	0.000111	0.301920	0.000033	48.5	0.929103
600	0.999645	0.000097	0.294557	0.000028	49.5	0.934511
612	0.999727	0.000083	0.287372	0.000024	50.5	0.939601
624	0.999796	0.000068	0.280363	0.000019	51.5	0.944341
636	0.999850	0.000054	0.273525	0.000015	52.5	0.948827
648	0.999891	0.000041	0.266854	0.000011	53.5	0.953536
660	0.999924	0.000033	0.260345	0.000008	54.5	0.959378
672	0.999949	0.000025	0.253995	0.000006	55.5	0.965601
684	0.999968	0.000019	0.247800	0.000005	56.5	0.972497
696	0.999982	0.000014	0.241756	0.000003	57.5	0.979825
708	0.999993	0.000010	0.235860	0.000002	58.5	0.987429
720	0.999998	0.000006	0.230107	0.000001	59.5	0.994698
732	1.000000	0.000002	0.224495	0.000000	60.5	1.000000
744	1.000000	0.000000	0.219019	0.000000	61.5	1.000000
756	1.000000	0.000000	0.213677	0.000000	62.5	1.000000
768	1.000000	0.000000	0.208466	0.000000	63.5	1.000000
780	1.000000	0.000000	0.203381	0.000000	64.5	1.000000
Total		1.000000		0.870032		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.025^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7) [Upward sum of Column (5)] / [upward sum of Column (3)] and adjusted forward in time to its respective payment year.

Accident Fund  
Factors to Discount Future Accident Year Losses to Present Value Basis  
Investment Yield 3.00% per Annum

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 3.00% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.985329	0.101374	0.5	0.860701
24	0.252795	0.149912	0.956630	0.143410	1.5	0.870068
36	0.374131	0.121336	0.928767	0.112693	2.5	0.869320
48	0.473567	0.099435	0.901716	0.089662	3.5	0.869304
60	0.557001	0.083435	0.875452	0.073043	4.5	0.869956
72	0.629420	0.072418	0.849954	0.061552	5.5	0.870828
84	0.688364	0.058944	0.825198	0.048641	6.5	0.870953
96	0.739068	0.050704	0.801163	0.040622	7.5	0.871940
108	0.781902	0.042834	0.777828	0.033318	8.5	0.872468
120	0.815798	0.033896	0.755173	0.025597	9.5	0.872843
132	0.843745	0.027947	0.733178	0.020490	10.5	0.874927
144	0.869705	0.025960	0.711823	0.018479	11.5	0.878134
156	0.892882	0.023177	0.691090	0.016017	12.5	0.879469
168	0.910916	0.018034	0.670961	0.012100	13.5	0.878992
180	0.928828	0.017911	0.651419	0.011668	14.5	0.880130
192	0.941593	0.012765	0.632445	0.008073	15.5	0.875462
204	0.953371	0.011778	0.614025	0.007232	16.5	0.873691
216	0.961993	0.008623	0.596140	0.005140	17.5	0.867040
228	0.969208	0.007215	0.578777	0.004176	18.5	0.861981
240	0.974092	0.004884	0.561920	0.002744	19.5	0.854532
252	0.978864	0.004772	0.545553	0.002603	20.5	0.851923
264	0.981814	0.002949	0.529663	0.001562	21.5	0.843044
276	0.984744	0.002930	0.514236	0.001507	22.5	0.842118
288	0.986770	0.002026	0.499258	0.001012	23.5	0.836148
300	0.988804	0.002034	0.484717	0.000986	24.5	0.835384
312	0.990428	0.001625	0.470599	0.000764	25.5	0.829648
324	0.991394	0.000966	0.456892	0.000441	26.5	0.824758
336	0.993001	0.001606	0.443584	0.000713	27.5	0.829236
348	0.993986	0.000986	0.430665	0.000424	28.5	0.813749
360	0.994641	0.000654	0.418121	0.000274	29.5	0.806722
372	0.995388	0.000747	0.405943	0.000303	30.5	0.806616
384	0.995813	0.000425	0.394119	0.000167	31.5	0.798538
396	0.996127	0.000314	0.382640	0.000120	32.5	0.801451
408	0.996456	0.000330	0.371495	0.000122	33.5	0.808912
420	0.996740	0.000284	0.360675	0.000102	34.5	0.814865
432	0.997008	0.000268	0.350170	0.000094	35.5	0.822725
444	0.997278	0.000270	0.339971	0.000092	36.5	0.831042
456	0.997543	0.000265	0.330068	0.000087	37.5	0.838695
468	0.997797	0.000254	0.320455	0.000081	38.5	0.845943
480	0.998036	0.000239	0.311121	0.000074	39.5	0.853048
492	0.998261	0.000225	0.302059	0.000068	40.5	0.860186
504	0.998472	0.000211	0.293262	0.000062	41.5	0.867344
516	0.998669	0.000197	0.284720	0.000056	42.5	0.874510
528	0.998851	0.000182	0.276427	0.000050	43.5	0.881665
540	0.999019	0.000168	0.268376	0.000045	44.5	0.888785
552	0.999173	0.000154	0.260559	0.000040	45.5	0.895841
564	0.999312	0.000139	0.252970	0.000035	46.5	0.902799
576	0.999437	0.000125	0.245602	0.000031	47.5	0.909612
588	0.999548	0.000111	0.238449	0.000026	48.5	0.916225
600	0.999645	0.000097	0.231503	0.000022	49.5	0.922552
612	0.999727	0.000083	0.224761	0.000019	50.5	0.928513
624	0.999796	0.000068	0.218214	0.000015	51.5	0.934069
636	0.999850	0.000054	0.211858	0.000012	52.5	0.939328
648	0.999891	0.000041	0.205688	0.000008	53.5	0.944858
660	0.999924	0.000033	0.199697	0.000006	54.5	0.951742
672	0.999949	0.000025	0.193880	0.000005	55.5	0.959090
684	0.999968	0.000019	0.188233	0.000004	56.5	0.967256
696	0.999982	0.000014	0.182751	0.000003	57.5	0.975953
708	0.999993	0.000010	0.177428	0.000002	58.5	0.985001
720	0.999998	0.000006	0.172260	0.000001	59.5	0.993668
732	1.000000	0.000002	0.167243	0.000000	60.5	1.000000
744	1.000000	0.000000	0.162372	0.000000	61.5	1.000000
756	1.000000	0.000000	0.157643	0.000000	62.5	1.000000
768	1.000000	0.000000	0.153051	0.000000	63.5	1.000000
780	1.000000	0.000000	0.148593	0.000000	64.5	1.000000
Total		1.000000		0.848074		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.030^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7) [Upward sum of Column (5)] / [upward sum of Column (3)] and adjusted forward in time to its respective payment year.

**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 3.50% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 3.50% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.982946	0.101129	0.5	0.841575
24	0.252795	0.149912	0.949707	0.142372	1.5	0.852226
36	0.374131	0.121336	0.917591	0.111337	2.5	0.851368
48	0.473567	0.099435	0.886561	0.088156	3.5	0.851342
60	0.557001	0.083435	0.856581	0.071469	4.5	0.852077
72	0.629420	0.072418	0.827614	0.059934	5.5	0.853064
84	0.688364	0.058944	0.799628	0.047133	6.5	0.853203
96	0.739068	0.050704	0.772587	0.039173	7.5	0.854327
108	0.781902	0.042834	0.746461	0.031974	8.5	0.854931
120	0.815798	0.033896	0.721218	0.024447	9.5	0.855365
132	0.843745	0.027947	0.696829	0.019474	10.5	0.857756
144	0.869705	0.025960	0.673265	0.017478	11.5	0.861446
156	0.892882	0.023177	0.650497	0.015076	12.5	0.863025
168	0.910916	0.018034	0.628500	0.011334	13.5	0.862557
180	0.928828	0.017911	0.607246	0.010877	14.5	0.863948
192	0.941593	0.012765	0.586711	0.007490	15.5	0.858749
204	0.953371	0.011778	0.566871	0.006677	16.5	0.856854
216	0.961993	0.008623	0.547701	0.004723	17.5	0.849420
228	0.969208	0.007215	0.529180	0.003818	18.5	0.843792
240	0.974092	0.004884	0.511285	0.002497	19.5	0.835444
252	0.978864	0.004772	0.493995	0.002357	20.5	0.832577
264	0.981814	0.002949	0.477290	0.001408	21.5	0.822594
276	0.984744	0.002930	0.461150	0.001351	22.5	0.821606
288	0.986770	0.002026	0.445555	0.000903	23.5	0.814900
300	0.988804	0.002034	0.430488	0.000875	24.5	0.814080
312	0.990428	0.001625	0.415931	0.000676	25.5	0.807621
324	0.991394	0.000966	0.401866	0.000388	26.5	0.802095
336	0.993001	0.001606	0.388276	0.000624	27.5	0.807171
348	0.993986	0.000986	0.375146	0.000370	28.5	0.798621
360	0.994641	0.000654	0.362460	0.000237	29.5	0.781573
372	0.995388	0.000747	0.350203	0.000262	30.5	0.781324
384	0.995813	0.000425	0.338360	0.000144	31.5	0.771995
396	0.996127	0.000314	0.326918	0.000103	32.5	0.775084
408	0.996456	0.000330	0.315863	0.000104	33.5	0.783336
420	0.996740	0.000284	0.305181	0.000087	34.5	0.789886
432	0.997008	0.000268	0.294861	0.000079	35.5	0.798617
444	0.997278	0.000270	0.284890	0.000077	36.5	0.807888
456	0.997543	0.000265	0.275256	0.000073	37.5	0.816423
468	0.997797	0.000254	0.265948	0.000067	38.5	0.824513
480	0.998036	0.000239	0.256954	0.000062	39.5	0.832455
492	0.998261	0.000225	0.248265	0.000056	40.5	0.840448
504	0.998472	0.000211	0.239870	0.000051	41.5	0.848482
516	0.998669	0.000197	0.231758	0.000046	42.5	0.856538
528	0.998851	0.000182	0.223921	0.000041	43.5	0.864598
540	0.999019	0.000168	0.216349	0.000036	44.5	0.872634
552	0.999173	0.000154	0.209033	0.000032	45.5	0.880613
564	0.999312	0.000139	0.201964	0.000028	46.5	0.888493
576	0.999437	0.000125	0.195134	0.000024	47.5	0.896223
588	0.999548	0.000111	0.188535	0.000021	48.5	0.903739
600	0.999645	0.000097	0.182160	0.000018	49.5	0.910938
612	0.999727	0.000083	0.176000	0.000015	50.5	0.917728
624	0.999796	0.000068	0.170048	0.000012	51.5	0.924060
636	0.999850	0.000054	0.164298	0.000009	52.5	0.930057
648	0.999891	0.000041	0.158742	0.000007	53.5	0.936370
660	0.999924	0.000033	0.153374	0.000005	54.5	0.942258
672	0.999949	0.000025	0.148187	0.000004	55.5	0.952696
684	0.999968	0.000019	0.143176	0.000003	56.5	0.962097
696	0.999982	0.000014	0.138334	0.000002	57.5	0.972134
708	0.999993	0.000010	0.133656	0.000001	58.5	0.982601
720	0.999998	0.000006	0.129137	0.000001	59.5	0.992649
732	1.000000	0.000002	0.124770	0.000000	60.5	1.000000
744	1.000000	0.000000	0.120550	0.000000	61.5	1.000000
756	1.000000	0.000000	0.116474	0.000000	62.5	1.000000
768	1.000000	0.000000	0.112535	0.000000	63.5	1.000000
780	1.000000	0.000000	0.108730	0.000000	64.5	1.000000
Total		1.000000		0.827223		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.035^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7) [Upward sum of Column (5)] / [upward sum of Column (3)] and adjusted forward in time to its respective payment year.

**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 4.00% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 4.00% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.980581	0.100885	0.5	0.823386
24	0.252795	0.149912	0.942866	0.141347	1.5	0.835257
36	0.374131	0.121336	0.906602	0.110004	2.5	0.834293
48	0.473567	0.099435	0.871733	0.086681	3.5	0.834254
60	0.557001	0.083435	0.838204	0.069935	4.5	0.835065
72	0.629420	0.072418	0.805966	0.058367	5.5	0.836161
84	0.688364	0.058944	0.774967	0.045680	6.5	0.836310
96	0.739068	0.050704	0.745161	0.037783	7.5	0.837563
108	0.781902	0.042834	0.716501	0.030691	8.5	0.838239
120	0.815798	0.033896	0.688943	0.023353	9.5	0.838728
132	0.843745	0.027947	0.662445	0.018514	10.5	0.841413
144	0.869705	0.025960	0.636967	0.016536	11.5	0.845570
156	0.892882	0.023177	0.612468	0.014195	12.5	0.847394
168	0.910916	0.018034	0.588911	0.010621	13.5	0.846950
180	0.928828	0.017911	0.566261	0.010143	14.5	0.848606
192	0.941593	0.012765	0.544482	0.006950	15.5	0.842926
204	0.953371	0.011778	0.523540	0.006166	16.5	0.840940
216	0.961993	0.008623	0.503404	0.004341	17.5	0.832793
228	0.969208	0.007215	0.484042	0.003492	18.5	0.826653
240	0.974092	0.004884	0.465425	0.002273	19.5	0.817479
252	0.978864	0.004772	0.447524	0.002136	20.5	0.814393
264	0.981814	0.002949	0.430312	0.001269	21.5	0.803386
276	0.984744	0.002930	0.413761	0.001212	22.5	0.802360
288	0.986770	0.002026	0.397847	0.000806	23.5	0.794977
300	0.988804	0.002034	0.382546	0.000778	24.5	0.794119
312	0.990428	0.001625	0.367832	0.000598	25.5	0.786992
324	0.991394	0.000966	0.353685	0.000342	26.5	0.780875
336	0.993001	0.001606	0.340082	0.000546	27.5	0.786524
348	0.993986	0.000986	0.327002	0.000322	28.5	0.767035
360	0.994641	0.000654	0.314425	0.000206	29.5	0.758010
372	0.995388	0.000747	0.302331	0.000226	30.5	0.757600
384	0.995813	0.000425	0.290703	0.000123	31.5	0.747054
396	0.996127	0.000314	0.279522	0.000088	32.5	0.750259
408	0.996456	0.000330	0.268771	0.000089	33.5	0.759209
420	0.996740	0.000284	0.258434	0.000073	34.5	0.766274
432	0.997008	0.000268	0.248494	0.000067	35.5	0.775783
444	0.997278	0.000270	0.238937	0.000065	36.5	0.785915
456	0.997543	0.000265	0.229747	0.000061	37.5	0.795246
468	0.997797	0.000254	0.220911	0.000056	38.5	0.804099
480	0.998036	0.000239	0.212414	0.000051	39.5	0.812800
492	0.998261	0.000225	0.204244	0.000046	40.5	0.821575
504	0.998472	0.000211	0.196389	0.000041	41.5	0.830411
516	0.998669	0.000197	0.188835	0.000037	42.5	0.839290
528	0.998851	0.000182	0.181572	0.000033	43.5	0.848188
540	0.999019	0.000168	0.174589	0.000029	44.5	0.857076
552	0.999173	0.000154	0.167874	0.000026	45.5	0.865918
564	0.999312	0.000139	0.161417	0.000022	46.5	0.874665
576	0.999437	0.000125	0.155209	0.000019	47.5	0.883260
588	0.999548	0.000111	0.149239	0.000017	48.5	0.891629
600	0.999645	0.000097	0.143499	0.000014	49.5	0.899656
612	0.999727	0.000083	0.137980	0.000011	50.5	0.907235
624	0.999796	0.000068	0.132673	0.000009	51.5	0.914306
636	0.999850	0.000054	0.127570	0.000007	52.5	0.921005
648	0.999891	0.000041	0.122664	0.000005	53.5	0.928068
660	0.999924	0.000033	0.117946	0.000004	54.5	0.936922
672	0.999949	0.000025	0.113410	0.000003	55.5	0.946415
684	0.999968	0.000019	0.109048	0.000002	56.5	0.957018
696	0.999982	0.000014	0.104854	0.000002	57.5	0.968365
708	0.999993	0.000010	0.100821	0.000001	58.5	0.980227
720	0.999998	0.000006	0.096943	0.000001	59.5	0.991639
732	1.000000	0.000002	0.093214	0.000000	60.5	1.000000
744	1.000000	0.000000	0.089629	0.000000	61.5	1.000000
756	1.000000	0.000000	0.086182	0.000000	62.5	1.000000
768	1.000000	0.000000	0.082867	0.000000	63.5	1.000000
780	1.000000	0.000000	0.079680	0.000000	64.5	1.000000
Total		1.000000		0.807397		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.040 \wedge \text{Column (6)}$ .
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7) [Upward sum of Column (5)] / [upward sum of Column (3)] and adjusted forward in time to its respective payment year.

**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 4.24% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 4.24% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.979445	0.100769	0.5	0.814926
24	0.252795	0.149912	0.939595	0.140856	1.5	0.827365
36	0.374131	0.121336	0.901366	0.109368	2.5	0.826350
48	0.473567	0.099435	0.864693	0.085981	3.5	0.826304
60	0.557001	0.083435	0.829511	0.069210	4.5	0.827150
72	0.629420	0.072418	0.795761	0.057628	5.5	0.828296
84	0.688364	0.058944	0.763384	0.044997	6.5	0.828448
96	0.739068	0.050704	0.732325	0.037132	7.5	0.829760
108	0.781902	0.042834	0.702529	0.030092	8.5	0.830469
120	0.815798	0.033896	0.673945	0.022844	9.5	0.830983
132	0.843745	0.027947	0.646525	0.018069	10.5	0.833805
144	0.869705	0.025960	0.620220	0.016101	11.5	0.838183
156	0.892882	0.023177	0.594985	0.013790	12.5	0.840125
168	0.910916	0.018034	0.570777	0.010294	13.5	0.839697
180	0.928828	0.017911	0.547554	0.009807	14.5	0.841483
192	0.941593	0.012765	0.525276	0.006705	15.5	0.835587
204	0.953371	0.011778	0.503904	0.005935	16.5	0.833569
216	0.961993	0.008623	0.483402	0.004168	17.5	0.825100
228	0.969208	0.007215	0.463734	0.003346	18.5	0.818732
240	0.974092	0.004884	0.444866	0.002173	19.5	0.809184
252	0.978864	0.004772	0.426766	0.002037	20.5	0.806005
264	0.981814	0.002949	0.409403	0.001207	21.5	0.794532
276	0.984744	0.002930	0.392745	0.001151	22.5	0.793494
288	0.986770	0.002026	0.376766	0.000763	23.5	0.785804
300	0.988804	0.002034	0.361437	0.000735	24.5	0.784934
312	0.990428	0.001625	0.346731	0.000563	25.5	0.777504
324	0.991394	0.000966	0.332624	0.000321	26.5	0.771116
336	0.993001	0.001606	0.319090	0.000513	27.5	0.777034
348	0.993986	0.000986	0.306108	0.000302	28.5	0.756652
360	0.994641	0.000654	0.293653	0.000192	29.5	0.747170
372	0.995388	0.000747	0.281705	0.000211	30.5	0.746678
384	0.995813	0.000425	0.270244	0.000115	31.5	0.735557
396	0.996127	0.000314	0.259248	0.000081	32.5	0.738799
408	0.996456	0.000330	0.248700	0.000082	33.5	0.748055
420	0.996740	0.000284	0.238582	0.000068	34.5	0.755343
432	0.997008	0.000268	0.228875	0.000061	35.5	0.765196
444	0.997278	0.000270	0.219562	0.000059	36.5	0.775714
456	0.997543	0.000265	0.210629	0.000056	37.5	0.785401
468	0.997797	0.000254	0.202059	0.000051	38.5	0.794594
480	0.998036	0.000239	0.193838	0.000046	39.5	0.803637
492	0.998261	0.000225	0.185952	0.000042	40.5	0.812764
504	0.998472	0.000211	0.178386	0.000038	41.5	0.821963
516	0.998669	0.000197	0.171128	0.000034	42.5	0.831215
528	0.998851	0.000182	0.164165	0.000030	43.5	0.840496
540	0.999019	0.000168	0.157486	0.000026	44.5	0.849774
552	0.999173	0.000154	0.151078	0.000023	45.5	0.859012
564	0.999312	0.000139	0.144932	0.000020	46.5	0.868159
576	0.999437	0.000125	0.139035	0.000017	47.5	0.877153
588	0.999548	0.000111	0.133378	0.000015	48.5	0.885917
600	0.999645	0.000097	0.127951	0.000012	49.5	0.894328
612	0.999727	0.000083	0.122745	0.000010	50.5	0.902273
624	0.999796	0.000068	0.117751	0.000008	51.5	0.909689
636	0.999850	0.000054	0.112960	0.000006	52.5	0.916714
648	0.999891	0.000041	0.108364	0.000004	53.5	0.924127
660	0.999924	0.000033	0.103955	0.000003	54.5	0.933435
672	0.999949	0.000025	0.099726	0.000002	55.5	0.943424
684	0.999968	0.000019	0.095668	0.000002	56.5	0.954595
696	0.999982	0.000014	0.091776	0.000001	57.5	0.966565
708	0.999993	0.000010	0.088042	0.000001	58.5	0.979092
720	0.999998	0.000006	0.084460	0.000000	59.5	0.991155
732	1.000000	0.000002	0.081023	0.000000	60.5	1.000000
744	1.000000	0.000000	0.077727	0.000000	61.5	1.000000
756	1.000000	0.000000	0.074564	0.000000	62.5	1.000000
768	1.000000	0.000000	0.071531	0.000000	63.5	1.000000
780	1.000000	0.000000	0.068620	0.000000	64.5	1.000000
Total		1.000000		0.798176		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.042^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $\sum \text{Column (5)} / [\sum \text{Column (3)}]$  and adjusted forward in time to its respective payment year.

**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 4.50% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 4.50% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.978232	0.100644	0.5	0.806068
24	0.252795	0.149912	0.936107	0.140333	1.5	0.819100
36	0.374131	0.121336	0.895796	0.108692	2.5	0.818032
48	0.473567	0.099435	0.857221	0.085238	3.5	0.817978
60	0.557001	0.083435	0.820308	0.068442	4.5	0.818859
72	0.629420	0.072418	0.784983	0.056847	5.5	0.820056
84	0.688364	0.058944	0.751180	0.044278	6.5	0.820212
96	0.739068	0.050704	0.718833	0.036448	7.5	0.821586
108	0.781902	0.042834	0.687878	0.029465	8.5	0.822328
120	0.815798	0.033896	0.658257	0.022312	9.5	0.822868
132	0.843745	0.027947	0.629911	0.017604	10.5	0.825835
144	0.869705	0.025960	0.602785	0.015648	11.5	0.830445
156	0.892882	0.023177	0.576828	0.013369	12.5	0.832512
168	0.910916	0.018034	0.551989	0.009955	13.5	0.832106
180	0.928828	0.017911	0.528219	0.009461	14.5	0.834033
192	0.941593	0.012765	0.505472	0.006453	15.5	0.827917
204	0.953371	0.011778	0.483706	0.005697	16.5	0.825871
216	0.961993	0.008623	0.462876	0.003991	17.5	0.817073
228	0.969208	0.007215	0.442944	0.003196	18.5	0.810472
240	0.974092	0.004884	0.423870	0.002070	19.5	0.800538
252	0.978864	0.004772	0.405617	0.001936	20.5	0.797268
264	0.981814	0.002949	0.388150	0.001145	21.5	0.785313
276	0.984744	0.002930	0.371436	0.001088	22.5	0.784268
288	0.986770	0.002026	0.355441	0.000720	23.5	0.776262
300	0.988804	0.002034	0.340135	0.000692	24.5	0.775384
312	0.990428	0.001625	0.325488	0.000529	25.5	0.767641
324	0.991394	0.000966	0.311471	0.000301	26.5	0.760975
336	0.993001	0.001606	0.298059	0.000479	27.5	0.767175
348	0.993986	0.000986	0.285224	0.000281	28.5	0.745864
360	0.994641	0.000654	0.272941	0.000179	29.5	0.735904
372	0.995388	0.000747	0.261188	0.000195	30.5	0.735321
384	0.995813	0.000425	0.249941	0.000106	31.5	0.723591
396	0.996127	0.000314	0.239178	0.000075	32.5	0.726861
408	0.996456	0.000330	0.228878	0.000075	33.5	0.736425
420	0.996740	0.000284	0.219022	0.000062	34.5	0.743934
432	0.997008	0.000268	0.209591	0.000056	35.5	0.754137
444	0.997278	0.000270	0.200565	0.000054	36.5	0.765046
456	0.997543	0.000265	0.191928	0.000051	37.5	0.775096
468	0.997797	0.000254	0.183663	0.000047	38.5	0.784637
480	0.998036	0.000239	0.175755	0.000042	39.5	0.794028
492	0.998261	0.000225	0.168186	0.000038	40.5	0.803517
504	0.998472	0.000211	0.160944	0.000034	41.5	0.813090
516	0.998669	0.000197	0.154013	0.000030	42.5	0.822726
528	0.998851	0.000182	0.147381	0.000027	43.5	0.832401
540	0.999019	0.000168	0.141034	0.000024	44.5	0.842084
552	0.999173	0.000154	0.134961	0.000021	45.5	0.851732
564	0.999312	0.000139	0.129149	0.000018	46.5	0.861294
576	0.999437	0.000125	0.123588	0.000015	47.5	0.870704
588	0.999548	0.000111	0.118266	0.000013	48.5	0.879881
600	0.999645	0.000097	0.113173	0.000011	49.5	0.888694
612	0.999727	0.000083	0.108300	0.000009	50.5	0.897022
624	0.999796	0.000068	0.103636	0.000007	51.5	0.904798
636	0.999850	0.000054	0.099173	0.000005	52.5	0.912166
648	0.999891	0.000041	0.094903	0.000004	53.5	0.919945
660	0.999924	0.000033	0.090816	0.000003	54.5	0.929731
672	0.999949	0.000025	0.086905	0.000002	55.5	0.940245
684	0.999968	0.000019	0.083163	0.000002	56.5	0.952017
696	0.999982	0.000014	0.079582	0.000001	57.5	0.964647
708	0.999993	0.000010	0.076155	0.000001	58.5	0.977880
720	0.999998	0.000006	0.072875	0.000000	59.5	0.990639
732	1.000000	0.000002	0.069737	0.000000	60.5	1.000000
744	1.000000	0.000000	0.066734	0.000000	61.5	1.000000
756	1.000000	0.000000	0.063860	0.000000	62.5	1.000000
768	1.000000	0.000000	0.061110	0.000000	63.5	1.000000
780	1.000000	0.000000	0.058479	0.000000	64.5	1.000000
Total		1.000000		0.788522		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.045^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.



**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 5.00% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 5.00% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.975900	0.100404	0.5	0.789560
24	0.252795	0.149912	0.929429	0.139332	1.5	0.803697
36	0.374131	0.121336	0.885170	0.107403	2.5	0.802529
48	0.473567	0.099435	0.843019	0.083826	3.5	0.802457
60	0.557001	0.083435	0.802875	0.066988	4.5	0.803402
72	0.629420	0.072418	0.764643	0.055374	5.5	0.804693
84	0.688364	0.058944	0.728232	0.042925	6.5	0.804853
96	0.739068	0.050704	0.693554	0.035166	7.5	0.806339
108	0.781902	0.042834	0.660528	0.028293	8.5	0.807142
120	0.815798	0.033896	0.629074	0.021323	9.5	0.807729
132	0.843745	0.027947	0.599118	0.016744	10.5	0.810965
144	0.869705	0.025960	0.570589	0.014812	11.5	0.816012
156	0.892882	0.023177	0.543418	0.012595	12.5	0.818322
168	0.910916	0.018034	0.517541	0.009333	13.5	0.817964
180	0.928828	0.017911	0.492896	0.008828	14.5	0.820168
192	0.941593	0.012765	0.469425	0.005992	15.5	0.813657
204	0.953371	0.011778	0.447071	0.005266	16.5	0.811577
216	0.961993	0.008623	0.425782	0.003671	17.5	0.802182
228	0.969208	0.007215	0.405507	0.002926	18.5	0.795168
240	0.974092	0.004884	0.386197	0.001886	19.5	0.784535
252	0.978864	0.004772	0.367806	0.001755	20.5	0.781112
264	0.981814	0.002949	0.350292	0.001033	21.5	0.768275
276	0.984744	0.002930	0.333611	0.000978	22.5	0.767230
288	0.986770	0.002026	0.317725	0.000644	23.5	0.758649
300	0.988804	0.002034	0.302595	0.000615	24.5	0.757769
312	0.990428	0.001625	0.288186	0.000468	25.5	0.749459
324	0.991394	0.000966	0.274463	0.000265	26.5	0.742284
336	0.993001	0.001606	0.261393	0.000420	27.5	0.749018
348	0.993986	0.000986	0.248946	0.000245	28.5	0.725991
360	0.994641	0.000654	0.237091	0.000155	29.5	0.715139
372	0.995388	0.000747	0.225801	0.000169	30.5	0.714374
384	0.995813	0.000425	0.215049	0.000091	31.5	0.701496
396	0.996127	0.000314	0.204808	0.000064	32.5	0.704786
408	0.996456	0.000330	0.195056	0.000064	33.5	0.714890
420	0.996740	0.000284	0.185767	0.000053	34.5	0.722778
432	0.997008	0.000268	0.176921	0.000047	35.5	0.733599
444	0.997278	0.000270	0.168496	0.000046	36.5	0.745209
456	0.997543	0.000265	0.160473	0.000043	37.5	0.755908
468	0.997797	0.000254	0.152831	0.000039	38.5	0.766071
480	0.998036	0.000239	0.145554	0.000035	39.5	0.776089
492	0.998261	0.000225	0.138622	0.000031	40.5	0.786229
504	0.998472	0.000211	0.132021	0.000028	41.5	0.796476
516	0.998669	0.000197	0.125735	0.000025	42.5	0.806811
528	0.998851	0.000182	0.119747	0.000022	43.5	0.817207
540	0.999019	0.000168	0.114045	0.000019	44.5	0.827628
552	0.999173	0.000154	0.108614	0.000017	45.5	0.838031
564	0.999312	0.000139	0.103442	0.000014	46.5	0.848358
576	0.999437	0.000125	0.098516	0.000012	47.5	0.858538
588	0.999548	0.000111	0.093825	0.000010	48.5	0.868479
600	0.999645	0.000097	0.089357	0.000009	49.5	0.878038
612	0.999727	0.000083	0.085102	0.000007	50.5	0.887081
624	0.999796	0.000068	0.081050	0.000006	51.5	0.895527
636	0.999850	0.000054	0.077190	0.000004	52.5	0.903533
648	0.999891	0.000041	0.073514	0.000003	53.5	0.911997
660	0.999924	0.000033	0.070014	0.000002	54.5	0.922680
672	0.999949	0.000025	0.066680	0.000002	55.5	0.934182
684	0.999968	0.000019	0.063505	0.000001	56.5	0.947093
696	0.999982	0.000014	0.060480	0.000001	57.5	0.960978
708	0.999993	0.000010	0.057600	0.000001	58.5	0.975560
720	0.999998	0.000006	0.054858	0.000000	59.5	0.989648
732	1.000000	0.000002	0.052245	0.000000	60.5	1.000000
744	1.000000	0.000000	0.049757	0.000000	61.5	1.000000
756	1.000000	0.000000	0.047388	0.000000	62.5	1.000000
768	1.000000	0.000000	0.045131	0.000000	63.5	1.000000
780	1.000000	0.000000	0.042982	0.000000	64.5	1.000000
Total		1.000000		0.770531		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.050^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{Upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Accident Fund**  
**Factors to Discount Future Accident Year Losses to Present Value Basis**  
**Investment Yield 5.50% per Annum**

Months (1)	Accident Fund Loss Payment Pattern		Present Value Factor at 5.50% (4)	Present Value of Payment (5)	Payment Year t (6)	Discount Factor at Time t (7)
	Cumulative (2)	Incremental (3)				
12	0.102883	0.102883	0.973585	0.100166	0.5	0.773805
24	0.252795	0.149912	0.922829	0.138343	1.5	0.788997
36	0.374131	0.121336	0.874720	0.106135	2.5	0.787730
48	0.473567	0.099435	0.829118	0.082444	3.5	0.787640
60	0.557001	0.083435	0.785894	0.065571	4.5	0.788642
72	0.629420	0.072418	0.744923	0.053946	5.5	0.790021
84	0.688364	0.058944	0.706088	0.041620	6.5	0.790181
96	0.739068	0.050704	0.669278	0.033935	7.5	0.791772
108	0.781902	0.042834	0.634387	0.027174	8.5	0.792632
120	0.815798	0.033896	0.601314	0.020382	9.5	0.793260
132	0.843745	0.027947	0.569966	0.015929	10.5	0.796753
144	0.869705	0.025960	0.540252	0.014025	11.5	0.802223
156	0.892882	0.023177	0.512088	0.011869	12.5	0.804773
168	0.910916	0.018034	0.485391	0.008754	13.5	0.804471
180	0.928828	0.017911	0.460086	0.008241	14.5	0.806957
192	0.941593	0.012765	0.436101	0.005567	15.5	0.800087
204	0.953371	0.011778	0.413366	0.004869	16.5	0.797996
216	0.961993	0.008623	0.391816	0.003378	17.5	0.788055
228	0.969208	0.007215	0.371389	0.002679	18.5	0.780669
240	0.974092	0.004884	0.352028	0.001719	19.5	0.769390
252	0.978864	0.004772	0.333676	0.001592	20.5	0.765841
264	0.981814	0.002949	0.316280	0.000933	21.5	0.752186
276	0.984744	0.002930	0.299792	0.000878	22.5	0.751157
288	0.986770	0.002026	0.284163	0.000576	23.5	0.742048
300	0.988804	0.002034	0.269349	0.000548	24.5	0.741180
312	0.990428	0.001625	0.255307	0.000415	25.5	0.732348
324	0.991394	0.000966	0.241997	0.000234	26.5	0.724703
336	0.993001	0.001606	0.229381	0.000368	27.5	0.731954
348	0.993986	0.000986	0.217423	0.000214	28.5	0.707314
360	0.994641	0.000654	0.206088	0.000135	29.5	0.695611
372	0.995388	0.000747	0.195344	0.000146	30.5	0.694659
384	0.995813	0.000425	0.185160	0.000079	31.5	0.680666
396	0.996127	0.000314	0.175507	0.000055	32.5	0.683938
408	0.996456	0.000330	0.166358	0.000055	33.5	0.694516
420	0.996740	0.000284	0.157685	0.000045	34.5	0.702725
432	0.997008	0.000268	0.149464	0.000040	35.5	0.714096
444	0.997278	0.000270	0.141672	0.000038	36.5	0.726338
456	0.997543	0.000265	0.134287	0.000036	37.5	0.737622
468	0.997797	0.000254	0.127286	0.000032	38.5	0.748348
480	0.998036	0.000239	0.120650	0.000029	39.5	0.758933
492	0.998261	0.000225	0.114360	0.000026	40.5	0.769666
504	0.998472	0.000211	0.108398	0.000023	41.5	0.780533
516	0.998669	0.000197	0.102747	0.000020	42.5	0.791512
528	0.998851	0.000182	0.097391	0.000018	43.5	0.802575
540	0.999019	0.000168	0.092314	0.000016	44.5	0.813685
552	0.999173	0.000154	0.087501	0.000013	45.5	0.824794
564	0.999312	0.000139	0.082939	0.000012	46.5	0.835840
576	0.999437	0.000125	0.078615	0.000010	47.5	0.846745
588	0.999548	0.000111	0.074517	0.000008	48.5	0.857411
600	0.999645	0.000097	0.070632	0.000007	49.5	0.867679
612	0.999727	0.000083	0.066950	0.000006	50.5	0.877400
624	0.999796	0.000068	0.063460	0.000004	51.5	0.886486
636	0.999850	0.000054	0.060151	0.000003	52.5	0.895100
648	0.999891	0.000041	0.057016	0.000002	53.5	0.904218
660	0.999924	0.000033	0.054043	0.000002	54.5	0.915766
672	0.999949	0.000025	0.051226	0.000001	55.5	0.928225
684	0.999968	0.000019	0.048555	0.000001	56.5	0.942245
696	0.999982	0.000014	0.046024	0.000001	57.5	0.957357
708	0.999993	0.000010	0.043625	0.000000	58.5	0.973265
720	0.999998	0.000006	0.041350	0.000000	59.5	0.988667
732	1.000000	0.000002	0.039195	0.000000	60.5	1.000000
744	1.000000	0.000000	0.037151	0.000000	61.5	1.000000
756	1.000000	0.000000	0.035214	0.000000	62.5	1.000000
768	1.000000	0.000000	0.033379	0.000000	63.5	1.000000
780	1.000000	0.000000	0.031639	0.000000	64.5	1.000000
Total		1.000000		0.753365		

Notes:

- (2) Exhibit 4, Sheet 1b, Col (8).
- (3) Column (2) - prior Column (2).
- (4)  $1 / 1.055^t$  Column (6).
- (5) Column (3) x Column (4), assuming payments are distributed evenly during the year.
- (7)  $[\text{upward sum of Column (5)}] / [\text{upward sum of Column (3)}]$  and adjusted forward in time to its respective payment year.

**Undiscounted Ultimate Losses and Loss Ratios  
In Thousands**

Medical Aid Fund					
Accident Year	On Level Earned Premium	Selected Ultimate Losses	On Level Benefit Level Factor	On Level Ultimate Loss Ratio	% Distribution based on the On Level Earned Premiums
(1)	(2)	(3)	(4)	(5)	(6)
1996	\$457,637	\$440,648	1.000	96.3%	38.9%
1997	479,459	470,766	1.000	98.2%	38.9%
1998	493,487	492,763	1.000	99.9%	39.0%
1999	509,647	531,637	1.000	104.3%	38.8%
2000	520,580	585,345	1.000	112.4%	38.8%
2001	503,695	593,982	1.000	117.9%	38.9%
2002	496,217	598,966	1.000	120.7%	38.9%
2003	497,921	614,921	1.000	123.5%	39.0%
2004	524,864	667,628	1.000	127.2%	39.0%
2005	551,503	723,926	1.000	131.3%	38.9%
2006	568,261	793,081	1.000	139.6%	38.8%
2007	283,008	411,888	1.000	145.5%	38.8%
Total	\$5,886,279	\$6,925,551		117.7%	38.9%

Accident Fund					
Accident Year	On Level Earned Premium	Selected Ultimate Losses	On Level Benefit Level Factor	On Level Ultimate Loss Ratio	% Distribution based on the On Level Earned Premiums
(1)	(7)	(8)	(9)	(10)	(11)
1996	\$719,863	\$561,192	1.305	101.7%	61.1%
1997	753,115	602,764	1.268	101.5%	61.1%
1998	773,131	620,529	1.233	99.0%	61.0%
1999	803,086	694,349	1.178	101.9%	61.2%
2000	820,527	761,861	1.119	103.9%	61.2%
2001	792,786	782,668	1.080	106.6%	61.1%
2002	780,333	790,385	1.062	107.6%	61.1%
2003	780,013	772,921	1.054	104.5%	61.0%
2004	822,266	796,818	1.046	101.4%	61.0%
2005	865,248	835,924	1.032	99.7%	61.1%
2006	896,199	882,528	1.013	99.7%	61.2%
2007	447,047	446,339	1.000	99.8%	61.2%
Total	\$9,253,615	\$8,548,278		102.3%	61.1%

Notes:

- (2), (7) Provided by Washington Department of Labor & Industries.
- (3), (8) From Tillinghast's Reserve Study as of 6/30/2007.
- (9) From Exhibit 6, Sheet 1.
- (5) (3) x (4) / (2).
- (6) (2) / [(2) + (7)].
- (10) (8) x (9) / (7).
- (11) (7) / [(2) + (7)].



Estimate of Ultimate Claim Counts - Excluding Pensions

Accident Year	Medical Aid Fund Ultimate Claim Counts	Accident Fund Ultimate Claim Counts
(1)	(2)	(3)
1996	122,357	50,149
1997	125,282	50,718
1998	121,164	49,953
1999	118,018	49,864
2000	114,143	48,736
2001	103,156	46,493
2002	94,847	44,483
2003	88,777	43,813
2004	91,274	44,959
2005	92,003	46,182
2006	92,058	46,877
2007	44,149	22,998
Total	1,207,228	545,224

Notes:

(2), (3) From Tillinghast's Reserve Study as of 6/30/2007.

**Factors to Current Benefit Level  
Accident Fund**

Accident Year	Benefit Level Factor to 2008 Level		Ultimate Losses (000's)		Weighted Avg. Benefit Level Factor to 2008 Level
	Time Loss	PPD	Time Loss, Fatals & TPD	PPD	
(1)	(2)	(3)	(4)	(5)	(6)
1996	1.308	1.293	\$ 434,363	\$ 120,824	1.305
1997	1.271	1.257	476,802	119,439	1.268
1998	1.235	1.225	491,523	121,770	1.233
1999	1.173	1.204	566,337	120,021	1.178
2000	1.106	1.183	632,877	120,233	1.119
2001	1.067	1.150	654,919	118,787	1.080
2002	1.053	1.116	667,051	114,243	1.062
2003	1.048	1.093	651,110	112,495	1.054
2004	1.041	1.074	672,036	114,292	1.046
2005	1.029	1.048	704,439	119,953	1.032
2006	1.012	1.017	747,834	122,279	1.013
2007	1.000	1.000	379,500	60,346	1.000

Notes: (2) Exhibit 6, Sheet 2a, Item (18).

(3) Exhibit 6, Sheet 2b, Item (18).

(4),(5) From Tillinghast's Reserve Study as of 6/30/2007.

TPD = Total Permanent Disability, PPD = Permanent Partial Disability, including Hearing Loss.

(6) [Column (2) x Column (4) + Column (3) x Column (5)] / Sum of Columns (4) and (5).

**Workers' Compensation  
Calculation of Factors to Current Benefit Level  
Washington – Time Loss**

Date	Benefit Level Change	Cumulative Index	Weight for Experience Period												
			01/01/96	01/01/97	01/01/98	01/01/99	01/01/00	01/01/01	01/01/02	01/01/03	01/01/04	01/01/05	01/01/06	01/01/07	
			12/31/96	12/31/97	12/31/98	12/31/99	12/31/00	12/31/01	12/31/02	12/31/03	12/31/04	12/31/05	12/31/06	12/31/07	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
1/1/1996	Base	1.0000	49.73%	-	-	-	-	-	-	-	-	-	-	-	-
7/1/1996	1.0497	1.0497	50.27%	49.59%	-	-	-	-	-	-	-	-	-	-	-
7/1/1997	1.0097	1.0599	-	50.41%	49.59%	-	-	-	-	-	-	-	-	-	-
7/1/1998	1.0482	1.1110	-	-	50.41%	49.59%	-	-	-	-	-	-	-	-	-
7/1/1999	1.0578	1.1753	-	-	-	50.41%	49.73%	-	-	-	-	-	-	-	-
7/1/2000	1.0621	1.2483	-	-	-	-	50.27%	49.59%	-	-	-	-	-	-	-
7/1/2001	1.0134	1.2650	-	-	-	-	-	50.41%	49.59%	-	-	-	-	-	-
7/1/2002	1.0125	1.2808	-	-	-	-	-	-	50.41%	49.59%	-	-	-	-	-
7/1/2003	0.9984	1.2788	-	-	-	-	-	-	-	50.41%	49.73%	-	-	-	-
7/1/2004	1.0143	1.2970	-	-	-	-	-	-	-	-	50.27%	49.59%	-	-	-
7/1/2005	1.0086	1.3082	-	-	-	-	-	-	-	-	-	50.41%	49.59%	-	-
7/1/2006	1.0250	1.3409	-	-	-	-	-	-	-	-	-	-	50.41%	100.00%	-
1/1/2008			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
(16) On-Level Index		<b>1.3409</b>													
(17) Average Benefit Level			1.0250	1.0548	1.0856	1.1434	1.2120	1.2567	1.2729	1.2798	1.2879	1.3027	1.3247	1.3409	
(18) Factor to On-Level Date			<b>1.3083</b>	<b>1.2713</b>	<b>1.2352</b>	<b>1.1728</b>	<b>1.1064</b>	<b>1.0670</b>	<b>1.0534</b>	<b>1.0478</b>	<b>1.0411</b>	<b>1.0294</b>	<b>1.0122</b>	<b>1.0000</b>	

Notes: (2) Provided by Washington Department of Labor & Industries.  
 Data shown reflect changes to indemnity benefits only.  
 (16) Benefit level at on-level date of 1/1/2008.  
 (17) Average of (3), weighted by corresponding Column (4) through (15).  
 (18) = (16) / (17).

**Workers' Compensation  
Calculation of Factors to Current Benefit Level  
Washington – PPD**

Date	Benefit Level Change	Cumulative Index	Weight for Experience Period												
			01/01/96	01/01/97	01/01/98	01/01/99	01/01/00	01/01/01	01/01/02	01/01/03	01/01/04	01/01/05	01/01/06	01/01/07	
			12/31/96	12/31/97	12/31/98	12/31/99	12/31/00	12/31/01	12/31/02	12/31/03	12/31/04	12/31/05	12/31/06	12/31/07	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
1/1/1996	Base	1.0000	49.73%	-	-	-	-	-	-	-	-	-	-	-	-
7/1/1996	1.0288	1.0288	50.27%	49.59%	-	-	-	-	-	-	-	-	-	-	-
7/1/1997	1.0287	1.0584	-	50.41%	49.59%	-	-	-	-	-	-	-	-	-	-
7/1/1998	1.0227	1.0824	-	-	50.41%	49.59%	-	-	-	-	-	-	-	-	-
7/1/1999	1.0133	1.0968	-	-	-	50.41%	49.73%	-	-	-	-	-	-	-	-
7/1/2000	1.0219	1.1209	-	-	-	-	50.27%	49.59%	-	-	-	-	-	-	-
7/1/2001	1.0349	1.1600	-	-	-	-	-	50.41%	49.59%	-	-	-	-	-	-
7/1/2002	1.0272	1.1916	-	-	-	-	-	-	50.41%	49.59%	-	-	-	-	-
7/1/2003	1.0138	1.2081	-	-	-	-	-	-	-	50.41%	49.73%	-	-	-	-
7/1/2004	1.0222	1.2349	-	-	-	-	-	-	-	-	50.27%	49.59%	-	-	-
7/1/2005	1.0261	1.2672	-	-	-	-	-	-	-	-	-	50.41%	49.59%	-	-
7/1/2006	1.0352	1.3118	-	-	-	-	-	-	-	-	-	-	50.41%	100.00%	-
1/1/2008			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
(16) On-Level Index		<b>1.3118</b>													
(17) Average Benefit Level			1.0145	1.0437	1.0705	1.0897	1.1089	1.1406	1.1760	1.1999	1.2216	1.2512	1.2897	1.3118	
(18) Factor to On-Level Date			<b>1.2931</b>	<b>1.2568</b>	<b>1.2254</b>	<b>1.2038</b>	<b>1.1830</b>	<b>1.1501</b>	<b>1.1155</b>	<b>1.0932</b>	<b>1.0739</b>	<b>1.0485</b>	<b>1.0172</b>	<b>1.0000</b>	

Notes: (2) Provided by Washington Department of Labor & Industries.  
 Data shown reflect changes to indemnity benefits only.  
 (16) Benefit level at on-level date of 1/1/2008.  
 (17) Average of (3), weighted by corresponding Column (4) through (15).  
 (18) = (16) / (17).

Summary of Selected Trend Index to 2008

Accident Year	Trend Index to 2008									
	Claim Count		Severity		Pure Premium		Indicated Manual Loss Ratio		Final Selected Loss Ratio Trend	
	MAF	AF	MAF	AF	MAF	AF	MAF	AF	MAF	AF
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1996	0.657	0.883	2.952	1.460	1.940	1.289	1.555	0.995	1.555	0.995
1997	0.642	0.873	2.539	1.389	1.630	1.213	1.489	1.017	1.489	1.017
1998	0.664	0.886	2.227	1.310	1.478	1.161	1.424	1.005	1.424	1.005
1999	0.681	0.888	1.984	1.229	1.352	1.091	1.365	0.996	1.365	0.996
2000	0.705	0.909	1.788	1.195	1.260	1.086	1.310	0.979	1.310	0.979
2001	0.780	0.952	1.628	1.187	1.269	1.131	1.258	0.955	1.258	0.955
2002	0.848	0.995	1.494	1.169	1.267	1.164	1.213	0.953	1.213	0.953
2003	0.906	1.011	1.380	1.148	1.250	1.160	1.171	0.961	1.171	0.961
2004	0.881	0.985	1.283	1.143	1.131	1.126	1.135	1.000	1.135	1.000
2005	0.874	0.959	1.198	1.112	1.047	1.066	1.099	1.014	1.099	1.014
2006	0.874	0.945	1.124	1.066	0.982	1.007	1.065	1.023	1.065	1.023
2007	0.911	0.963	1.058	1.032	0.964	0.994	1.031	1.006	1.031	1.006
2008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Notes:

- (2) Exhibit 7, Sheet 2a, Column (9).
- (3) Exhibit 7, Sheet 2b, Column (9).
- (4) Selected based on Exhibit 7, Sheet 5, Column (11).
- (5) Selected based on Exhibit 7, Sheets 6 & 7, Column (11).
- (6) [Column (2) x Column (4)].
- (7) [Column (3) x Column (5)].
- (8) Selected based on Exhibit 7, Sheets 8 & 11, Column (11).
- (9) Selected based on Exhibit 7, Sheet 12, Column (11).
- (10) Selected judgmentally based on Column (6) and Column (8).
- (11) Selected judgmentally based on Column (7) and Column (9).

Summary of Selected Trend Factors

Accident Year	Claim Count Trend		Severity Trend		Indicated Pure Premium Trend		Indicated Loss Ratio Trend		Final Selected Loss Ratio Trend	
	Medical	Indemnity	Medical	Indemnity	Medical	Indemnity	Medical	Indemnity	Medical	Indemnity
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1996	2.4%	1.1%	16.3%	5.1%	19.0%	6.3%	4.4%	-2.2%	4.4%	-2.2%
1997	-3.3%	-1.5%	14.0%	6.0%	10.3%	4.4%	4.6%	1.2%	4.6%	1.2%
1998	-2.6%	-0.2%	12.2%	6.6%	9.3%	6.4%	4.3%	0.9%	4.3%	0.9%
1999	-3.3%	-2.3%	11.0%	2.8%	7.3%	0.5%	4.2%	1.7%	4.2%	1.7%
2000	-9.6%	-4.6%	9.8%	0.7%	-0.7%	-4.0%	4.1%	2.5%	4.1%	2.5%
2001	-8.1%	-4.3%	9.0%	1.5%	0.2%	-2.8%	3.7%	0.2%	3.7%	0.2%
2002	-6.4%	-1.5%	8.3%	1.8%	1.3%	0.3%	3.6%	-0.8%	3.6%	-0.8%
2003	2.8%	2.6%	7.6%	0.4%	10.6%	3.1%	3.2%	-3.9%	3.2%	-3.9%
2004	0.8%	2.7%	7.1%	2.8%	8.0%	5.6%	3.3%	-1.4%	3.3%	-1.4%
2005	0.1%	1.5%	6.6%	4.3%	6.6%	5.9%	3.2%	-0.9%	3.2%	-0.9%
2006	-4.1%	-1.9%	6.2%	3.3%	1.9%	1.4%	3.3%	1.7%	3.3%	1.7%
2007	-8.9%	-3.7%	5.8%	3.2%	-3.6%	-0.6%	3.1%	0.6%	3.1%	0.6%

Note: Derived from Exhibit 7, Sheet 1a as ratio of sequential trend indices, minus 1.0.

**Selection of Claim Count Trend Factors**  
**Medical Aid Fund - Claim Count Trend**

Accident Year	Trend to 2008		Selected Claim Frequency Trend	Estimated On Level Earned Premium (000's)	Claim Frequency	Developed Ultimate Reported Claim Counts	Indicated Annual Change	Selected Index to 2008
	Fitted Claim Frequency	Fitted Claim Frequency to Actual						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1996	0.495	0.493	0.495	\$ 457,637	0.267	122,357	2.4%	0.657
1997	0.507	0.504	0.507	479,459	0.261	125,282	-3.3%	0.642
1998	0.534	0.536	0.534	493,487	0.246	121,164	-2.6%	0.664
1999	0.563	0.569	0.563	509,647	0.232	118,018	-3.3%	0.681
2000	0.599	0.601	0.599	520,580	0.219	114,143	-9.6%	0.705
2001	0.649	0.643	0.649	503,695	0.205	103,156	-8.1%	0.780
2002	0.694	0.689	0.694	496,217	0.191	94,847	-6.4%	0.848
2003	0.733	0.739	0.733	497,921	0.178	88,777	2.8%	0.906
2004	0.748	0.757	0.748	524,864	0.174	91,274	0.8%	0.881
2005	0.784	0.789	0.784	551,503	0.167	92,003	0.1%	0.874
2006	0.830	0.813	0.830	568,261	0.162	92,058	-4.1%	0.874
2007	0.913	0.844	0.913	566,015	0.156	88,298	-8.9%	0.911
2008	1.000	1.000	1.000	570,200	0.141	80,427		1.000

Notes:

- (2) Exhibit 7, Sheet 3, Column (11).
- (3) Exhibit 7, Sheet 3, Column (13).
- (4) Judgmentally selected.
- (5) Exhibit 5, Sheet 1, Col (2). 2007 is annualized and 2008 is estimated based on an exponential fit.
- (6) (7) / (5) for 2007 and prior. 2008 selected judgmentally.
- (7) Exhibit 5, Sheet 2, Col (2). 2007 is annualized. 2008 = (5) x (6).
- (8) [Next Column (7) / Column (7)] - 1.0.
- (9) [Column (7) for 2008] / Column (7).

**Selection of Claim Count Trend Factors**  
**Accident Fund - Claim Count Trend**

Accident Year	Trend to 2008		Selected Claim Frequency Trend	Estimated On Level Earned Premium (000's)	Claim Frequency	Developed Ultimate Reported Claim Counts	Indicated Annual Change	Selected Index to 2008
	Fitted Claim Frequency	Fitted Claim Frequency to Actual						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1996	0.689	0.683	0.689	\$ 719,863	0.0697	50,149	1.1%	0.883
1997	0.706	0.707	0.706	753,115	0.0673	50,718	-1.5%	0.873
1998	0.735	0.736	0.735	773,131	0.0646	49,953	-0.2%	0.886
1999	0.762	0.766	0.762	803,086	0.0621	49,864	-2.3%	0.888
2000	0.795	0.801	0.795	820,527	0.0594	48,736	-4.6%	0.909
2001	0.821	0.811	0.821	792,786	0.0586	46,493	-4.3%	0.952
2002	0.831	0.835	0.831	780,333	0.0570	44,483	-1.5%	0.995
2003	0.848	0.847	0.848	780,013	0.0562	43,813	2.6%	1.011
2004	0.859	0.870	0.859	822,266	0.0547	44,959	2.7%	0.985
2005	0.890	0.892	0.890	865,248	0.0534	46,182	1.5%	0.959
2006	0.923	0.910	0.923	896,199	0.0523	46,877	-1.9%	0.945
2007	0.961	0.925	0.961	894,095	0.0514	45,996	-3.7%	0.963
2008	1.000	1.000	1.000	897,423	0.0493	44,282		1.000

Notes:

- (2) Exhibit 7, Sheet 4, Column (11).
- (3) Exhibit 7, Sheet 4, Column (13).
- (4) Judgmentally selected.
- (5) Exhibit 5, Sheet 1, Col (7). 2007 is annualized and 2008 is estimated based on an exponential fit.
- (6) (7) / (5) for 2007 and prior. 2008 selected judgmentally.
- (7) Exhibit 5, Sheet 2, Col (3). 2007 is annualized. 2008 = (5) x (6).
- (8) [Next Column (7) / Column (7)] - 1.0.
- (9) [Column (7) for 2008] / Column (7).

**Regression Analysis  
Medical Aid Count**

Accident Year	On Level Ultimate Frequency	Benefit Level Factor	Adjusted Frequency	Independent Variables:				Fitted Frequency	Fitted Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				Unemp Rate	Change in EMP	Time	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	0.267	1.000	0.267	0.059	0.041	1.000	-	0.266	-2.5%	0.495	-5.7%	0.493	-5.7%
1997	0.261	1.000	0.261	0.049	0.041	2.000	-	0.260	-5.0%	0.507	-6.0%	0.504	-6.0%
1998	0.246	1.000	0.246	0.048	0.023	3.000	-	0.247	-5.1%	0.534	-6.1%	0.536	-6.0%
1999	0.232	1.000	0.232	0.048	0.011	4.000	-	0.234	-6.1%	0.563	-6.2%	0.569	-6.1%
2000	0.219	1.000	0.219	0.050	(0.006)	5.000	-	0.220	-7.7%	0.599	-6.2%	0.601	-6.2%
2001	0.205	1.000	0.205	0.062	(0.012)	6.000	-	0.203	-6.5%	0.649	-6.0%	0.643	-6.1%
2002	0.191	1.000	0.191	0.073	0.005	7.000	-	0.190	-5.3%	0.694	-5.9%	0.689	-6.0%
2003	0.178	1.000	0.178	0.074	0.014	8.000	-	0.180	-2.0%	0.733	-6.0%	0.739	-5.9%
2004	0.174	1.000	0.174	0.063	0.032	9.000	-	0.176	-4.6%	0.748	-7.0%	0.757	-6.7%
2005	0.167	1.000	0.167	0.055	0.027	10.000	-	0.168	-5.6%	0.784	-7.8%	0.789	-7.6%
2006	0.162	1.000	0.162	0.050	0.023	11.000	-	0.159	-9.2%	0.830	-8.9%	0.813	-9.8%
2007	0.156	1.000	0.156	0.056	0.015	12.000	-	0.144	-8.7%	0.913	-8.7%	0.844	-15.6%
2008				0.058	0.010	13.000	-	0.132		1.000		1.000	
Average, 1996-2007			0.209	0.057	0.018	6.000	-						
Regression Coefficients				(0.433)	0.142	(0.011)	-						
Intercept:				0.297									
R Squared:				0.998									

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



**Regression Analysis  
Accident Fund Count**

Accident Year	On Level Ultimate Frequency	Benefit Level Factor	Adjusted Frequency	Independent Variables:				Fitted Frequency	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008	
				Unemp Rate	Change in EMP	Time	(8)							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1996	0.070	1.000	0.070	0.059	0.041	1.000	-	0.069	-2.5%	0.689	-3.1%	0.683	-3.1%	
1997	0.067	1.000	0.067	0.049	0.041	2.000	-	0.067	-3.9%	0.706	-3.1%	0.707	-3.1%	
1998	0.065	1.000	0.065	0.048	0.023	3.000	-	0.065	-3.6%	0.735	-3.0%	0.736	-3.0%	
1999	0.062	1.000	0.062	0.048	0.011	4.000	-	0.062	-4.1%	0.762	-3.0%	0.766	-2.9%	
2000	0.059	1.000	0.059	0.050	(0.006)	5.000	-	0.060	-3.2%	0.795	-2.8%	0.801	-2.7%	
2001	0.059	1.000	0.059	0.062	(0.012)	6.000	-	0.058	-1.2%	0.821	-2.8%	0.811	-2.9%	
2002	0.057	1.000	0.057	0.073	0.005	7.000	-	0.057	-2.0%	0.831	-3.0%	0.835	-3.0%	
2003	0.056	1.000	0.056	0.074	0.014	8.000	-	0.056	-1.3%	0.848	-3.2%	0.847	-3.3%	
2004	0.055	1.000	0.055	0.063	0.032	9.000	-	0.055	-3.5%	0.859	-3.7%	0.870	-3.4%	
2005	0.053	1.000	0.053	0.055	0.027	10.000	-	0.053	-3.6%	0.890	-3.8%	0.892	-3.8%	
2006	0.052	1.000	0.052	0.050	0.023	11.000	-	0.052	-4.0%	0.923	-3.9%	0.910	-4.6%	
2007	0.051	1.000	0.051	0.056	0.015	12.000	-	0.050	-3.9%	0.961	-3.9%	0.925	-7.5%	
2008				0.058	0.010	13.000	-	0.048		1.000		1.000		
Average, 1996-2007			0.060	0.057	0.018	6.000	-							
Regression Coefficients				0.005	0.055	(0.002)	-							
Intercept:				0.068										
R Squared:				0.993										

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



**Regression Analysis  
Medical Aid Severity**

Accident Year	On Level Ultimate Severity	Benefit Level Factor	Adjusted Severity	Independent Variables:				Fitted Severity	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				Time	(6)	(7)	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	3.601	1.000	3.601	1.000	-	-	-	3.201	16.3%	2.952	9.4%	2.624	8.4%
1997	3.758	1.000	3.758	2.000	-	-	-	3.722	14.0%	2.539	8.8%	2.515	8.7%
1998	4.067	1.000	4.067	3.000	-	-	-	4.243	12.3%	2.227	8.3%	2.324	8.8%
1999	4.505	1.000	4.505	4.000	-	-	-	4.764	10.9%	1.984	7.9%	2.098	8.6%
2000	5.128	1.000	5.128	5.000	-	-	-	5.284	9.9%	1.788	7.5%	1.843	7.9%
2001	5.758	1.000	5.758	6.000	-	-	-	5.805	9.0%	1.628	7.2%	1.641	7.3%
2002	6.315	1.000	6.315	7.000	-	-	-	6.326	8.2%	1.494	6.9%	1.497	6.9%
2003	6.927	1.000	6.927	8.000	-	-	-	6.847	7.6%	1.380	6.7%	1.364	6.4%
2004	7.315	1.000	7.315	9.000	-	-	-	7.367	7.1%	1.283	6.4%	1.292	6.6%
2005	7.869	1.000	7.869	10.000	-	-	-	7.888	6.6%	1.198	6.2%	1.201	6.3%
2006	8.615	1.000	8.615	11.000	-	-	-	8.409	6.2%	1.124	6.0%	1.097	4.7%
2007	9.329	1.000	9.329	12.000	-	-	-	8.930	5.8%	1.058	5.8%	1.013	1.3%
2008				13.000	-	-	-	9.451		1.000		1.000	
Average, 1996-2007			5.805	6.000	-	-	-						
		Regression Coefficients		0.521	-	-	-						
		Intercept:		2.680									
		R Squared:		0.989									

Notes:

- (2) Based on Exhibit 7, Sheet 14. Ultimate severity in \$000's.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



**Regression Analysis  
Accident Fund Severity**

Accident Year	On Level Ultimate Severity	Benefit Level Factor	Adjusted Severity	Independent Variables:				Fitted Severity	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				SAAW (000's)	(6)	(7)	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	14.603	1.000	14.603	28.594	-	-	-	14.386	5.0%	1.461	3.2%	1.439	3.1%
1997	15.074	1.000	15.074	30.479	-	-	-	15.102	6.0%	1.392	3.0%	1.394	3.1%
1998	15.320	1.000	15.320	32.862	-	-	-	16.006	6.5%	1.313	2.8%	1.372	3.2%
1999	16.406	1.000	16.406	35.610	-	-	-	17.049	2.8%	1.233	2.4%	1.281	2.8%
2000	17.487	1.000	17.487	36.889	-	-	-	17.534	0.7%	1.198	2.3%	1.202	2.3%
2001	18.177	1.000	18.177	37.229	-	-	-	17.663	1.5%	1.190	2.5%	1.156	2.1%
2002	18.879	1.000	18.879	37.940	-	-	-	17.933	1.8%	1.172	2.7%	1.113	1.8%
2003	18.603	1.000	18.603	38.794	-	-	-	18.257	0.5%	1.151	2.9%	1.130	2.5%
2004	18.537	1.000	18.537	39.038	-	-	-	18.350	2.8%	1.145	3.4%	1.134	3.2%
2005	18.683	1.000	18.683	40.385	-	-	-	18.861	4.4%	1.114	3.7%	1.125	4.0%
2006	19.070	1.000	19.070	42.584	-	-	-	19.696	3.3%	1.067	3.3%	1.102	5.0%
2007	19.408	1.000	19.408	44.287	-	-	-	20.342	3.3%	1.033	3.3%	1.083	8.3%
2008				46.059	-	-	-	21.015		1.000		1.000	
Average, 1996-2007			17.349	36.400	-	-	-						
Regression Coefficients				0.380	-	-	-						
Intercept:				3.534									
R Squared:				0.906									

Notes:

- (2) Based on Exhibit 7, Sheet 14. Ultimate severity in \$000's.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



Regression Analysis  
Accident Fund Severity

Accident Year	On Level Ultimate Severity	Benefit Level Factor	Ln Adjusted Severity	Independent Variables:				Fitted Severity	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				Ln SAAW	(6)	(7)	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	14.603	1.000	2.681	3.353	-	-	-	14.340	5.2%	1.459	3.2%	1.432	3.0%
1997	15.074	1.000	2.713	3.417	-	-	-	15.083	6.1%	1.387	3.0%	1.388	3.0%
1998	15.320	1.000	2.729	3.492	-	-	-	16.010	6.6%	1.307	2.7%	1.365	3.2%
1999	16.406	1.000	2.798	3.573	-	-	-	17.061	2.8%	1.226	2.3%	1.275	2.7%
2000	17.487	1.000	2.861	3.608	-	-	-	17.545	0.7%	1.192	2.2%	1.196	2.3%
2001	18.177	1.000	2.900	3.617	-	-	-	17.673	1.5%	1.184	2.4%	1.151	2.0%
2002	18.879	1.000	2.938	3.636	-	-	-	17.939	1.8%	1.166	2.6%	1.108	1.7%
2003	18.603	1.000	2.923	3.658	-	-	-	18.258	0.5%	1.146	2.8%	1.124	2.4%
2004	18.537	1.000	2.920	3.665	-	-	-	18.349	2.7%	1.140	3.3%	1.128	3.1%
2005	18.683	1.000	2.928	3.698	-	-	-	18.849	4.3%	1.110	3.5%	1.120	3.8%
2006	19.070	1.000	2.948	3.751	-	-	-	19.657	3.2%	1.064	3.2%	1.097	4.7%
2007	19.408	1.000	2.966	3.791	-	-	-	20.277	3.2%	1.032	3.2%	1.078	7.8%
2008				3.830	-	-	-	20.917		1.000		1.000	
Average, 1996-2007			2.849	3.588	-	-	-						
Regression Coefficients				0.792	-	-	-						
Intercept:				0.007									
R Squared:				0.914									

Notes:

- (2) Based on Exhibit 7, Sheet 14. Ultimate severity in \$000's.
- (4) LN [ (2) x (3) ].
- (5) to (8) Selected variables based on judgment.
- (9)  $e^{\text{[Sum of (5) to (8) multiplied by their respective coefficient plus the intercept]}}$ .
- (10) Next (9) / (9) - 1.0.
- (11)  $[1.0 + (10)] \times \text{next (11)}$ .
- (12)  $(11)^{[1.0 / (\text{number of years to 2008})]} - 1.0$ .
- (13) (11) for 2008 / EXP (4).
- (14)  $(13)^{[1.0 / (\text{number of years to 2008})]} - 1.0$ .



Regression Analysis  
Medical Aid Loss Ratio

Accident Year	On Level Ultimate Loss Ratio	Benefit Level Factor	Adjusted Loss Ratio	Independent Variables:				Fitted Loss Ratio	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008	
				Unemp Rate	Change in EMP	Time								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1996	0.963	1.000	0.963	0.059	0.041	1.000	-	0.937	4.2%	1.556	3.8%	1.514	3.5%	
1997	0.982	1.000	0.982	0.049	0.041	2.000	-	0.976	4.7%	1.493	3.7%	1.485	3.7%	
1998	0.999	1.000	0.999	0.048	0.023	3.000	-	1.023	4.4%	1.425	3.6%	1.460	3.9%	
1999	1.043	1.000	1.043	0.048	0.011	4.000	-	1.068	4.4%	1.365	3.5%	1.397	3.8%	
2000	1.124	1.000	1.124	0.050	(0.006)	5.000	-	1.115	4.3%	1.307	3.4%	1.296	3.3%	
2001	1.179	1.000	1.179	0.062	(0.012)	6.000	-	1.163	3.7%	1.253	3.3%	1.236	3.1%	
2002	1.207	1.000	1.207	0.073	0.005	7.000	-	1.207	3.4%	1.208	3.2%	1.208	3.2%	
2003	1.235	1.000	1.235	0.074	0.014	8.000	-	1.248	2.8%	1.168	3.2%	1.180	3.4%	
2004	1.272	1.000	1.272	0.063	0.032	9.000	-	1.283	3.2%	1.136	3.2%	1.146	3.5%	
2005	1.313	1.000	1.313	0.055	0.027	10.000	-	1.325	3.2%	1.101	3.2%	1.111	3.6%	
2006	1.396	1.000	1.396	0.050	0.023	11.000	-	1.367	3.4%	1.067	3.3%	1.045	2.2%	
2007	1.455	1.000	1.455	0.056	0.015	12.000	-	1.413	3.2%	1.032	3.2%	1.002	0.2%	
2008				0.058	0.010	13.000	-	1.458		1.000		1.000		
Average, 1996-2007			1.156	0.057	0.018	6.000	-							
Regression Coefficients				0.346	(0.206)	0.043	-							
Intercept:				0.882										
R Squared:				0.983										

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.

**Regression Analysis  
Medical Aid Loss Ratio**

Accident Year	On Level Ultimate Loss Ratio	Benefit Level Factor	Adjusted Loss Ratio	Independent Variables:				Fitted Loss Ratio	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				Adj AF Loss Ratio	(6)	(7)	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	0.963	1.000	0.963	1.017	-	-	-	1.154	0.0%	0.996	0.0%	1.194	1.5%
1997	0.982	1.000	0.982	1.015	-	-	-	1.153	-0.5%	0.997	0.0%	1.171	1.4%
1998	0.999	1.000	0.999	0.990	-	-	-	1.147	0.6%	1.002	0.0%	1.151	1.4%
1999	1.043	1.000	1.043	1.019	-	-	-	1.154	0.4%	0.996	0.0%	1.102	1.1%
2000	1.124	1.000	1.124	1.039	-	-	-	1.159	0.6%	0.992	-0.1%	1.022	0.3%
2001	1.179	1.000	1.179	1.066	-	-	-	1.165	0.2%	0.986	-0.2%	0.975	-0.4%
2002	1.207	1.000	1.207	1.076	-	-	-	1.168	-0.6%	0.984	-0.3%	0.952	-0.8%
2003	1.235	1.000	1.235	1.045	-	-	-	1.160	-0.6%	0.991	-0.2%	0.931	-1.4%
2004	1.272	1.000	1.272	1.014	-	-	-	1.153	-0.3%	0.997	-0.1%	0.904	-2.5%
2005	1.313	1.000	1.313	0.997	-	-	-	1.149	0.0%	1.000	0.0%	0.876	-4.3%
2006	1.396	1.000	1.396	0.997	-	-	-	1.149	0.0%	1.000	0.0%	0.824	-9.2%
2007	1.455	1.000	1.455	0.998	-	-	-	1.149	0.0%	1.000	0.0%	0.790	-21.0%
2008				0.998	-	-	-	1.149		1.000		1.000	
Average, 1996-2007			1.156	1.025	-	-	-						
Regression Coefficients				0.235	-	-	-						
Intercept:				0.915									
R Squared:				0.002									

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



**Regression Analysis  
Medical Aid Loss Ratio**

Accident Year	On Level Ultimate Loss Ratio	Benefit Level Factor	Ln Adjusted Loss Ratio	Independent Variables:				Fitted Loss Ratio	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008	
				Ln Adj. AF LR	(6)	(7)	(8)							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1996	0.963	1.000	(0.038)	0.017	-	-	-	1.144	-0.1%	0.993	-0.1%	1.180	1.4%	
1997	0.982	1.000	(0.018)	0.015	-	-	-	1.143	-0.9%	0.994	-0.1%	1.157	1.3%	
1998	0.999	1.000	(0.001)	(0.010)	-	-	-	1.133	1.1%	1.003	0.0%	1.138	1.3%	
1999	1.043	1.000	0.042	0.019	-	-	-	1.145	0.7%	0.993	-0.1%	1.089	1.0%	
2000	1.124	1.000	0.117	0.038	-	-	-	1.153	1.0%	0.986	-0.2%	1.011	0.1%	
2001	1.179	1.000	0.165	0.064	-	-	-	1.164	0.4%	0.976	-0.3%	0.964	-0.5%	
2002	1.207	1.000	0.188	0.073	-	-	-	1.168	-1.1%	0.973	-0.5%	0.941	-1.0%	
2003	1.235	1.000	0.211	0.044	-	-	-	1.156	-1.1%	0.983	-0.3%	0.920	-1.6%	
2004	1.272	1.000	0.241	0.013	-	-	-	1.143	-0.6%	0.994	-0.1%	0.893	-2.8%	
2005	1.313	1.000	0.272	(0.003)	-	-	-	1.136	0.0%	1.000	0.0%	0.866	-4.7%	
2006	1.396	1.000	0.333	(0.003)	-	-	-	1.136	0.0%	1.000	0.0%	0.814	-9.8%	
2007	1.455	1.000	0.375	(0.002)	-	-	-	1.136	0.0%	1.000	0.0%	0.781	-21.9%	
2008				(0.002)	-	-	-	1.136		1.000		1.000		
Average, 1996-2007				0.137	0.024	-	-	-						
				Regression Coefficients	0.369	-	-	-						
				Intercept:	0.128									
				R Squared:	0.006									

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) LN [ (2) x (3) ].
- (5) to (8) Selected variables based on judgment.
- (9)  $e^{\text{[Sum of (5) to (8) multiplied by their respective coefficient plus the intercept]}}$ .
- (10) Next (9) / (9) - 1.0.
- (11)  $[1.0 + (10)] \times \text{next (11)}$ .
- (12)  $(11)^{1.0 / (\text{number of years to 2008})} - 1.0$ .
- (13) (11) for 2008 / EXP (4).
- (14)  $(13)^{1.0 / (\text{number of years to 2008})} - 1.0$ .



**Regression Analysis  
Medical Aid Loss Ratio**

Accident Year	On Level Ultimate Loss Ratio	Benefit Level Factor	Adjusted Loss Ratio	Independent Variables:				Fitted Loss Ratio	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				Time	(6)	(7)	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	0.963	1.000	0.963	1.000	-	-	-	0.939	4.6%	1.555	3.7%	1.516	3.5%
1997	0.982	1.000	0.982	2.000	-	-	-	0.982	4.4%	1.486	3.7%	1.486	3.7%
1998	0.999	1.000	0.999	3.000	-	-	-	1.025	4.2%	1.423	3.6%	1.462	3.9%
1999	1.043	1.000	1.043	4.000	-	-	-	1.069	4.1%	1.365	3.5%	1.399	3.8%
2000	1.124	1.000	1.124	5.000	-	-	-	1.112	3.9%	1.312	3.5%	1.298	3.3%
2001	1.179	1.000	1.179	6.000	-	-	-	1.156	3.8%	1.263	3.4%	1.238	3.1%
2002	1.207	1.000	1.207	7.000	-	-	-	1.199	3.6%	1.217	3.3%	1.209	3.2%
2003	1.235	1.000	1.235	8.000	-	-	-	1.242	3.5%	1.175	3.3%	1.182	3.4%
2004	1.272	1.000	1.272	9.000	-	-	-	1.286	3.4%	1.135	3.2%	1.147	3.5%
2005	1.313	1.000	1.313	10.000	-	-	-	1.329	3.3%	1.098	3.2%	1.112	3.6%
2006	1.396	1.000	1.396	11.000	-	-	-	1.373	3.2%	1.063	3.1%	1.046	2.3%
2007	1.455	1.000	1.455	12.000	-	-	-	1.416	3.1%	1.031	3.1%	1.003	0.3%
2008				13.000	-	-	-	1.459		1.000		1.000	
Average, 1996-2007			1.156	6.000	-	-	-						
Regression Coefficients				0.043	-	-	-						
Intercept:				0.895									
R Squared:				0.982									

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.

**Regression Analysis  
Accident Fund Loss Ratio**

Accident Year	On Level Ultimate Loss Ratio	Benefit Level Factor	Adjusted Loss Ratio	Independent Variables:				Fitted Loss Ratio	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008	
				Unemp Rate	Change in EMP	Time	(8)							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1996	1.017	1.000	1.017	0.059	0.041	1.000	-	1.020	-2.2%	0.995	0.0%	0.998	0.0%	
1997	1.015	1.000	1.015	0.049	0.041	2.000	-	0.998	1.3%	1.017	0.2%	1.000	0.0%	
1998	0.990	1.000	0.990	0.048	0.023	3.000	-	1.010	0.9%	1.005	0.0%	1.025	0.2%	
1999	1.019	1.000	1.019	0.048	0.011	4.000	-	1.019	1.7%	0.996	0.0%	0.996	0.0%	
2000	1.039	1.000	1.039	0.050	(0.006)	5.000	-	1.037	2.5%	0.979	-0.3%	0.977	-0.3%	
2001	1.066	1.000	1.066	0.062	(0.012)	6.000	-	1.063	0.2%	0.955	-0.7%	0.952	-0.7%	
2002	1.076	1.000	1.076	0.073	0.005	7.000	-	1.065	-0.9%	0.953	-0.8%	0.943	-1.0%	
2003	1.045	1.000	1.045	0.074	0.014	8.000	-	1.056	-3.9%	0.961	-0.8%	0.971	-0.6%	
2004	1.014	1.000	1.014	0.063	0.032	9.000	-	1.014	-1.4%	1.000	0.0%	1.001	0.0%	
2005	0.997	1.000	0.997	0.055	0.027	10.000	-	1.001	-0.8%	1.014	0.5%	1.018	0.6%	
2006	0.997	1.000	0.997	0.050	0.023	11.000	-	0.992	1.6%	1.023	1.1%	1.017	0.9%	
2007	0.998	1.000	0.998	0.056	0.015	12.000	-	1.009	0.6%	1.006	0.6%	1.016	1.6%	
2008				0.058	0.010	13.000	-	1.015		1.000		1.000		
Average, 1996-2007			1.025	0.057	0.018	6.000	-							
Regression Coefficients				1.935	(0.968)	(0.003)	-							
Intercept:				0.948										
R Squared:				0.873										

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



**Regression Analysis  
Accident Fund Loss Ratio**

Accident Year	On Level Ultimate Loss Ratio	Benefit Level Factor	Adjusted Loss Ratio	Independent Variables:				Fitted Loss Ratio	Trend	Fitted Trend to 2008	Annualized Fitted Trend to 2008	Fitted to Actual Trend to 2008	Annualized Fitted to Actual Trend to 2008
				Time	(6)	(7)	(8)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1996	1.017	1.000	1.017	1.000	-	-	-	1.025	0.0%	0.999	0.0%	1.007	0.1%
1997	1.015	1.000	1.015	2.000	-	-	-	1.025	0.0%	0.999	0.0%	1.009	0.1%
1998	0.990	1.000	0.990	3.000	-	-	-	1.025	0.0%	0.999	0.0%	1.035	0.3%
1999	1.019	1.000	1.019	4.000	-	-	-	1.025	0.0%	0.999	0.0%	1.006	0.1%
2000	1.039	1.000	1.039	5.000	-	-	-	1.025	0.0%	0.999	0.0%	0.986	-0.2%
2001	1.066	1.000	1.066	6.000	-	-	-	1.025	0.0%	0.999	0.0%	0.961	-0.6%
2002	1.076	1.000	1.076	7.000	-	-	-	1.025	0.0%	0.999	0.0%	0.952	-0.8%
2003	1.045	1.000	1.045	8.000	-	-	-	1.025	0.0%	1.000	0.0%	0.980	-0.4%
2004	1.014	1.000	1.014	9.000	-	-	-	1.025	0.0%	1.000	0.0%	1.011	0.3%
2005	0.997	1.000	0.997	10.000	-	-	-	1.025	0.0%	1.000	0.0%	1.027	0.9%
2006	0.997	1.000	0.997	11.000	-	-	-	1.025	0.0%	1.000	0.0%	1.027	1.3%
2007	0.998	1.000	0.998	12.000	-	-	-	1.024	0.0%	1.000	0.0%	1.026	2.6%
2008				13.000	-	-	-	1.024		1.000		1.000	
Average, 1996-2007			1.025	6.000	-	-	-						
Regression Coefficients				(0.000)	-	-	-						
Intercept:				1.026									
R Squared:				0.000									

Notes:

- (2) Based on Exhibit 7, Sheet 14.
- (4) (2) x (3).
- (5) to (8) Selected variables based on judgment.
- (9) Sum of (5) to (8) multiplied by their respective coefficient plus the intercept.

- (10) Next (9) / (9) - 1.0.
- (11) [1.0 + (10)] x next (11).
- (12) (11) ^ [1.0 / (number of years to 2008)] - 1.0.
- (13) (9) for 2008 / (4).
- (14) (13) ^ [1.0 / (number of years to 2008)] - 1.0.



Regression Analysis  
Derivation of Dependent Variables

<u>Accident Year</u> (1)	<u>Medical Aid Fund On Level Loss Ratio</u> (2)	<u>Accident Fund On Level Loss Ratio</u> (3)	<u>Medical Aid Fund On Level Severity</u> (4)	<u>Accident Fund On Level Severity</u> (5)	<u>Medical Aid Fund On Level Frequency</u> (6)	<u>Accident Fund On Level Frequency</u> (7)
1996	96.3%	101.7%	3.601	14.603	0.267	0.070
1997	98.2%	101.5%	3.758	15.074	0.261	0.067
1998	99.9%	99.0%	4.067	15.320	0.246	0.065
1999	104.3%	101.9%	4.505	16.406	0.232	0.062
2000	112.4%	103.9%	5.128	17.487	0.219	0.059
2001	117.9%	106.6%	5.758	18.177	0.205	0.059
2002	120.7%	107.6%	6.315	18.879	0.191	0.057
2003	123.5%	104.5%	6.927	18.603	0.178	0.056
2004	127.2%	101.4%	7.315	18.537	0.174	0.055
2005	131.3%	99.7%	7.869	18.683	0.167	0.053
2006	139.6%	99.7%	8.615	19.070	0.162	0.052
2007	145.5%	99.8%	9.329	19.408	0.156	0.051

Notes:

- (2) Exhibit 5, Sheet 1, Col (5).
- (3) Exhibit 5, Sheet 1, Col (9).
- (4) Exhibit 5, Sheet 1, Col (3) x Exhibit 5, Sheet 1, Col (4) / Exhibit 5, Sheet 2, Col (2), per thousand.
- (5) Exhibit 5, Sheet 1, Col (7) x Exhibit 5, Sheet 1, Col (8) / Exhibit 5, Sheet 2, Col (3), per thousand.
- (6) Exhibit 5, Sheet 2, Col (2) / Exhibit 5, Sheet 1, Col (2).
- (7) Exhibit 5, Sheet 2, Col (3) / Exhibit 5, Sheet 1, Col (6).

**Regression Analysis**  
**Derivation of Independent Variables**

<u>Accident Year</u> (1)	<u>Unemp Rate</u> (2)	<u>Change in EMP</u> (3)	<u>Change in Med. Cost per LTC</u> (4)	<u>State Annual Avg. Wage (000's)</u> (5)	<u>On Level Acc Fund Loss Ratio</u> (6)
1996	5.9%	4.1%	7.4%	28.594	1.017
1997	4.9%	4.1%	10.1%	30.479	1.015
1998	4.8%	2.3%	8.3%	32.862	0.990
1999	4.8%	1.1%	10.6%	35.610	1.019
2000	5.0%	-0.6%	8.2%	36.889	1.039
2001	6.2%	-1.2%	14.0%	37.229	1.066
2002	7.3%	0.5%	7.4%	37.940	1.076
2003	7.4%	1.4%	9.0%	38.794	1.045
2004	6.3%	3.2%	6.8%	39.038	1.014
2005	5.5%	2.7%	11.7%	40.385	0.997
2006	5.0%	2.3%	7.5%	42.584	0.997
2007	5.6%	1.5%	8.5%	44.287	0.998

Notes:

- (2), (3) Based on data compiled by the U.S. Department of Labor, Bureau of Labor Statistics for the state of Washington.
- (4) Based on Tillinghast's analysis of industry data. Details available upon request.
- (5) Based on data compiled by Washington Department of Labor & Industries. Projections selected by Tillinghast.
- (6) Exhibit 5, Sheet 1, Col (9).