Commonwealth of Massachusetts

Actuarial Estimate of Outstanding Liability

As of June 30, 2009

August 2009

Aon Global Risk Consulting
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Boston, MA 02110

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

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I. Introduction

I.1. Purpose

Aon Global Risk Consulting ("AGRC") has conducted an actuarial review of the GAAP outstanding loss reserves of the Commonwealth of Massachusetts' ("Commonwealth") self-insured Workers Compensation program.

I.2. Scope

The specific scope of this study is to prepare an independent estimate of the required workers compensation reserves as of June 30, 2009, separately for seven clusters of agencies:

1. The Department of Mental Retardation ("DMR")
2. The Department of Mental Health ("DMH")
3. The Department of Corrections ("DOC")
4. UMass – Amherst
5. UMass – Medical School
6. All Other Colleges and Universities
7. All Other Departments

For the "All Other Colleges and Universities" cluster, we have provided estimates of each educational institution's obligations.

We have provided a range of reserves that can be used to test the reasonableness of the carried reserves established by the Commonwealth. Estimates have been prepared on both a discounted and undiscounted basis, utilizing rates of discount equal to 4% and 6%.

Our estimates do not include any provision for allocated loss adjustment expenses (ALAE) that may be incurred in the processing and settlement of claims, other than rehabilitation/investigation payments included with medical losses as described in the Data section (Section V) of this report.

* * * * * *

Vahan A. Mahdasian ACAS, MAAA and Mujtaba Datoo ACAS, MAAA are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial report contained herein.

We performed this analysis using generally accepted actuarial principles and in accordance with all relevant Actuarial Standards of Practice.

Please contact us if you have any questions regarding this report.

Respectfully submitted,

Aon Global

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II. Conditions and Limitations

II.1. Inherent Uncertainty

Actuarial calculations produce estimates of inherently uncertain future contingent events. We believe that the estimates provided represent reasonable provisions based on the appropriate application of actuarial techniques to the available data. However, there is no guarantee that actual future payments will not differ from estimates included herein.

II.2. Extraordinary Future Emergence

Our projections make no provision for the extraordinary future emergence of losses or types of losses not sufficiently represented in the historical data or which are not yet quantifiable.

II.3. Data Reliance

In conducting this analysis, we relied upon the provided data without audit or independent verification; however, we reviewed it for reasonableness and consistency. Any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our review and analysis.

II.4. Use and Distribution

Use of this report is limited to the Commonwealth of Massachusetts for the specific purpose described in the Introduction section. Other uses are prohibited without an executed release with Aon.

Distribution by the Commonwealth of Massachusetts is unrestricted. We recognize that this report may be distributed to others and we request that Aon be notified of any such distribution. The report should only be distributed in its entirety including all supporting exhibits.

III. Executive Summary

III.1. Total Reserves

Based on our review, we estimate that the range of reasonable undiscounted loss reserves as of June 30, 2009 for the Commonwealth's aggregate workers compensation liabilities to be **$322.4M to $402.1M**.

We also calculated reasonable ranges on a present value basis, using interest rates of 4% and 6% and the Commonwealth's historical payment patterns. We estimate the range of reasonable reserves to be as follows:

Discounted at 4%: **$244.7M to $308.6M**

Discounted at 6%: **$218.5M to $276.9M**

The following shows reserves for each cluster identified in the Scope section.

Cluster	Cluster	Report Section	Undiscounted	Discounted at 4%	Discounted at 6%
DMR	1	2	$28.1 - 35.2M	$23.0 - 29.2M	$21.2 - 27.0M
DMH	2	3	$26.7 - 33.6M	$20.8 - 26.4M	$18.8 - 23.9M
DOC	3	4	$80.8 - 103.0M	$61.1 - 78.7M	$54.6 - 70.6M
UMass - Amherst	4	5	$7.6 - 10.9M	$5.9 - 8.7M	$5.3 - 7.9M
UMass - Medical	4	6	$3.9 - 5.6M	$3.3 - 4.8M	$3.0 - 4.5M
Other Colleges & Univ	4	7	$12.6 - 15.7M	$10.5 - 13.1M	$9.7 - 12.1M
All Other Departments	5	8	$162.7 - 198.1M	$120.0 - 147.6M	$105.9 - 130.8M
Total			$322.4 - 402.1M	$244.7 - 308.6M	$218.5 - 276.9M

III.2. Fiscal Year 2009 Loss Rates

The cost of the workers compensation program as measured by the estimated FY2009 loss rates (losses per $100 payroll) varied significantly by cluster.

As shown in the table below, overall rates fell by 1.7% when compared to the prior year.

Cluster	Payroll (000)	Average Ult Loss	Average FY 09 Loss Rate	Prior Loss Rate	% Change
DMR	302,930	5,207,500	1.719	1.531	12.3%
DMH	204,114	4,839,000	2.371	2.525	-6.1%
DOC	331,868	16,189,500	4.878	5.026	-2.9%
UMass - Amherst	338,291	1,710,500	0.506	0.487	3.9%
UMass - Medical	306,218	1,389,775	0.454	0.596	-23.8%
Other C & Univ's	836,836	3,352,000	0.401	0.370	8.4%
All Other	2,711,675	24,851,000	0.916	0.907	1.0%
Total	5,031,931	57,539,275	1.143	1.163	-1.7%

III.3. UMass Reserves

To facilitate the use of this report by the University of Massachusetts ("UMass"), we present an aggregate estimate of the liabilities for each UMass segment. These include UMass Amherst and UMass Medical School (shown separately in table above) as well as UMass Lowell, Boston, and Dartmouth (included as part of the "Other Colleges and & Universities" cluster above).

We estimate the reasonable range of reserves for the aggregate UMass program to be **$15.8M to $21.9M**.

Discounted at 4%, the range of reserves is **$12.8M to $18.0M**

Discounted at 6%, the range of reserves is **$11.7M to $16.6M**

The following shows the range of reasonable reserves at various discount rates for each UMass segment.

Cluster	Undiscounted	Discounted at 4%	Discounted at 6%
UMass - Amherst	$7.6 - 10.9M	$5.9 - 8.7M	$5.3 - 7.9M
UMass - Medical	$3.9 - 5.6M	$3.3 - 4.8M	$3.0 - 4.5M
UMass - Dartmouth	$1.4 - 1.8M	$1.2 - 1.5M	$1.1 - 1.4M
University of Lowell	$1.7 - 2.1M	$1.4 - 1.8M	$1.3 - 1.7M
UMass - Boston	$1.2 - 1.4M	$1.0 - 1.2M	$0.9 - 1.1M
Total UMass	$15.8 - 21.9M	$12.8 - 18.0M	$11.7 - 16.6M

III.4. Other Colleges and Universities Reserve

We have allocated the aggregate reserve estimate for All Other Colleges and Universities to the individual institutions within the cluster. Estimates for each institution are shown on Summary Exhibit 7.

III.5. Short Term Reserve Percentages

We have determined the percentage of the reserve estimates that can be considered short-term, meaning the percentage of projected payments of the total reserves expected to be made over the next twelve month period. The calculation of these percentages is shown on Exhibit 1 Page 16 of Sections 1-8 in the report

IV. Program Description

We note that discussion took place regarding employees leaving the Commonwealth to be part of a new entity (The Massachusetts Department of Transportation) as well as other employees (Sheriffs) joining the Commonwealth. However, in discussions with Commonwealth management, it was felt that deferring analysis of these changes until next year was appropriate for several reasons:

- The legislation is effective for 2010 and onward.
- For FY 2009 there is no impact, and for 2010 the impact will be minimal.
- The effect of some employees leaving and others joining the Commonwealth has an "offsetting" impact.

The Commonwealth has provided workers compensation coverage to its employees on a self-insured basis since the early 1920's ("the Program"). The Program covers all workers, except those employed by the Commonwealth's various public authorities and the State Police.

The Commonwealth retains responsibility for all claims and does not purchase per claim or aggregate reinsurance.

Pursuant to legislation effective July 1, 1997, the Program is administered by the Commonwealth's Human Resources Division ("HRD"); prior to that date, certain workers compensation administration responsibilities had been under the supervision of the Public Employee Retirement Administration Commission ("PERAC"). HRD is responsible for making fair and timely payments of indemnity and medical benefits to injured employees, maintaining the claim and financial records of the Program and for negotiating appropriate settlements for all Program claims.

V. Data

In determining outstanding liabilities, we relied on the following data:

V.1. Loss

Claim payments for the 12 month period ending June 30, 2009 were provided by the Commonwealth. Payments were provided by department and agency and were split into four categories: compensation, medical, lump sum, and rehabilitation/investigations. For our review, we analyzed compensation (Indemnity) and lump sum payments separately. Medical and rehabilitation/ investigation payments were combined and analyzed as "Medical" losses.

Our estimates do not include any provision for allocated loss adjustment expenses (ALAE) that may be incurred in the processing and settlement of claims, other than rehabilitation/investigation payments included with medical losses noted above. Also, the estimates do not consider unallocated loss adjustment expenses (ULAE), such as fees of adjusters and settling agents, etc.

The 12 month incremental payments provided by the Commonwealth were added to the cumulative claim payments from the prior analysis (at June 30, 2008) to derive cumulative paid figures as of June 30, 2009 found in this report.

V.2. Exposure

Exposure information in the form of annual payroll was provided by the Commonwealth. Payroll figures were provided by department for FY 2009. Payroll figures for prior periods are from the prior study.

We relied on loss and exposure data provided by responsible officers or employees of the Commonwealth. We also relied on data found in the prior analysis and thereby also those sources described in it; utilizing last year's triangles and updating them with data provided by the HRD. We also relied on payroll data provided by the Office of the Comptroller. As mentioned previously, any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our analysis.

V.3. Industry Data

Loss development factors were derived from the Commonwealth's own triangles and industry data provided by:

1. The National Council on Compensation Insurance (NCCI)
2. The Workers Compensation Rating and Inspection Bureau of Massachusetts (WCRIBMA)

Trend factors used to adjust for changes in historical wage and benefit levels are based on data from these sources as well.

VI. Actuarial Analysis

VI.1. Overview

Performing an actuarial analysis involves developing a qualitative understanding of the risk and applying actuarial techniques and methods to available data. These methods attempt to project unpaid losses to ultimate settlement value. Each method requires certain underlying assumptions and varies in its responsiveness to loss data. As a result, not all methods are appropriate for use in all circumstances. For each unique situation, actuaries assess the strengths and weaknesses inherent in the results of each method in producing reasonable estimates of ultimate loss.

The following methods were employed in developing the recommendations contained in this report.

VI.2. Paid Loss Development Method

This method is based on the assumption that losses from a group of claims are paid in a sufficiently consistent pattern such that past experience can be used to predict future development. The term loss development is used to describe changes that take place in the value of a group of claims over time. In order to reflect loss development arithmetically, incremental loss development factors are calculated by dividing losses at a given evaluation date by the immediately preceding evaluation date. A multiplicative process is then used to calculate a cumulative loss development factor that represents the development to ultimate for a given age of maturity.

This method can be applied using either cumulative paid losses or incurred losses (cumulative paid losses plus case reserves). For a given group of claims, cumulative losses are multiplied by the appropriate cumulative loss development factor to estimate ultimate losses. For the Commonwealth, we relied on the Paid Loss Development Method only, as the Commonwealth does not currently establish case reserves.

This method relies heavily on data as of the most recent evaluation date and assumes past patterns are predictive of future development. If the program has inadequate history to develop predictive loss development patterns, other sources of loss development information may be considered.

In addition to the cumulative loss development factors, we apply an additional factor to bring losses from their current paid status to a projected ultimate basis. This factor is called an “Additional Tail Consideration” factor.

The “Additional Tail Factor” consideration is based on our observation that for certain clusters, some of the older policy periods showed more open claims and higher development than other periods. We also evaluated the average age of the paid claimants for each cluster and year, and noticed that in certain years payments were being made to relatively young claimants. We judgmentally added a tail factor selection to account for these observations.

VI.3. Paid Bornhuetter-Ferguson Method

This method offers a blend of stability and responsiveness by estimating ultimate losses using a percentage of the expected loss results and current loss data. It calculates future loss development based on expected loss estimates and the cumulative loss development factors described in the Loss Development Method.

The B-F Method can be applied using either cumulative paid or incurred losses. Again, for the Commonwealth, we relied on the Paid B-F Method only as the Commonwealth does not currently establish case reserves.

In determining future loss development, the percent of expected losses remaining to be paid is based on the appropriate loss development factor. This percentage is multiplied by expected losses to determine expected future development. This estimate of future loss development is added to losses at the current evaluation date to project ultimate losses.

To determine the expected losses, we determine an initial expected pure premium (or an "a priori" loss rate) based upon (1) a review of the Commonwealth's historic pure premiums (losses divided by payroll) as well as (2) consideration of the selected rate. By considering both metrics, we attempt to balance stability and responsiveness in the selection of the initial expected pure premium.

VI.4. Lump Sum Methodology

Lump sum indemnity payments are analyzed separately from all other indemnity payments. We relied on two methods to develop lump sum payments to ultimate levels. The first is a standard paid loss development method, where current lump sum payments are multiplied by a cumulative lump sum development factor to arrive at the estimate of ultimate lump sum losses.

The second method uses ultimate indemnity losses excluding lump sums as a base for estimating remaining outstanding lump sum payments. Outstanding lump sums payments are estimated by multiplying base ultimates by cumulative incremental lump sums as a percent of ultimate losses excluding lump sums ratio. The outstanding lump sum payments are added to payments to date to arrive at the estimate of ultimate lump sum losses. An estimate of ultimate lump sums is selected based on a review of both methods.

VI.5. 7/1/81-82 and Prior Periods Methodology

In order to estimate liabilities relating to periods 7/1/81-82 and prior, we again relied on two methods. The first uses an average payment trend to estimate the reserves needed for prior periods. This estimate is added to payments to date to arrive at the estimate of ultimate loss. The average payment trend is derived from the Commonwealth's history of incremental payments and is credibility weighted with the total Commonwealth payment trend (derived from all Commonwealth data combined).

The second method multiplies average incremental payments over the last three fiscal years by a selected number of survival years in order to estimate the needed reserve. The needed reserve is added to payments to date to arrive at an estimate of the ultimate loss. An estimate of ultimate loss is selected based on a review of both methods.

VI.6. Selection of Ultimate Losses and Reasonable Reserve Estimates

Our estimates of ultimate losses by year were judgmentally selected based on the methods described above. Generally, we selected the lower and higher of the Paid Loss Development and Paid Bornhuetter-Ferguson methods as the "Low End" and "High End" selections by year. In certain cases, we judgmentally increased the high end of the range if we felt there was not enough "differential" in the two methodologies.

Similar to the prior analysis, we assume that any payment made during fiscal year 2009 implies an "open" claim and will remain open during fiscal year 2009. As a rule, if no payments were made for two years in a row, we project minimal reserves for that year, assuming the claims in that year are closed.

VI.7. Allocation Methodology for Massachusetts Colleges and Universities

The allocation of reserves to each college and university is based on a credibility weighting of expected loss experience based on exposure (payroll) and actual loss experience. The credibility weight is based on the formula P/ (P+K) where P is average payroll for the entity over the past five years and K is 20,000,000 for entities with a low coefficient of variation (CV) and 50,000,000 for entities with a high coefficient of variation (> 1.00).

The expected loss experience is the 5 year average payroll for each entity multiplied by the overall indemnity and medical loss rates for the entire Other Colleges and Universities group. The actual loss experience used in the allocation is a 5-year average ultimate loss for each entity. The ultimate loss for each entity is calculated by applying the paid loss development method to each entity's loss experience.

The outstanding losses estimated for Other Colleges and Universities is then allocated to each entity based on its percentage share of the ultimate credibility weighted losses.

VII. Actuarial Principles & Assumptions

VII.1. Incurred But Not Reported (IBNR)

Generally, losses will increase over time for the following reasons:

1. It is impossible to estimate precisely the ultimate losses and allocated loss adjustment expenses for claims when they are initially reported.

2. It takes a period of time for some claims to be discovered, reported, and recorded. Unreported claims are referred to as "pure" IBNR claims. Claims that are reported but not yet recorded are referred to as "pipeline" IBNR claims.

3. Closed claims are sometimes reopened.

These three conditions result in the need for IBNR reserves.

VII.2. Loss Trend

Loss trend is the change in claim frequency and cost levels from one time period to the next. Factors that affect the frequency and severity of claims are constantly changing over time. Examples of causes of these changes include inflation, societal attitudes toward legal action, and changes in laws. Actuaries use trend factors to adjust historical loss experience to comparable cost levels. Using workers compensation as an example, three elements of cost are combined within this single factor:

Increases in defined benefits for Workers Compensation: Benefits are established by legislative authority and typically reviewed annually by state legislatures. Many times, benefits are expanded by legislatures through changes such as broadening the definition of injury, decreasing waiting periods, increasing benefit duration, or increasing maximum benefit limits.

Increases in medical costs: This causes inflationary trend in the medical component of workers compensation losses.

Increase in wage costs: Wage inflation, although relatively small in some economic sectors, has occurred over the past several years as well.

Specifically, for this analysis, trend factors were obtained from the 2008 rate filing published by the WCRIB of Massachusetts.

VII.3. Exposure

Actuaries select an exposure base expected to vary directly with the incidence and/or severity of claims. The actuary must consider both the historical loss level and the corresponding exposures in evaluating claim liabilities and expected future costs.

As previously discussed, payroll exposure for FY1985 through FY2009 were provided by the Commonwealth.

VII.4. Time Value of Money

Due to the time lag between when claims are incurred, reported, and finally paid, a sound funding recommendation may consider the time value of money. Income will be earned on self-insurance fund assets until those assets are liquidated to pay losses. If this income is retained in the self-insurance fund, such investment income may be considered.

At the Commonwealth's direction, we used 4% and 6% rates to discount the estimated reserves. We have not formed any opinion regarding the reasonability of these rates. It is noted that discounting reserves introduces additional risk to the analysis since the timing of actual loss payments may differ from the estimated payment pattern, and since the realized investment yield may differ from that assumed.

VII.5. Provision for Uncertainty

An actuarial projection may consider the degree of uncertainty inherent in its projection. An estimate stated at its ultimate value on a nominal basis may include an implicit provision for uncertainty due to the time value of money. If an estimate is stated at present value, it may be appropriate to include an explicit provision for uncertainty. Further, an explicit provision for uncertainty may be warranted when losses are subject to a high degree of variability.

For the Commonwealth, we have not explicitly used any provision for risk in our calculations. Instead, we have determined a "low" and "high" end range of reasonable reserves. It should be understood that the range does not represent all possible outcomes, but rather a range of reasonable estimates.

VIII. Arrangement of Exhibits

This report contains eight sections preceded by a set of summary exhibits.

The summary exhibits include the following:

Summary Exhibit	Description
1	Summary of Reserve Estimates - Undiscounted
2	Summary of Reserve Estimates - Discounted at 4%
3	Summary of Reserve Estimates - Discounted at 6%
4	Summary of Change in Ultimate Loss
5	Summary of Estimates for 06-07 Fiscal Year
6	Summary of Reserve Estimates by Cluster
7	Summary of Reserve Estimates by College
8	Summary of Ultimate Losses by Cluster
9	Calculation of Implied Development Factors
10	MA Colleges and Universities Allocation

The eight sections and their exhibits are organized as follows:

Section	Exhibit	Cluster
1	1	All Clusters Combined - Indemnity
1	2	All Clusters Combined - Medical
2	1	DMR - Indemnity
2	2	DMR - Medical
3	1	DMH - Indemnity
3	2	DMH - Indemnity
4	1	DOC - Indemnity
4	2	DOC - Medical
5	1	Umass Amherst - Indemnity
5	2	Umass Amherst - Medical
6	1	Umass Medical School - Indemnity
6	2	Umass Medical School - Medical
7	1	Other College and Universities - Indemnity
7	2	Other College and Universities - Medical
8	1	All Other - Indemnity
8	2	All Other - Medical

Within Sections 1 through 8, the worksheets are organized as follows:

Page	Description
1	Summary of Ultimate Losses
2	Paid Loss Development Method
3	Paid Bornhuetter-Ferguson Method
4	Calculation of Initial Expected Loss Rates
5	Calculation of 1982 and Prior Reserves Page 1
6	Calculation of 1982 and Prior Reserves Page 2
7	Paid Loss Triangle
8	Comparison of Ultimate Losses
9-12	Calculation of Ultimate Lump Sum Payment
13-15	Discounting Exhibits
16	Calculation of FY 2009 Payments

IX. Description of Exhibits

IX.1. Summary Exhibits

Summary Exhibit 1 shows the undiscounted low and high reserve estimates by cluster for indemnity and medical separately.

Summary Exhibit 2 shows the low and high reserve estimates by cluster for indemnity and medical separately, discounted at 4%.

Summary Exhibit 3 shows the low and high reserve estimates by cluster for indemnity and medical separately, discounted at 6%.

Summary Exhibit 4 shows the change in ultimate loss from the prior report by cluster and for indemnity and medical separately. Changes in the ultimate loss for the current fiscal year are excluded.

Summary Exhibit 5 shows the low and high ultimate loss estimate for the current fiscal year. The estimates are shown by cluster and for indemnity and medical separately. The midpoint of the range of estimates is used to calculate the loss rate for each cluster.

Summary Exhibit 6 contains an additional summary of reserve estimates by cluster, showing both the discounted and undiscounted ranges of reserves.

Summary Exhibit 7 contains a summary of reserve estimates by college. High and low reserve estimates are shown undiscounted as well as at 4% and 6% discount rates.

Summary Exhibit 8 shows the selection of ultimate losses by accident year for all clusters. A calculation of the outstanding losses and loss rates is also shown by accident year.

Page 1 shows results for all clusters combined.

Pages 2 – 8 show results for each of the clusters specified in the Scope section.

Summary Exhibit 9 shows the calculation of the implied loss development factors underlying the results of our analysis by accident year. The selected ultimate loss for all clusters is divided by the paid losses to date for all clusters to derive the indicated LDF by accident year.

Summary Exhibit 10 Page 1 shows the results of the methodology used to allocate ultimate losses to each of the college and universities contained in the Other Colleges and Universities group. This methodology is discussed in the Overview section of this report.

Summary Exhibit 10 Page 2 shows the estimated loss costs for indemnity and medical combined for each college and university. The loss costs are calculated by dividing the sum of the estimated ultimate indemnity and medical losses on Page 4 by the payroll figures on Page 3.

Summary Exhibit 10 Page 3 shows the historical payrolls for each college and university.

Summary Exhibit 10 Page 4 shows the estimated ultimate indemnity and medical losses for each college and university. The estimated ultimate losses are calculated by multiplying the cumulative paid indemnity and medical losses on Page 5 by the Age-to-Ultimate LDF's shown on Page 4.

Summary Exhibit 10 Page 5 shows the historical cumulative indemnity and medical payments for each college and university.

Summary Exhibit 10 Page 6 shows the current fiscal year indemnity and medical payments for each college and university.

IX.2. Pages in Exhibits 1 and 2 of Sections 1 through 8

Page 1 shows the selected ultimate losses by accident year. A high and low selection is made for each accident year based on a review of the actuarial methods presented. Outstanding losses based on the low and high estimates are also calculated. The outstanding loss estimate equals the selected ultimate loss minus paid losses to date.

Page 2 shows the application of the Paid Loss Development Method to the applicable data. The number of paid counts in the last 12 months, average outstanding claim amounts, and the average age for claimants that had an indemnity payment within the last calendar year are also shown.

Page 3 shows the application of the Paid Bornhuetter-Ferguson Method to the applicable data. The ultimate loss cost resulting from the method is also shown.

Page 4 calculates the initial expected loss rate, which is used as the a priori loss rate in the B-F method. Expected ultimate losses from the Paid Loss Development Method are divided by payroll for each accident year. The resulting loss rates are trended to the current cost and wage level and adjusted for historical changes in benefit levels. A current loss cost is then selected.

Page 5 shows the application of the methodology used to estimate ultimate losses for periods 7/1/1981-82 and prior. This methodology is described in the Actuarial Analysis section of this report.

Page 6 shows the derivation of the selected trend using the applicable data for each section. The selected trend is used in the methodology for estimating the 7/1/1981-82 and prior reserves.

Page 7 shows the paid loss development triangle and selected LDF's underlying the paid loss development and paid B-F methods.

Page 8 shows the comparison of the selected ultimate losses to the selection from the prior actuarial reserve review. The changes in ultimates are shown on an absolute and percentage change basis.

Page 9 calculates the estimated ultimate lump sum payments. Two methodologies are reviewed and an estimate of the ultimate lump sum payments by accident year is made. The two methods are described in the Actuarial Analysis section of this report. A comparison to the prior ultimate lump sum selection is also shown.

Pages 10 through 12 show various lump sum development triangles underlying the lump sum methodology on Page 9. Incremental lump sum payments (in 12 month intervals) are accumulated to derive a cumulative lump sum payment triangle (Page 10). Page 11 shows the incremental lump sum payments as a percent of ultimate indemnity loss excluding lump sum payments. Page 12 shows the selection of the LDF's for the cumulative lump sum payment triangle.

Page 13 calculates the discount factors based on the selected payout patterns from Page 7. Discount factors are calculated assuming 4% and 6% interest rates.

Pages 14 and 15 show the application of the discount factors from Page 13 to the outstanding losses from Page 1. Page 14 shows the discounted outstanding losses at 4%; Page 15 shows them at 6%.

Page 16 estimates the percentage of reserve estimates which can be considered short-term; i.e., projected payments associated with the reserves which will be made over the next calendar period.

X. Exhibits

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

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Commonwealth of Massachusetts
Workers Compensation
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Summary of Reserve Estimates - Undiscounted

Cluster	Cluster #	Report Section	Loss Reserve Estimate Low End	Loss Reserve Estimate High End
Department of Mental Retardation	1	Section 2		
Indemnity			24,605,983	30,635,791
Medical			3,517,425	4,606,592
Total			28,123,408	35,242,383
Department of Mental Health	2	Section 3		
Indemnity			25,764,162	32,023,525
Medical			948,899	1,544,306
Total			26,713,061	33,567,831
Department of Corrections	3	Section 4		
Indemnity			66,221,194	85,429,154
Medical			14,572,633	17,532,732
Total			80,793,828	102,961,886
UMass - Amherst	4	Section 5		
Indemnity			6,326,787	9,190,612
Medical			1,270,335	1,667,679
Total			7,597,121	10,858,291
UMass - Medical School	4	Section 6		
Indemnity			3,119,931	4,447,843
Medical			775,072	1,196,876
Total			3,895,003	5,644,719
Other Colleges & Universities	4	Section 7		
Indemnity			10,281,728	13,102,063
Medical			2,336,793	2,615,808
Total			12,618,521	15,717,870
All Others	5-17 & 95	Section 8		
Indemnity			144,375,842	174,431,188
Medical			18,296,744	23,639,965
Total			162,672,586	198,071,153
Grand Total		Section 1		
Indemnity			280,695,627	349,260,175
Medical			41,717,901	52,803,958
Total			322,413,528	402,064,133

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Summary of Reserve Estimates - Discounted at 4%

Cluster	Cluster #	Report Section	Loss Reserve Estimate Low End	Loss Reserve Estimate High End
Department of Mental Retardation	1	Section 2		
Indemnity			20,069,204	25,298,968
Medical			2,935,381	3,889,311
Total			23,004,585	29,188,278
Department of Mental Health	2	Section 3		
Indemnity			19,972,975	25,026,511
Medical			836,581	1,368,526
Total			20,809,556	26,395,037
Department of Corrections	3	Section 4		
Indemnity			49,783,646	64,967,481
Medical			11,361,908	13,777,230
Total			61,145,554	78,744,711
UMass - Amherst	4	Section 5		
Indemnity			4,863,108	7,288,105
Medical			1,067,257	1,408,904
Total			5,930,365	8,697,008
UMass - Medical School	4	Section 6		
Indemnity			2,582,640	3,738,640
Medical			692,019	1,068,594
Total			3,274,659	4,807,234
Other Colleges & Universities	4	Section 7		
Indemnity			8,477,284	10,885,606
Medical			2,011,234	2,248,563
Total			10,488,518	13,134,169
All Others	5-17 & 95	Section 8		
Indemnity			105,638,817	128,940,824
Medical			14,404,469	18,657,895
Total			120,043,286	147,598,719
Grand Total		Section 1		
Indemnity			211,387,674	266,146,134
Medical			33,308,850	42,419,023
Total			244,696,524	308,565,157

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Summary of Reserve Estimates - Discounted at 6%

Cluster	Cluster #	Report Section	Loss Reserve Estimate Low End	Loss Reserve Estimate High End
Department of Mental Retardation	1	Section 2		
Indemnity			18,456,762	23,377,205
Medical			2,725,845	3,630,080
Total			21,182,608	27,007,285
Department of Mental Health	2	Section 3		
Indemnity			17,969,280	22,592,731
Medical			794,917	1,302,696
Total			18,764,197	23,895,427
Department of Corrections	3	Section 4		
Indemnity			44,310,049	58,119,392
Medical			10,266,194	12,495,025
Total			54,576,243	70,614,417
UMass - Amherst	4	Section 5		
Indemnity			4,355,496	6,612,634
Medical			992,060	1,312,931
Total			5,347,556	7,925,564
UMass - Medical School	4	Section 6		
Indemnity			2,391,601	3,481,754
Medical			657,911	1,015,731
Total			3,049,512	4,497,485
Other Colleges & Universities	4	Section 7		
Indemnity			7,796,632	10,043,414
Medical			1,885,143	2,106,383
Total			9,681,776	12,149,796
All Others	5-17 & 95	Section 8		
Indemnity			92,821,928	113,815,802
Medical			13,064,627	16,950,892
Total			105,886,556	130,766,694
Grand Total		Section 1		
Indemnity			188,101,748	238,042,932
Medical			30,386,698	38,813,737
Total			218,488,446	276,856,669

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Summary of Change in Ultimate Loss (excluding current Fiscal Year)

Cluster	Cluster #	Report Section	Current Ult Loss Estimate less Previous Ult Loss Estimate Low End	High End
Department of Mental Retardation	1	Section 2		
Indemnity			(1,432,095)	(1,878,311)
Medical			(11,191)	(226,059)
Total			(1,443,286)	(2,104,369)
Department of Mental Health	2	Section 3		
Indemnity			(796,199)	(2,556,327)
Medical			(3,027,021)	(3,422,333)
Total			(3,823,221)	(5,978,659)
Department of Corrections	3	Section 4		
Indemnity			(5,863,383)	(11,404,430)
Medical			(1,180,388)	(674,171)
Total			(7,043,771)	(12,078,601)
UMass - Amherst	4	Section 5		
Indemnity			(324,399)	(681,257)
Medical			84,192	(86,285)
Total			(240,207)	(767,542)
UMass - Medical School	4	Section 6		
Indemnity			257,000	171,651
Medical			34,000	(56,050)
Total			291,000	115,601
Other Colleges & Universities	4	Section 7		
Indemnity			284,374	(478,576)
Medical			23,128	(180,380)
Total			307,502	(658,957)
All Others	5-17 & 95	Section 8		
Indemnity			(6,266,980)	(11,289,092)
Medical			(204,979)	(1,094,298)
Total			(6,471,959)	(12,383,390)
Grand Total		Section 1		
Indemnity			(14,141,682)	(28,116,341)
Medical			(4,282,260)	(5,739,576)
Total			(18,423,942)	(33,855,918)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Summary of Estimates for 2008-09 Fiscal Year

Cluster	Cluster #	Report Section	Ultimate Loss Estimate Low End	Ultimate Loss Estimate High End	Average	Payroll (000)	Loss Rate
Department of Mental Retardation	1	Section 2					
Indemnity			3,267,000	3,623,000			
Medical			1,520,000	2,005,000			
Total			4,787,000	5,628,000	5,207,500	302,930	1.719
Department of Mental Health	2	Section 3					
Indemnity			3,690,000	4,317,000			
Medical			701,000	970,000			
Total			4,391,000	5,287,000	4,839,000	204,114	2.371
Department of Corrections	3	Section 4					
Indemnity			10,383,000	14,478,000			
Medical			3,551,000	3,967,000			
Total			13,934,000	18,445,000	16,189,500	331,868	4.878
UMass - Amherst	4	Section 5					
Indemnity			1,011,000	1,144,000			
Medical			535,000	731,000			
Total			1,546,000	1,875,000	1,710,500	338,291	0.506
UMass - Medical School	4	Section 6					
Indemnity			829,000	988,000			
Medical			447,000	515,550			
Total			1,276,000	1,503,550	1,389,775	306,218	0.454
Other Colleges & Universities	4	Section 7					
Indemnity			2,086,000	2,354,000			
Medical			1,106,000	1,158,000			
Total			3,192,000	3,512,000	3,352,000	836,836	0.401
All Others	5-17 & 95	Section 8					
Indemnity			17,189,000	18,961,000			
Medical			5,700,000	7,852,000			
Total			22,889,000	26,813,000	24,851,000	2,711,675	0.916
Grand Total		Section 1					
Indemnity			38,455,000	45,865,000			
Medical			13,560,000	17,198,550			
Total			52,015,000	63,063,550	57,539,275	5,031,931	1.143

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Summary of Reserve Estimates by Cluster

Cluster	Cluster / Report Section	Undiscounted		Discounted at 4%		Discounted at 6%	
		Low End	High End	Low End	High End	Low End	High End
DMR	1 / 2	28,123,408	35,242,383	23,004,585	29,188,278	21,182,608	27,007,285
DMH	2 / 3	26,713,061	33,567,831	20,809,556	26,395,037	18,764,197	23,895,427
DOC	3 / 4	80,793,828	102,961,886	61,145,554	78,744,711	54,576,243	70,614,417
UMass - Amherst	4 / 5	7,597,121	10,858,291	5,930,365	8,697,008	5,347,556	7,925,564
UMass - Medical	4 / 6	3,895,003	5,644,719	3,274,659	4,807,234	3,049,512	4,497,485
Other Colleges & Univ's	4 / 7	12,618,521	15,717,870	10,488,518	13,134,169	9,681,776	12,149,796
All Other Departments	5 / 8	162,672,586	198,071,153	120,043,286	147,598,719	105,886,556	130,766,694
Total		322,413,528	402,064,133	244,696,524	308,565,157	218,488,446	276,856,669

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Summary of Reserve Estimates by College

	Undiscounted		Discounted at 4%		Discounted at 6%	
Cluster	Low End	High End	Low End	High End	Low End	High End
Berkshire Community College	171,144	213,180	142,255	178,138	131,313	164,787
Bridgewater State College	798,321	994,403	663,564	830,943	612,525	768,666
Bristol Community College	262,464	326,930	218,160	273,189	201,380	252,714
Bunker Hill Community College	226,625	282,288	188,371	235,886	173,882	218,207
Cape Cod Community College	225,690	281,123	187,593	234,912	173,164	217,306
Fitchburg State College	503,768	627,503	418,732	524,355	386,525	485,056
Framingham State College	463,204	576,975	385,015	482,132	355,401	445,998
Greenfield Community College	162,340	202,214	134,937	168,974	124,558	156,310
Holyoke Community College	258,222	321,646	214,634	268,774	198,125	248,630
Mass Bay Community College	200,079	249,222	166,306	208,255	153,514	192,647
Mass College of Art	235,577	293,439	195,812	245,204	180,751	226,826
Mass Maritime Academy	229,549	285,930	190,801	238,929	176,125	221,022
Massachusetts College of Liberal Arts	225,069	280,351	187,078	234,267	172,688	216,709
Massasoit Community College	369,277	459,978	306,943	384,367	283,334	355,560
Middlesex Community College	243,619	303,457	202,496	253,575	186,921	234,570
Mt Wachusett Community College	241,990	301,428	201,143	251,879	185,671	233,002
North Essex Community College	239,225	297,983	198,844	249,000	183,549	230,338
North Shore Community College	203,701	253,733	169,316	212,025	156,293	196,134
Quinsigamond Community College	342,052	426,067	284,314	356,030	262,445	329,346
Roxbury Community College	158,996	198,048	132,157	165,493	121,992	153,090
Salem State College	856,232	1,066,539	711,701	891,222	656,959	824,427
Springfield Tech Community College	497,854	620,137	413,816	518,199	381,987	479,361
UMass (Boston)	1,162,283	1,447,761	966,090	1,209,779	891,781	1,119,109
UMass (Dartmouth)	1,419,687	1,768,389	1,180,044	1,477,702	1,089,279	1,366,952
University of Lowell	1,722,735	2,145,872	1,431,938	1,793,134	1,321,798	1,658,743
Westfield State College	800,314	996,887	665,222	833,019	614,055	770,586
Worcester State College	398,505	496,385	331,237	414,789	305,760	383,702
Total	12,618,521	15,717,870	10,488,518	13,134,169	9,681,776	12,149,796

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		92,253,007			112,453,399	123,676,172	20,200,392	31,423,164		
6/30/82-83		17,112,267	19,340,855		18,903,293	20,059,628	1,791,026	2,947,361		
6/30/83-84		24,997,723	28,195,409		27,640,359	29,097,686	2,642,636	4,099,963		
6/30/84-85	1,632,355	37,192,995	42,443,676	39,332,227	39,587,648	41,910,840	2,394,653	4,717,845	2.425	2.568
6/30/85-86	1,755,421	50,201,521	57,752,095	53,491,315	54,247,730	56,164,466	4,046,209	5,962,945	3.090	3.199
6/30/86-87	2,017,293	55,360,403	62,282,841	59,602,572	58,660,246	61,371,167	3,299,843	6,010,764	2.908	3.042
6/30/87-88	2,675,340	79,486,717	90,855,870	86,974,313	87,380,571	90,852,402	7,893,854	11,365,684	3.266	3.396
6/30/88-89	2,880,999	78,726,286	88,332,349	86,239,688	86,520,369	88,482,024	7,794,083	9,755,738	3.003	3.071
6/30/89-90	2,855,415	76,509,116	85,963,417	85,208,350	83,950,077	85,149,886	7,440,961	8,640,770	2.940	2.982
6/30/90-91	2,682,613	63,331,780	76,988,325	72,524,878	71,812,065	76,424,696	8,480,285	13,092,916	2.677	2.849
6/30/91-92	2,641,036	41,886,294	48,433,746	47,746,102	47,365,953	48,668,810	5,479,659	6,782,516	1.793	1.843
6/30/92-93	2,639,939	28,985,029	34,437,036	33,703,751	33,557,428	34,430,313	4,572,399	5,445,284	1.271	1.304
6/30/93-94	2,801,390	31,270,933	37,611,919	36,975,684	36,942,000	37,643,000	5,671,067	6,372,067	1.319	1.344
6/30/94-95	2,894,918	28,783,199	34,806,459	34,704,943	34,490,423	34,688,476	5,707,224	5,905,278	1.191	1.198
6/30/95-96	3,029,192	27,231,121	33,511,709	33,555,065	32,934,852	33,763,991	5,703,731	6,532,870	1.087	1.115
6/30/96-97	3,621,274	27,618,995	34,741,306	34,871,593	34,735,838	35,556,086	7,116,843	7,937,091	0.959	0.982
6/30/97-98	3,485,251	29,444,070	37,246,143	37,364,711	37,202,642	37,957,306	7,758,571	8,513,236	1.067	1.089
6/30/98-99	3,717,044	28,013,679	36,579,127	36,788,431	36,576,000	37,491,000	8,562,321	9,477,321	0.984	1.009
6/30/99-00	3,911,384	31,878,827	42,991,106	43,112,685	42,963,000	43,898,000	11,084,173	12,019,173	1.098	1.122
6/30/00-01	3,990,080	36,594,520	49,798,744	49,815,903	49,739,000	51,296,000	13,144,480	14,701,480	1.247	1.286
6/30/01-02	4,107,529	32,230,285	45,766,760	45,889,608	45,748,000	46,700,000	13,517,715	14,469,715	1.114	1.137
6/30/02-03	4,081,731	31,761,354	46,996,033	47,104,305	46,815,000	47,963,000	15,053,646	16,201,646	1.147	1.175
6/30/03-04	4,128,759	31,196,071	47,541,870	47,703,768	47,375,000	48,577,100	16,178,929	17,381,029	1.147	1.177
6/30/04-05	4,274,405	30,838,920	50,074,724	51,147,363	49,418,000	51,918,600	18,579,080	21,079,680	1.156	1.215
6/30/05-06	4,561,005	25,116,273	44,629,780	49,227,718	45,353,000	49,373,250	20,236,727	24,256,977	0.994	1.083
6/30/06-07	4,793,519	20,770,722	42,227,102	49,672,692	42,658,000	50,691,700	21,887,278	29,920,978	0.890	1.058
6/30/07-08	5,105,961	17,483,251	49,070,710	57,796,148	49,992,000	59,818,350	32,508,749	42,335,099	0.979	1.172
6/30/08-09	5,031,931	8,348,005	51,263,004	59,684,885	52,015,000	63,063,550	43,666,995	54,715,545	1.034	1.253
Total	85,315,785	1,084,623,365	1,319,882,114	1,280,238,697	1,407,036,893	1,486,687,498	322,413,528	402,064,133		
Tot 6/30/84-09	85,315,785	950,260,368	1,272,345,851	1,280,238,697	1,248,039,842	1,313,854,013	297,779,474	363,593,645	1.463	1.540

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Summary Exhibit 8, Pages 2-8
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		19,960,516			25,177,176	27,568,258	5,216,660	7,607,742		
6/30/82-83		4,718,719	5,208,603		5,080,669	5,337,491	361,950	618,772		
6/30/83-84		8,940,245	10,597,348		10,387,673	10,823,183	1,447,429	1,882,938		
6/30/84-85	181,529	7,511,271	7,737,408	7,743,918	7,579,218	7,684,779	67,947	173,508	4.175	4.233
6/30/85-86	195,215	11,809,550	12,297,622	12,291,568	12,152,000	12,255,000	342,450	445,450	6.225	6.278
6/30/86-87	224,337	15,346,425	16,104,555	16,115,217	15,797,000	15,934,000	450,575	587,575	7.042	7.103
6/30/87-88	262,830	21,048,354	24,030,768	22,303,254	22,299,000	23,170,000	1,250,646	2,121,646	8.484	8.816
6/30/88-89	283,848	23,275,495	24,780,968	24,803,793	24,781,000	24,804,000	1,505,505	1,528,505	8.730	8.738
6/30/89-90	285,041	18,640,237	19,920,641	20,057,417	18,902,000	19,060,000	261,763	419,763	6.631	6.687
6/30/90-91	267,694	13,723,515	14,716,270	14,709,958	14,031,000	14,139,000	307,485	415,485	5.241	5.282
6/30/91-92	261,403	9,702,320	10,423,627	10,416,363	10,416,000	10,423,000	713,680	720,680	3.985	3.987
6/30/92-93	259,951	5,930,160	6,391,178	6,387,983	6,388,000	6,391,000	457,840	460,840	2.457	2.459
6/30/93-94	257,021	4,756,135	5,153,640	5,152,852	5,152,000	5,154,000	395,865	397,865	2.005	2.005
6/30/94-95	255,811	3,008,308	3,276,971	3,282,867	3,277,000	3,283,000	268,692	274,692	1.281	1.283
6/30/95-96	255,494	3,937,947	4,338,042	4,339,703	4,338,000	4,340,000	400,053	402,053	1.698	1.699
6/30/96-97	270,025	3,348,340	3,706,998	3,714,941	3,707,000	3,715,000	358,660	366,660	1.373	1.376
6/30/97-98	245,319	3,237,860	3,630,110	3,634,680	3,630,000	3,635,000	392,140	397,140	1.480	1.482
6/30/98-99	251,404	2,885,671	3,260,112	3,270,044	3,260,000	3,270,000	374,329	384,329	1.297	1.301
6/30/99-00	255,590	2,832,345	3,234,817	3,244,938	3,234,000	3,245,000	401,655	412,655	1.265	1.270
6/30/00-01	263,866	4,061,516	4,732,071	4,726,133	4,726,000	4,732,000	664,484	670,484	1.791	1.793
6/30/01-02	267,544	2,986,387	3,544,931	3,555,810	3,545,000	3,556,000	558,613	569,613	1.325	1.329
6/30/02-03	274,409	3,589,145	4,460,043	4,460,247	4,457,000	4,463,000	867,855	873,855	1.624	1.626
6/30/03-04	272,327	3,456,843	4,454,567	4,454,896	4,450,000	4,459,000	993,157	1,002,157	1.634	1.637
6/30/04-05	273,587	3,384,787	4,659,252	4,644,683	4,582,000	4,662,000	1,197,213	1,277,213	1.675	1.704
6/30/05-06	285,078	2,888,064	4,298,864	4,439,098	4,237,000	4,439,000	1,348,936	1,550,936	1.486	1.557
6/30/06-07	298,452	2,542,796	4,432,814	4,656,021	4,293,000	4,674,000	1,750,204	2,131,204	1.438	1.566
6/30/07-08	314,165	1,569,498	3,783,883	4,590,209	3,651,000	4,591,000	2,081,502	3,021,502	1.162	1.461
6/30/08-09	302,930	1,100,878	5,271,195	5,143,312	4,787,000	5,628,000	3,686,122	4,527,122	1.580	1.858
Total	6,564,872	210,193,328	218,447,298	202,139,907	238,316,736	245,435,711	28,123,408	35,242,383		
Tot 6/30/84-09	6,564,872	176,573,848	202,641,347	202,139,907	197,671,218	201,706,779	21,097,370	25,132,931	3.011	3.073

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 2, Exhibit 1, Page 1 + Section 2, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		18,676,505			23,101,174	24,525,006	4,424,669	5,848,501		
6/30/82-83		2,466,481	2,588,000		2,522,503	2,650,602	56,022	184,122		
6/30/83-84		2,681,031	2,939,625		2,870,749	3,009,971	189,719	328,940		
6/30/84-85	142,302	4,290,796	4,883,048	4,496,984	4,497,000	4,883,000	206,204	592,204	3.160	3.431
6/30/85-86	153,030	4,891,866	5,236,953	5,214,038	5,214,000	5,237,000	322,134	345,134	3.407	3.422
6/30/86-87	175,859	6,910,391	7,431,375	7,432,250	7,037,000	7,161,000	126,609	250,609	4.001	4.072
6/30/87-88	206,034	12,808,783	14,360,283	13,763,342	14,120,878	14,361,000	1,312,095	1,552,217	6.854	6.970
6/30/88-89	222,510	13,631,466	15,282,050	14,711,139	15,053,506	15,282,000	1,422,040	1,650,534	6.765	6.868
6/30/89-90	223,446	12,989,055	14,651,469	14,122,730	14,123,000	14,652,000	1,133,945	1,662,945	6.321	6.557
6/30/90-91	209,847	9,395,593	10,596,496	10,292,371	10,292,000	10,596,000	896,407	1,200,407	4.905	5.049
6/30/91-92	204,915	5,516,815	6,038,502	6,037,848	5,651,000	5,736,000	134,185	219,185	2.758	2.799
6/30/92-93	176,368	4,391,843	4,848,538	4,848,324	4,848,000	4,848,000	456,157	456,157	2.749	2.749
6/30/93-94	172,727	2,899,230	3,259,830	3,264,031	3,259,000	3,265,000	359,770	365,770	1.887	1.890
6/30/94-95	177,958	3,612,590	4,228,883	4,112,935	4,113,000	4,229,000	500,410	616,410	2.311	2.376
6/30/95-96	175,626	2,712,477	3,048,581	3,061,727	2,757,000	2,796,000	44,523	83,523	1.570	1.592
6/30/96-97	189,700	2,076,645	2,350,766	2,376,056	2,351,000	2,376,000	274,355	299,355	1.239	1.253
6/30/97-98	176,882	3,216,612	3,755,010	3,763,561	3,755,000	3,764,000	538,388	547,388	2.123	2.128
6/30/98-99	188,672	2,254,634	2,641,731	2,673,472	2,641,000	2,674,000	386,366	419,366	1.400	1.417
6/30/99-00	194,073	2,901,582	3,489,591	3,517,515	3,490,000	3,517,000	588,418	615,418	1.798	1.812
6/30/00-01	201,133	3,921,199	4,816,374	4,822,649	4,817,000	4,822,000	895,801	900,801	2.395	2.397
6/30/01-02	202,655	3,093,186	3,975,539	3,994,219	3,976,000	3,994,000	882,814	900,814	1.962	1.971
6/30/02-03	202,050	2,401,032	3,096,120	3,142,446	3,096,000	3,142,000	694,968	740,968	1.532	1.555
6/30/03-04	189,108	4,202,394	5,713,443	5,694,525	5,694,000	5,714,000	1,491,606	1,511,606	3.011	3.022
6/30/04-05	186,494	3,227,845	4,594,182	4,651,173	4,594,000	4,652,000	1,366,155	1,424,155	2.463	2.494
6/30/05-06	192,742	2,461,495	3,628,258	4,089,637	3,553,000	4,089,000	1,091,505	1,627,505	1.843	2.121
6/30/06-07	202,830	2,054,256	3,638,543	4,174,752	3,638,000	4,175,000	1,583,744	2,120,744	1.794	2.058
6/30/07-08	211,536	1,697,583	3,611,049	4,483,857	3,611,000	4,484,000	1,913,417	2,786,417	1.707	2.120
6/30/08-09	204,114	970,364	4,390,727	5,287,135	4,391,000	5,287,000	3,420,636	4,316,636	2.151	2.590
Total	4,782,611	142,353,748	149,094,968	144,028,716	169,066,810	175,921,579	26,713,061	33,567,831		
Tot 6/30/84-09	4,782,611	118,529,732	143,567,343	144,028,716	140,572,384	145,736,000	22,042,652	27,206,268	2.939	3.047

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 3, Exhibit 1, Page 1 + Section 3, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		3,700,609			5,013,201	6,282,759	1,312,592	2,582,150		
6/30/82-83		2,912,565	3,822,471		3,725,137	4,008,471	812,572	1,095,906		
6/30/83-84		2,135,674	2,226,885		2,160,403	2,271,423	24,729	135,749		
6/30/84-85	115,008	4,061,479	5,352,466	4,209,235	4,592,000	4,784,000	530,521	722,521	3.993	4.160
6/30/85-86	123,679	6,747,313	9,614,968	7,048,366	7,941,853	8,334,000	1,194,541	1,586,687	6.421	6.738
6/30/86-87	142,129	4,525,389	4,822,309	4,828,806	4,600,000	4,640,000	74,611	114,611	3.236	3.265
6/30/87-88	166,516	7,221,952	8,074,968	7,807,987	7,804,000	8,079,000	582,048	857,048	4.687	4.852
6/30/88-89	179,833	7,947,156	9,389,623	8,623,535	8,623,000	9,389,000	675,844	1,441,844	4.795	5.221
6/30/89-90	180,589	10,769,527	11,921,535	11,871,284	11,871,000	11,922,000	1,101,473	1,152,473	6.574	6.602
6/30/90-91	169,598	11,338,268	17,352,451	13,231,260	13,231,000	17,353,000	1,892,732	6,014,732	7.801	10.232
6/30/91-92	165,612	5,634,936	6,354,985	6,363,810	6,355,000	6,364,000	720,064	729,064	3.837	3.843
6/30/92-93	173,874	4,477,624	5,059,674	5,082,751	5,059,000	5,083,000	581,376	605,376	2.910	2.923
6/30/93-94	185,611	6,174,637	7,115,935	7,142,219	7,116,000	7,142,000	941,363	967,363	3.834	3.848
6/30/94-95	193,706	7,452,230	8,812,104	8,835,732	8,812,000	8,836,000	1,359,770	1,383,770	4.549	4.562
6/30/95-96	204,905	6,383,926	7,687,078	7,734,820	7,687,000	7,735,000	1,303,074	1,351,074	3.751	3.775
6/30/96-97	233,704	7,626,916	9,279,284	9,344,023	9,279,000	9,344,000	1,652,084	1,717,084	3.970	3.998
6/30/97-98	221,484	9,359,034	11,730,866	11,750,193	11,731,000	11,751,000	2,371,966	2,391,966	5.297	5.306
6/30/98-99	255,677	9,067,574	11,623,621	11,682,293	11,624,000	11,682,000	2,556,426	2,614,426	4.546	4.569
6/30/99-00	268,079	9,970,529	13,021,365	13,077,822	13,021,000	13,077,000	3,050,471	3,106,471	4.857	4.878
6/30/00-01	278,762	13,058,704	17,501,003	17,470,271	17,470,000	18,209,000	4,411,296	5,150,296	6.267	6.532
6/30/01-02	282,635	10,485,599	14,448,272	14,500,066	14,448,000	14,500,000	3,962,401	4,014,401	5.112	5.130
6/30/02-03	289,398	10,675,556	15,225,849	15,275,101	15,083,000	15,275,000	4,407,444	4,599,444	5.212	5.278
6/30/03-04	293,308	9,548,405	14,315,515	14,405,423	14,177,000	14,406,000	4,628,595	4,857,595	4.833	4.912
6/30/04-05	290,903	9,795,821	15,585,539	16,085,306	15,566,000	16,740,000	5,770,179	6,944,179	5.351	5.754
6/30/05-06	294,215	6,828,398	11,900,668	14,069,883	12,894,000	14,070,000	6,065,602	7,241,602	4.383	4.782
6/30/06-07	289,092	4,881,220	10,029,650	13,421,680	11,675,000	13,952,000	6,793,780	9,070,780	4.039	4.826
6/30/07-08	354,141	3,740,883	10,402,696	16,712,181	13,382,000	17,368,000	9,641,117	13,627,117	3.779	4.904
6/30/08-09	331,868	1,558,842	10,120,986	17,567,239	13,934,000	18,445,000	12,375,158	16,886,158	4.199	5.558
Total	5,684,326	198,080,766	272,792,767	278,141,287	278,874,594	301,042,652	80,793,828	102,961,886		
Tot 6/30/84-09	5,684,326	189,331,918	266,743,412	278,141,287	267,975,853	288,480,000	78,643,935	99,148,082	4.714	5.075

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 4, Exhibit 1, Page 1 + Section 4, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		2,105,687			2,494,790	2,646,392	389,102	540,705		
6/30/82-83		225,530	228,841		229,124	232,650	3,594	7,120		
6/30/83-84		220,938	224,419		224,907	230,155	3,969	9,217		
6/30/84-85	139,178	1,698,661	2,053,794	1,723,529	1,723,757	2,054,488	25,096	355,826	1.239	1.476
6/30/85-86	149,671	1,420,086	1,990,563	1,443,631	1,443,177	1,717,613	23,090	297,527	0.964	1.148
6/30/86-87	171,999	2,213,783	3,073,835	2,264,254	2,264,000	3,073,000	50,217	859,217	1.316	1.787
6/30/87-88	201,511	2,146,040	2,280,933	2,255,820	2,256,000	2,281,000	109,960	134,960	1.120	1.132
6/30/88-89	206,011	2,002,874	2,177,830	2,146,187	2,146,000	2,178,000	143,126	175,126	1.042	1.057
6/30/89-90	206,006	679,355	745,930	751,424	743,890	750,463	64,535	71,108	0.361	0.364
6/30/90-91	189,307	2,613,838	2,942,918	2,940,360	2,941,000	2,943,000	327,162	329,162	1.554	1.555
6/30/91-92	188,230	2,736,189	3,384,647	3,173,987	3,174,000	3,385,000	437,811	648,811	1.686	1.798
6/30/92-93	192,221	712,440	787,278	787,948	727,000	745,000	14,560	32,560	0.378	0.388
6/30/93-94	203,766	1,165,388	1,697,113	1,401,746	1,401,000	1,697,000	235,612	531,612	0.688	0.833
6/30/94-95	204,442	1,067,175	1,263,155	1,259,785	1,078,423	1,111,476	11,248	44,301	0.527	0.544
6/30/95-96	211,792	835,707	1,005,358	1,004,001	856,000	880,000	20,293	44,293	0.404	0.416
6/30/96-97	240,609	700,394	886,675	886,454	886,000	887,000	185,606	186,606	0.368	0.369
6/30/97-98	239,416	649,150	790,373	794,588	790,000	794,000	140,850	144,850	0.330	0.332
6/30/98-99	240,064	864,680	1,082,452	1,081,560	1,080,000	1,083,000	215,320	218,320	0.450	0.451
6/30/99-00	262,199	1,528,038	2,018,554	1,994,107	1,993,000	2,019,000	464,962	490,962	0.760	0.770
6/30/00-01	274,893	1,538,062	2,045,177	2,021,721	2,022,000	2,045,000	483,938	506,938	0.736	0.744
6/30/01-02	264,006	1,065,189	1,409,690	1,403,912	1,404,000	1,410,000	338,811	344,811	0.532	0.534
6/30/02-03	261,467	926,397	1,264,283	1,262,234	1,261,000	1,265,000	334,603	338,603	0.482	0.484
6/30/03-04	274,600	413,829	588,844	605,699	589,000	606,000	175,171	192,171	0.214	0.221
6/30/04-05	253,275	754,344	1,162,645	1,149,175	1,149,000	1,163,000	394,656	408,656	0.454	0.459
6/30/05-06	329,111	639,587	1,202,222	1,362,285	1,203,000	1,363,000	563,413	723,413	0.366	0.414
6/30/06-07	343,116	456,371	960,971	1,174,351	961,000	1,174,000	504,629	717,629	0.280	0.342
6/30/07-08	346,351	537,365	1,336,219	1,423,473	1,260,000	1,499,000	722,635	961,635	0.364	0.433
6/30/08-09	338,291	332,848	1,875,395	1,546,156	1,546,000	1,875,000	1,213,152	1,542,152	0.457	0.554
Total	5,931,533	32,249,946	40,480,117	37,858,389	39,847,067	43,108,237	7,597,121	10,858,291		
Tot 6/30/84-09	5,931,533	29,697,791	40,026,857	37,858,389	36,898,247	39,999,041	7,200,456	10,301,250	0.622	0.674

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 5, Exhibit 1, Page 1 + Section 5, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		1,455,812			1,455,812	1,462,132	0	6,320		
6/30/82-83		327,566	329,631		327,672	335,649	106	8,083		
6/30/83-84		1,494,800	1,504,086		1,523,932	1,553,573	29,132	58,773		
6/30/84-85	90,571	1,015,470	1,021,847	1,022,257	1,033,339	1,052,834	17,869	37,364	1.141	1.162
6/30/85-86	97,399	2,733,296	2,763,927	2,762,435	2,763,432	2,768,662	30,136	35,367	2.837	2.843
6/30/86-87	111,929	3,523,471	4,153,862	3,570,312	3,571,000	3,861,730	47,529	338,260	3.190	3.450
6/30/87-88	131,134	2,997,192	3,314,889	3,053,684	3,054,000	3,184,629	56,808	187,437	2.329	2.429
6/30/88-89	151,343	3,112,432	3,209,921	3,221,386	3,167,349	3,268,054	54,917	155,622	2.093	2.159
6/30/89-90	112,226	3,797,545	3,950,382	3,956,893	3,865,186	3,987,422	67,641	189,877	3.444	3.553
6/30/90-91	112,428	1,403,520	1,461,490	1,461,085	1,427,065	1,473,696	23,545	70,176	1.269	1.311
6/30/91-92	122,872	2,187,492	2,265,249	2,264,080	2,221,204	2,296,867	33,712	109,375	1.808	1.869
6/30/92-93	129,919	1,033,363	1,070,542	1,070,099	1,048,102	1,085,031	14,739	51,668	0.807	0.835
6/30/93-94	142,718	2,426,870	2,524,276	2,521,366	2,521,000	2,524,000	94,130	97,130	1.766	1.769
6/30/94-95	152,788	936,521	960,786	961,038	961,000	961,000	24,479	24,479	0.629	0.629
6/30/95-96	164,973	874,675	900,191	900,789	886,424	913,492	11,749	38,817	0.537	0.554
6/30/96-97	193,880	616,419	631,241	633,608	626,838	645,086	10,419	28,667	0.323	0.333
6/30/97-98	192,992	996,296	1,051,819	1,051,568	1,011,642	1,045,306	15,345	49,010	0.524	0.542
6/30/98-99	191,535	933,878	977,336	978,784	977,000	979,000	43,122	45,122	0.510	0.511
6/30/99-00	169,941	863,844	934,644	933,327	933,000	935,000	69,156	71,156	0.549	0.550
6/30/00-01	171,840	934,992	1,006,151	1,005,563	1,005,000	1,006,000	70,008	71,008	0.585	0.585
6/30/01-02	183,110	486,871	538,314	541,365	538,000	541,000	51,129	54,129	0.294	0.295
6/30/02-03	195,846	841,757	979,937	978,469	978,000	981,000	136,243	139,243	0.499	0.501
6/30/03-04	229,073	1,258,023	1,478,099	1,474,261	1,474,000	1,495,100	215,977	237,077	0.643	0.653
6/30/04-05	211,119	340,972	418,120	523,442	418,000	533,600	77,028	192,628	0.198	0.253
6/30/05-06	266,856	999,362	1,405,823	1,385,088	1,383,000	1,426,250	383,638	426,888	0.518	0.534
6/30/06-07	273,358	589,081	941,940	1,073,070	942,000	1,089,700	352,919	500,619	0.345	0.399
6/30/07-08	299,832	981,297	2,144,021	1,942,853	1,943,000	2,172,350	961,703	1,191,053	0.648	0.725
6/30/08-09	306,218	274,177	1,319,409	1,435,688	1,276,000	1,503,550	1,001,823	1,229,373	0.417	0.491
Total	4,405,899	39,436,993	43,257,934	40,722,511	43,331,996	45,081,713	3,895,003	5,644,719		
Tot 6/30/84-09	4,405,899	36,158,815	41,424,217	40,722,511	40,024,580	41,730,359	3,865,765	5,571,543	0.908	0.947

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 6, Exhibit 1, Page 1 + Section 6, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		3,099,642			4,259,502	4,794,952	1,159,860	1,695,311		
6/30/82-83		796,317	798,148		811,448	826,578	15,131	30,261		
6/30/83-84		945,504	947,645		963,997	982,491	18,493	36,987		
6/30/84-85	249,035	1,604,929	1,608,490	1,608,649	1,635,334	1,665,739	30,405	60,810	0.657	0.669
6/30/85-86	267,811	2,253,255	2,259,781	2,259,418	2,261,269	2,263,190	8,014	9,935	0.844	0.845
6/30/86-87	307,762	2,628,713	2,867,016	2,637,700	2,639,246	2,869,437	10,533	240,723	0.858	0.932
6/30/87-88	360,569	4,463,214	5,195,722	4,480,660	4,540,693	4,655,773	77,479	192,559	1.259	1.291
6/30/88-89	371,471	1,940,364	1,951,088	1,952,911	1,971,514	2,016,971	31,150	76,607	0.531	0.543
6/30/89-90	374,816	3,716,110	3,759,561	3,750,576	3,751,000	3,760,000	34,890	43,890	1.001	1.003
6/30/90-91	350,048	1,866,079	1,900,388	1,900,304	1,901,000	1,901,000	34,921	34,921	0.543	0.543
6/30/91-92	356,084	2,118,566	2,644,859	2,190,661	2,249,749	2,417,943	131,183	299,377	0.632	0.679
6/30/92-93	383,583	1,653,844	1,718,259	1,718,113	1,679,326	1,716,282	25,482	62,438	0.438	0.447
6/30/93-94	439,244	1,529,149	1,969,607	1,632,550	1,632,000	1,969,000	102,851	439,851	0.372	0.448
6/30/94-95	437,287	1,897,317	2,013,838	2,013,827	2,014,000	2,014,000	116,683	116,683	0.461	0.461
6/30/95-96	459,490	1,850,889	1,988,399	1,989,095	1,894,428	1,932,499	43,539	81,610	0.412	0.421
6/30/96-97	540,181	1,609,062	1,762,407	1,766,649	1,762,000	1,766,000	152,938	156,938	0.326	0.327
6/30/97-98	518,613	2,065,700	2,334,019	2,331,444	2,331,000	2,335,000	265,300	269,300	0.449	0.450
6/30/98-99	536,523	1,518,747	1,747,521	1,752,471	1,748,000	1,821,000	229,253	302,253	0.326	0.339
6/30/99-00	583,551	1,664,483	1,928,721	1,938,872	1,929,000	1,939,000	264,517	274,517	0.331	0.332
6/30/00-01	628,836	1,989,472	2,409,740	2,413,764	2,410,000	2,414,000	420,528	424,528	0.383	0.384
6/30/01-02	646,243	2,551,118	3,199,317	3,189,398	3,186,000	3,202,000	634,882	650,882	0.493	0.495
6/30/02-03	630,315	1,606,351	2,096,138	2,106,925	2,097,000	2,107,000	490,649	500,649	0.333	0.334
6/30/03-04	647,755	1,893,798	2,593,277	2,595,167	2,593,000	2,685,000	699,202	791,202	0.400	0.415
6/30/04-05	784,398	1,563,467	2,246,333	2,555,516	2,246,000	2,556,000	682,533	992,533	0.286	0.326
6/30/05-06	747,901	1,773,475	2,912,420	2,979,999	2,913,000	3,085,000	1,139,525	1,311,525	0.389	0.412
6/30/06-07	810,859	1,326,670	2,487,504	2,908,207	2,487,000	2,908,000	1,160,330	1,581,330	0.307	0.359
6/30/07-08	834,198	1,325,906	3,354,579	3,436,302	3,354,000	3,436,000	2,028,094	2,110,094	0.402	0.412
6/30/08-09	836,836	581,844	3,244,569	3,460,131	3,192,000	3,512,000	2,610,156	2,930,156	0.381	0.420
Total	13,103,412	53,833,986	63,939,345	61,569,309	66,452,507	69,551,856	12,618,521	15,717,870		
Tot 6/30/84-09	13,103,412	48,992,523	62,193,552	61,569,309	60,417,559	62,947,834	11,425,036	13,955,311	0.461	0.480

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 7, Exhibit 1, Page 1 + Section 7, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Total Indemnity (Including Lump Sums) + Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		43,254,236			50,951,744	56,396,672	7,697,508	13,142,436		
6/30/82-83		5,665,089	6,365,161		6,206,741	6,668,187	541,652	1,003,099		
6/30/83-84		8,579,532	9,755,400		9,508,698	10,226,891	929,166	1,647,359		
6/30/84-85	714,731	17,010,388	19,786,623	18,527,654	18,527,000	19,786,000	1,516,612	2,775,612	2.592	2.768
6/30/85-86	768,615	20,346,156	23,588,282	22,471,858	22,472,000	23,589,000	2,125,844	3,242,844	2.924	3.069
6/30/86-87	883,277	20,212,232	23,829,888	22,754,032	22,752,000	23,832,000	2,539,768	3,619,768	2.576	2.698
6/30/87-88	1,346,746	28,801,183	33,598,307	33,309,565	33,306,000	35,121,000	4,504,817	6,319,817	2.473	2.608
6/30/88-89	1,465,984	26,816,499	31,540,869	30,780,738	30,778,000	31,544,000	3,961,501	4,727,501	2.099	2.152
6/30/89-90	1,473,293	25,917,287	31,013,901	30,698,026	30,694,000	31,018,000	4,776,713	5,100,713	2.083	2.105
6/30/90-91	1,383,691	22,990,966	28,018,312	27,989,540	27,989,000	28,019,000	4,998,034	5,028,034	2.023	2.025
6/30/91-92	1,341,919	13,989,975	17,321,876	17,299,352	17,299,000	18,046,000	3,309,025	4,056,025	1.289	1.345
6/30/92-93	1,324,022	10,785,755	14,561,565	13,808,533	13,808,000	14,562,000	3,022,245	3,776,245	1.043	1.100
6/30/93-94	1,400,303	12,319,524	15,891,517	15,860,920	15,861,000	15,892,000	3,541,477	3,572,477	1.133	1.135
6/30/94-95	1,472,926	10,809,056	14,250,722	14,238,759	14,235,000	14,254,000	3,425,944	3,444,944	0.966	0.968
6/30/95-96	1,556,911	10,635,499	14,544,059	14,524,930	14,516,000	15,167,000	3,880,501	4,531,501	0.932	0.974
6/30/96-97	1,953,175	11,641,221	16,123,934	16,149,862	16,124,000	16,823,000	4,482,779	5,181,779	0.826	0.861
6/30/97-98	1,890,544	9,919,419	13,953,946	14,038,676	13,954,000	14,633,000	4,034,581	4,713,581	0.738	0.774
6/30/98-99	2,053,169	10,488,495	15,246,354	15,349,807	15,246,000	15,982,000	4,757,505	5,493,505	0.743	0.778
6/30/99-00	2,177,952	12,118,007	18,363,413	18,406,104	18,363,000	19,166,000	6,244,993	7,047,993	0.843	0.880
6/30/00-01	2,170,750	11,090,574	17,288,227	17,355,804	17,289,000	18,068,000	6,198,426	6,977,426	0.796	0.832
6/30/01-02	2,261,335	11,561,934	18,650,697	18,704,837	18,651,000	19,497,000	7,089,066	7,935,066	0.825	0.862
6/30/02-03	2,228,246	11,721,116	19,873,662	19,878,882	19,843,000	20,730,000	8,121,884	9,008,884	0.891	0.930
6/30/03-04	2,222,588	10,422,780	18,398,124	18,473,797	18,398,000	19,212,000	7,975,220	8,789,220	0.828	0.864
6/30/04-05	2,274,629	11,771,684	21,408,653	21,538,068	20,863,000	21,612,000	9,091,316	9,840,316	0.917	0.950
6/30/05-06	2,445,102	9,525,892	19,281,525	20,901,728	19,170,000	20,901,000	9,644,108	11,375,108	0.784	0.855
6/30/06-07	2,575,811	8,920,327	19,735,680	22,264,610	18,662,000	22,719,000	9,741,673	13,798,673	0.725	0.882
6/30/07-08	2,745,738	7,630,720	24,438,262	25,207,273	22,791,000	26,268,000	15,160,280	18,637,280	0.830	0.957
6/30/08-09	2,711,675	3,529,053	25,040,723	25,245,223	22,889,000	26,813,000	19,359,947	23,283,947	0.844	0.989
Total	44,843,132	408,474,597	531,869,685	515,778,579	571,147,183	606,545,750	162,672,586	198,071,153		
Tot 6/30/84-09	44,843,132	350,975,740	515,749,123	515,778,579	504,480,000	533,254,000	153,504,260	182,278,260	1.125	1.189

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) - (9) = Sum of Section 8, Exhibit 1, Page 1 + Section 8, Exhibit 2, Page 1
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Total Indemnity (Including Lump Sums) + Medical

Calculation of Implied Development Factors

(1)	(2)	(3)	(4)
Accident Year	Pd Loss Including Lump Sum	Implied Cumulative LDF	Selected Ult Loss Including Lump Sum
All Prior Yrs	92,253,007	1.280	118,064,785
6/30/82-83	17,112,267	1.138	19,481,461
6/30/83-84	24,997,723	1.135	28,369,022
6/30/84-85	37,192,995	1.096	40,749,244
6/30/85-86	50,201,521	1.100	55,206,098
6/30/86-87	55,360,403	1.084	60,015,707
6/30/87-88	79,486,717	1.121	89,116,486
6/30/88-89	78,726,286	1.111	87,501,197
6/30/89-90	76,509,116	1.105	84,549,981
6/30/90-91	63,331,780	1.170	74,118,380
6/30/91-92	41,886,294	1.146	48,017,381
6/30/92-93	28,985,029	1.173	33,993,871
6/30/93-94	31,270,933	1.193	37,292,500
6/30/94-95	28,783,199	1.202	34,589,450
6/30/95-96	27,231,121	1.225	33,349,422
6/30/96-97	27,618,995	1.273	35,145,962
6/30/97-98	29,444,070	1.276	37,579,974
6/30/98-99	28,013,679	1.322	37,033,500
6/30/99-00	31,878,827	1.362	43,430,500
6/30/00-01	36,594,520	1.380	50,517,500
6/30/01-02	32,230,285	1.434	46,224,000
6/30/02-03	31,761,354	1.492	47,389,000
6/30/03-04	31,196,071	1.538	47,976,050
6/30/04-05	30,838,920	1.643	50,668,300
6/30/05-06	25,116,273	1.886	47,363,125
6/30/06-07	20,770,722	2.247	46,674,850
6/30/07-08	17,483,251	3.140	54,905,175
6/30/08-09	8,348,005	6.893	57,539,275
Total	1,084,623,365		1,446,862,195

NOTES:
(2) From Summary Exhibit 8, Page 1, Column (3)
(3) = (4) / (2)
(4) From Summary Exhibit 8, Page 1, Av erage of Columns (6) and (7)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4

Allocation Methodology

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	5 Year	Initial Loss Costs		Expected Losses				5 Year	Credibility	Distribution	CURRENT		PRIOR	
	Average							Average	Weighted	of Total	Reserve Estimate		Reserve Estimate	
Cluster	Payroll	Indemnity	Medical	Indemnity	Medical	Total	Credibility	Ult Loss	Ult Loss	Losses	Low End	High End	Low End	High End
Berkshire Community College	9,178,552	0.25	0.13	22,946	11,932	34,878	15.5%	55,669	38,103	1.4%	171,144	213,180	166,604	217,848
Bridgewater State College	48,766,239	0.25	0.13	121,916	63,396	185,312	70.9%	174,629	177,736	6.3%	798,321	994,403	673,362	880,473
Bristol Community College	17,687,446	0.25	0.13	44,219	22,994	67,212	26.1%	33,620	58,434	2.1%	262,464	326,930	184,819	241,666
Bunker Hill Community College	20,992,971	0.25	0.13	52,482	27,291	79,773	51.2%	22,524	50,455	1.8%	226,625	282,288	293,125	383,284
Cape Cod Community College	11,823,553	0.25	0.13	29,559	15,371	44,930	19.1%	72,734	50,247	1.8%	225,690	281,123	241,307	315,527
Fitchburg State College	27,079,319	0.25	0.13	67,698	35,203	102,901	57.5%	118,994	112,158	4.0%	503,768	627,503	449,996	588,404
Framingham State College	24,065,216	0.25	0.13	60,163	31,285	91,448	32.5%	127,391	103,127	3.7%	463,204	576,975	450,895	589,580
Greenfield Community College	10,703,347	0.25	0.13	26,758	13,914	40,673	34.9%	27,679	36,143	1.3%	162,340	202,214	166,032	217,100
Holyoke Community College	20,113,496	0.25	0.13	50,284	26,148	76,431	50.1%	38,655	57,490	2.0%	258,222	321,646	277,820	363,272
Mass Bay Community College	13,256,017	0.25	0.13	33,140	17,233	50,373	21.0%	22,563	44,545	1.6%	200,079	249,222	147,383	192,714
Mass College of Art	18,237,194	0.25	0.13	45,593	23,708	69,301	47.7%	33,966	52,448	1.9%	235,577	293,439	273,832	358,056
Mass Maritime Academy	13,160,007	0.25	0.13	32,900	17,108	50,008	39.7%	52,775	51,106	1.8%	229,549	285,930	194,200	253,931
Massachusetts College of Liberal Arts	14,460,360	0.25	0.13	36,151	18,798	54,949	22.4%	33,372	50,109	1.8%	225,069	280,351	196,806	257,339
Massasoit Community College	20,676,889	0.25	0.13	51,692	26,880	78,572	50.8%	85,738	82,215	2.9%	369,277	459,978	405,977	530,847
Middlesex Community College	30,329,426	0.25	0.13	75,824	39,428	115,252	60.3%	14,005	54,239	1.9%	243,619	303,457	408,956	534,741
Mt Wachusett Community College	15,322,727	0.25	0.13	38,307	19,920	58,226	23.5%	39,681	53,876	1.9%	241,990	301,428	228,796	299,169
North Essex Community College	19,712,032	0.25	0.13	49,280	25,626	74,906	49.6%	31,299	53,260	1.9%	239,225	297,983	289,886	379,049
North Shore Community College	21,934,676	0.25	0.13	54,837	28,515	83,352	52.3%	10,703	45,351	1.6%	203,701	253,733	209,645	274,127
Quinsigamond Community College	17,324,687	0.25	0.13	43,312	22,522	65,834	25.7%	105,937	76,154	2.7%	342,052	426,067	338,537	442,664
Roxbury Community College	9,825,501	0.25	0.13	24,564	12,773	37,337	16.4%	25,534	35,398	1.3%	158,996	198,048	145,247	189,922
Salem State College	47,454,106	0.25	0.13	118,635	61,690	180,326	70.4%	194,972	190,630	6.8%	856,232	1,066,539	825,021	1,078,779
Springfield Tech Community College	22,537,774	0.25	0.13	56,344	29,299	85,644	53.0%	133,201	110,841	3.9%	497,854	620,137	358,039	468,164
UMass (Boston)	105,227,160	0.25	0.13	263,068	136,795	399,863	84.0%	231,950	258,768	9.2%	1,162,283	1,447,761	1,059,616	1,385,530
UMass (Dartmouth)	72,558,480	0.25	0.13	181,396	94,326	275,722	78.4%	327,199	316,076	11.3%	1,419,687	1,768,389	1,677,766	2,193,809
University of Lowell	89,715,801	0.25	0.13	224,290	116,631	340,920	81.8%	393,048	383,546	13.7%	1,722,735	2,145,872	1,490,414	1,948,832
Westfield State College	28,315,490	0.25	0.13	70,789	36,810	107,599	58.6%	228,034	178,180	6.3%	800,314	996,887	673,646	880,845
Worcester State College	25,246,394	0.25	0.13	63,116	32,820	95,936	55.8%	83,007	88,722	3.2%	398,505	496,385	350,685	458,549
Total	775,704,862			1,939,262	1,008,416			2,718,882	2,809,357		12,618,521	15,717,870	12,178,413	15,924,221

NOTES:

(1) Provided by Commonwealth of Massachusetts; From Summary Exhibit 10, Page 3
(2) From Section 7, Exhibit 1, Page 4
(3) From Section 7, Exhibit 2, Page 4
(4) = (1) * (2) / 100
(5) = (1) * (3) / 100
(6) = (4) + (5)
(7) = P / (P+K); where P = Column (1) and K = 20M (if CV < 1) and K = 50M (if CV > 1). CV is the Coefficient of Variation, as calculated on Summary Exhibit 10, Page 2.
(8) = The Average of Columns (2) - (6) plus The Average of Columns (8) - (12) on Summary Exhibit 10 Page 4.
(9) = (7) * (8) + [1.00 - (7)] * (6)
(10) = (9) / Total (9)
(11) = The Total from Summary Exhibit 8, Page7, Column (8), allocated according to Column (10) of this exhibit.
(12) = The Total from Summary Exhibit 8, Page7, Column (9), allocated according to Column (10) of this exhibit.
(13) & (14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4

Estimated Loss Costs (Indemnity and Medical Combined)

	(1)	(2)	(3)	(4)	(5)	(6)
Cluster	2009	2008	2007	2006	2005	Coefficient of Variation
Berkshire Community College	0.117	0.748	0.187	1.931	0.024	1.322
Bridgewater State College	0.372	0.712	0.312	0.117	0.223	0.650
Bristol Community College	0.661	0.019	0.075	0.096	0.047	1.508
Bunker Hill Community College	0.091	0.265	0.023	0.110	0.024	0.960
Cape Cod Community College	0.027	0.389	1.903	0.377	0.499	1.140
Fitchburg State College	0.345	0.545	0.686	0.443	0.149	0.469
Framingham State College	0.021	1.639	0.750	0.051	0.052	1.404
Greenfield Community College	0.158	0.057	0.046	0.492	0.601	0.955
Holyoke Community College	0.252	0.033	0.332	0.317	0.017	0.809
Mass Bay Community College	0.030	0.591	0.108	0.047	0.051	1.448
Mass College of Art	0.421	0.102	0.101	0.184	0.095	0.772
Mass Maritime Academy	0.863	0.035	0.561	0.370	0.167	0.820
Massachusetts College of Liberal Arts	1.026	0.059	0.007	0.007	0.000	2.053
Massasoit Community College	0.270	0.602	0.158	0.614	0.447	0.482
Middlesex Community College	0.062	0.029	0.059	0.076	0.006	0.609
Mt Wachusett Community College	0.282	0.023	0.040	0.159	0.871	1.269
North Essex Community College	0.133	0.255	0.005	0.036	0.378	0.962
North Shore Community College	0.048	0.020	0.066	0.063	0.049	0.367
Quinsigamond Community College	0.122	1.553	0.058	1.096	0.202	1.117
Roxbury Community College	0.015	1.150	0.000	0.002	0.078	2.029
Salem State College	0.378	0.248	0.966	0.304	0.117	0.817
Springfield Tech Community College	0.761	1.000	0.071	0.149	0.949	0.759
UMass (Boston)	0.467	0.076	0.238	0.206	0.083	0.743
UMass (Dartmouth)	0.438	0.332	0.317	0.842	0.321	0.499
University of Lowell	0.347	0.173	0.237	0.573	1.014	0.727
Westfield State College	0.250	1.036	0.603	1.228	1.028	0.478
Worcester State College	0.652	0.141	0.128	0.155	0.578	0.788

NOTES:

(1) - (5) - Sum of Indemnity + Medical Losses from Summary Exhibit 10, Page 4 divided by Payroll from Summary Exhibit 10, Page 3.

(6) = Std Deviation / Mean of Columns (1) - (5) Used to calculate "ballast factor" (K) on Summary Exhibit 10, Page 1, Column (7).

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4

Payroll

Cluster	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
Berkshire Community College	9,549,565	10,158,105	9,155,431	8,915,545	8,114,116	7,941,363	8,777,590	9,149,582	9,304,137	8,031,065	7,596,027	7,199,052	7,516,297
Bridgewater State College	52,652,849	52,483,127	49,576,401	46,831,705	42,287,112	38,972,441	37,526,138	36,422,921	33,938,426	32,156,945	30,004,595	29,521,390	30,488,710
Bristol Community College	19,336,247	18,623,569	17,360,951	16,845,691	16,270,773	16,078,636	15,662,029	15,503,927	16,291,022	13,963,273	13,031,546	11,788,805	11,454,628
Bunker Hill Community College	22,350,623	22,877,018	21,428,548	20,183,373	18,125,292	17,109,843	16,751,827	16,551,942	16,487,356	14,276,709	14,053,219	17,388,360	16,563,180
Cape Cod Community College	13,893,719	12,286,889	11,471,904	10,891,309	10,573,943	10,117,005	10,560,228	10,207,653	10,660,754	9,445,737	9,090,645	8,685,711	9,153,214
Fitchburg State College	28,292,459	28,458,301	27,466,412	26,381,947	24,797,477	23,915,999	24,689,787	24,871,073	24,130,040	23,718,893	22,253,499	21,911,855	22,761,715
Framingham State College	25,771,673	26,214,323	23,896,137	22,946,519	21,497,429	20,408,571	20,722,668	20,775,006	19,206,201	18,773,220	17,740,424	17,964,393	19,163,317
Greenfield Community College	11,317,293	11,581,539	10,701,787	9,728,864	10,187,252	9,698,584	9,082,435	9,027,647	8,545,358	7,267,509	7,255,597	6,868,493	7,231,994
Holyoke Community College	22,287,377	22,042,258	20,022,607	19,032,683	17,182,554	16,917,435	16,790,936	17,194,206	17,108,969	14,197,924	13,089,917	12,746,217	13,502,590
Mass Bay Community College	14,498,441	13,861,574	13,481,993	12,454,119	11,983,957	11,870,075	11,805,793	12,177,120	11,795,413	10,238,131	10,132,893	10,124,922	11,155,020
Mass College of Art	20,162,055	19,772,872	18,583,602	17,180,736	15,486,705	14,109,170	13,657,513	13,820,033	13,110,102	12,397,696	11,426,156	11,170,843	11,103,577
Mass Maritime Academy	14,162,523	14,843,176	12,822,306	12,065,007	11,907,025	10,048,956	10,121,295	10,304,495	9,962,379	9,581,059	8,880,463	9,318,847	9,675,036
Massachusetts College of Liberal Arts	15,190,355	15,071,257	15,354,823	13,949,312	12,736,055	12,213,793	12,518,354	12,714,911	12,043,542	11,982,225	11,182,241	11,202,547	11,631,637
Massasoit Community College	23,591,710	21,986,777	20,065,965	19,294,440	18,445,552	17,778,599	17,876,885	18,316,626	18,346,493	16,690,111	15,004,651	14,387,704	15,514,013
Middlesex Community College	31,753,125	34,598,335	28,570,683	28,493,841	28,231,147	26,526,523	23,560,947	22,965,209	22,118,297	20,674,170	18,548,764	16,966,056	16,734,320
Mt Wachusett Community College	16,088,892	16,544,556	15,630,743	14,603,372	13,746,073	13,037,061	12,722,276	12,102,734	12,140,405	10,857,070	9,802,488	9,096,387	9,516,957
North Essex Community College	20,990,461	20,775,868	20,045,158	18,831,994	17,916,679	17,100,550	16,465,374	17,170,746	18,016,274	16,345,751	15,339,880	13,434,677	13,164,011
North Shore Community College	23,565,044	23,296,648	22,171,163	20,967,179	19,673,349	18,725,424	18,558,856	18,938,133	19,639,070	16,824,658	14,463,762	13,805,920	15,097,744
Quinsigamond Community College	19,811,937	18,532,245	17,013,353	16,176,692	15,089,211	14,517,485	14,157,008	14,000,863	13,841,106	11,859,673	11,167,302	10,401,690	10,908,293
Roxbury Community College	10,379,499	10,334,179	9,757,163	9,514,789	9,141,873	8,659,643	9,312,879	9,418,576	9,470,371	9,086,429	8,996,054	9,067,106	8,884,372
Salem State College	52,089,833	51,537,448	48,157,643	45,200,558	40,285,048	36,785,550	37,280,783	63,880,501	36,811,463	39,369,695	32,442,454	29,558,364	33,443,950
Springfield Tech Community College	23,304,165	23,414,497	22,168,600	22,134,864	21,666,745	21,326,245	21,445,470	21,485,964	21,534,118	18,349,286	18,152,180	17,113,163	17,828,241
UMass (Boston)	113,406,692	112,377,894	108,841,196	103,333,983	88,176,037	88,176,037	85,330,476	88,900,558	90,541,396	84,902,092	75,764,890	73,723,782	74,256,873
UMass (Dartmouth)	78,279,054	78,946,807	76,534,603	71,780,269	57,251,665	57,512,689	53,356,405	52,985,925	51,966,847	47,865,218	43,182,835	40,098,771	41,101,901
University of Lowell	94,554,306	97,058,337	95,743,394	89,020,188	72,202,781	72,531,587	68,018,583	75,795,699	69,936,484	63,517,235	59,085,332	57,365,786	63,571,590
Westfield State College	32,381,375	29,530,650	28,079,620	26,804,229	24,781,575	22,703,355	21,350,027	22,079,337	20,910,100	21,424,715	20,211,829	19,641,800	19,538,861
Worcester State College	27,174,333	26,989,939	25,305,730	24,338,146	22,423,822	20,331,813	19,878,337	20,118,530	18,317,039	17,420,661	16,475,117	16,055,367	16,656,998
UMass (Amherst)	338,290,566	346,351,152	343,116,093	329,110,631	253,274,792	274,600,044	261,467,034	264,006,172	274,893,301	262,198,603	240,064,320	239,416,217	240,608,859
UMass (Medical Center)	306,218,475	299,831,691	273,357,641	266,855,889	211,119,178	229,072,802	195,846,123	183,109,874	171,839,506	169,940,522	191,534,815	192,992,251	193,880,177
Total	1,481,344,647	1,480,381,031	1,405,881,649	1,343,867,874	1,134,575,217	1,148,787,278	1,085,294,056	1,113,995,963	1,072,905,969	1,013,356,275	965,973,895	949,016,476	972,108,075

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4

Estimated Ultimate Losses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Indemnity							
Cluster	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Berkshire Community College	0	147,408	5,641	35,726	420	1,947	24,762	11,486	40,221	10,735
Bridgewater State College	30,402	27,746	111,688	307,302	119,645	63,842	26,829	43,049	66,357	76,287
Bristol Community College	184	1,478	0	0	65,071	7,433	14,659	12,992	3,555	62,727
Bunker Hill Community College	905	8,499	0	32,649	11,053	3,532	13,754	4,987	27,946	9,294
Cape Cod Community College	7,370	11,681	138,372	12,175	0	45,385	29,337	79,959	35,675	3,717
Fitchburg State College	8,997	90,143	168,130	129,880	70,219	27,915	26,687	20,339	25,166	27,496
Framingham State College	5,025	2,634	127,128	339,775	0	6,204	9,041	52,051	89,809	5,291
Greenfield Community College	35,217	22,717	0	929	0	25,996	25,115	4,881	5,626	17,913
Holyoke Community College	1,787	35,045	42,093	0	20,115	1,111	25,352	24,330	7,313	36,130
Mass Bay Community College	2,728	407	8,201	66,337	0	3,421	5,493	6,341	15,546	4,343
Mass College of Art	3,935	2,900	11,832	6,182	63,831	10,732	28,631	6,942	13,888	20,958
Mass Maritime Academy	16,332	19,520	24,382	0	67,233	3,515	25,096	47,556	5,258	54,983
Massachusetts College of Liberal Arts	0	0	0	0	89,650	0	1,026	1,002	8,905	66,276
Massasoit Community College	41,745	48,267	20,754	61,083	26,082	40,751	70,117	10,853	71,357	37,683
Middlesex Community College	0	4,984	5,024	3,083	12,369	1,800	16,789	11,905	6,871	7,201
Mt Wachusett Community College	110,872	9,988	0	0	3,849	8,875	13,301	6,209	3,826	41,484
North Essex Community College	65,610	2,981	0	24,792	9,748	2,091	3,777	1,064	28,184	18,246
North Shore Community College	960	5,977	7,239	0	0	8,743	7,145	7,388	4,689	11,374
Quinsigamond Community College	18,333	144,550	6,191	233,008	18,537	12,144	32,751	3,638	54,883	5,651
Roxbury Community College	5,795	0	0	103,592	0	1,297	158	0	15,297	1,532
Salem State College	18,069	78,612	347,144	68,484	99,348	29,244	58,767	118,038	59,496	97,659
Springfield Tech Community College	148,166	9,835	9,115	74,593	94,747	57,520	23,220	6,519	159,600	82,692
UMass (Boston)	46,005	189,838	212,401	55,168	425,233	26,801	22,950	46,412	30,139	104,807
UMass (Dartmouth)	120,298	521,887	152,675	199,567	185,155	63,655	82,375	89,715	62,577	158,089
University of Lowell	524,267	387,139	166,749	101,869	225,898	208,179	122,962	59,929	66,480	101,768
Westfield State College	207,583	205,321	45,847	238,407	52,001	47,240	123,777	123,357	67,605	29,030
Worcester State College	80,660	24,962	17,322	14,035	112,192	48,914	12,856	15,181	24,059	64,854
Total	1,501,245	2,004,519	1,627,928	2,108,636	1,772,396	758,289	846,727	816,123	1,000,330	1,158,217
Age to Ultimate LDF's	1.616	1.847	2.180	2.944	6.181	1.195	1.230	1.407	1.641	3.925

NOTES:

(1) - (10) - Cumualtive Paid Losses from Summary Exhibit 10, Page 5 multiplied by Age to Ultimate LDF's at the bottom of this exhibit.

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4

Cumulative Paid Losses as of 6/30/09

	Indemnity					Medical				
Cluster	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Berkshire Community College	0	79,806	2,587	12,137	68	1,629	20,127	8,163	24,508	2,735
Bridgewater State College	18,811	15,021	51,226	104,400	19,356	53,424	21,807	30,595	40,434	19,437
Bristol Community College	114	800	0	0	10,527	6,220	11,915	9,234	2,166	15,982
Bunker Hill Community College	560	4,602	0	11,092	1,788	2,956	11,179	3,544	17,029	2,368
Cape Cod Community College	4,560	6,324	63,464	4,136	0	37,979	23,846	56,827	21,738	947
Fitchburg State College	5,567	48,803	77,113	44,124	11,360	23,360	21,691	14,455	15,334	7,006
Framingham State College	3,109	1,426	58,307	115,432	0	5,192	7,349	36,993	54,724	1,348
Greenfield Community College	21,791	12,299	0	316	0	21,754	20,414	3,469	3,428	4,564
Holyoke Community College	1,106	18,973	19,306	0	3,254	930	20,607	17,291	4,456	9,206
Mass Bay Community College	1,688	220	3,761	22,537	0	2,863	4,465	4,506	9,473	1,107
Mass College of Art	2,435	1,570	5,427	2,100	10,327	8,981	23,272	4,934	8,462	5,340
Mass Maritime Academy	10,106	10,568	11,183	0	10,877	2,942	20,398	33,798	3,204	14,009
Massachusetts College of Liberal Arts	0	0	0	0	14,504	0	834	712	5,426	16,887
Massasoit Community College	25,830	26,132	9,519	20,752	4,220	34,101	56,993	7,713	43,480	9,601
Middlesex Community College	0	2,698	2,304	1,047	2,001	1,506	13,647	8,461	4,187	1,835
Mt Wachusett Community College	68,604	5,408	0	0	623	7,427	10,812	4,413	2,331	10,570
North Essex Community College	40,597	1,614	0	8,423	1,577	1,750	3,070	756	17,173	4,649
North Shore Community College	594	3,236	3,320	0	0	7,316	5,807	5,251	2,857	2,898
Quinsigamond Community College	11,344	78,259	2,840	79,160	2,999	10,162	26,621	2,585	33,442	1,440
Roxbury Community College	3,586	0	0	35,193	0	1,085	128	0	9,321	390
Salem State College	11,180	42,560	159,218	23,266	16,073	24,472	47,767	83,889	36,253	24,883
Springfield Tech Community College	91,680	5,325	4,181	25,342	15,328	48,134	18,874	4,633	97,250	21,069
UMass (Boston)	28,466	102,777	97,418	18,742	68,794	22,427	18,654	32,985	18,365	26,704
UMass (Dartmouth)	74,436	282,547	70,025	67,799	29,954	53,268	66,956	63,760	38,130	40,280
University of Lowell	324,398	209,595	76,480	34,608	36,546	174,208	99,946	42,591	40,508	25,930
Westfield State College	128,445	111,160	21,028	80,994	8,413	39,531	100,609	87,670	41,194	7,397
Worcester State College	49,909	13,514	7,945	4,768	18,150	40,932	10,450	10,789	14,660	16,524
Total	928,916	1,085,237	746,652	716,370	286,738	634,551	688,238	580,019	609,536	295,106

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4

Calendar Year 2009 Paid Losses

	Indemnity					Medical				
Cluster	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Berkshire Community College	0	9,919	0	1,456	68	0	1,390	238	18,663	2,735
Bridgewater State College	-4,600	0	19,019	86,065	19,356	0	0	2,918	10,746	19,437
Bristol Community College	0	150	0	0	10,527	0	0	0	313	15,982
Bunker Hill Community College	0	0	0	2,682	1,788	0	0	0	2,617	2,368
Cape Cod Community College	0	0	21,289	0	0	0	1,956	10,962	13,956	947
Fitchburg State College	0	0	77,113	36,925	11,360	0	1,237	3,530	12,094	7,006
Framingham State College	0	0	8,315	67,753	0	580	0	195	29,862	1,348
Greenfield Community College	0	0	0	300	0	0	0	0	63	4,564
Holyoke Community College	0	0	0	0	3,254	0	3,676	106	919	9,206
Mass Bay Community College	0	0	0	22,537	0	0	0	0	7,475	1,107
Mass College of Art	0	0	0	162	10,327	0	81	462	3,157	5,340
Mass Maritime Academy	10,096	0	0	0	10,877	350	0	4,494	2,450	14,009
Massachusetts College of Liberal Arts	0	0	0	0	14,504	0	0	0	691	16,887
Massasoit Community College	0	801	0	14,243	4,220	0	213	0	32,495	9,601
Middlesex Community College	0	236	0	0	2,001	0	838	0	2,137	1,835
Mt Wachusett Community College	0	0	0	0	623	0	0	0	843	10,570
North Essex Community College	0	0	0	0	1,577	0	0	0	1,570	4,649
North Shore Community College	0	0	678	0	0	0	0	450	128	2,898
Quinsigamond Community College	0	22,861	0	49,786	2,999	0	1,978	0	19,225	1,440
Roxbury Community College	0	0	0	32,250	0	0	0	0	8,308	390
Salem State College	0	0	61,616	12,117	16,073	0	2,906	6,014	18,558	24,883
Springfield Tech Community College	18,599	0	0	24,044	15,328	0	0	84	85,001	21,069
UMass (Boston)	0	40,107	0	2,034	68,794	0	1,637	112	6,668	26,704
UMass (Dartmouth)	541	49,169	711	35,621	29,954	0	578	4,485	14,854	40,280
University of Lowell	48,212	30,008	0	20,250	36,546	13,087	7,921	4,662	36,198	25,930
Westfield State College	31,326	25,512	0	41,547	8,413	4,107	58,715	67,866	22,453	7,397
Worcester State College	0	912	0	0	18,150	0	267	771	3,390	16,524
Total	104,175	179,674	188,741	449,773	286,738	18,125	83,391	107,349	354,834	295,106

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

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Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		86,564,888			105,796,818	116,253,272	19,231,931	29,688,384		
6/30/82-83		15,889,874	18,091,183		17,680,529	18,787,809	1,790,655	2,897,935		
6/30/83-84		21,792,526	24,910,846		24,434,769	25,727,447	2,642,243	3,934,920		
6/30/84-85	1,632,355	34,129,939	39,308,041	36,201,337	36,472,679	38,747,574	2,342,740	4,617,635	2.234	2.374
6/30/85-86	1,755,421	45,333,170	52,747,173	48,490,575	49,243,853	51,148,930	3,910,683	5,815,760	2.805	2.914
6/30/86-87	2,017,293	49,738,878	56,505,190	53,819,325	52,881,000	55,585,730	3,142,122	5,846,852	2.621	2.755
6/30/87-88	2,675,340	69,979,870	81,051,220	77,157,650	77,576,571	81,034,402	7,596,702	11,054,532	2.900	3.029
6/30/88-89	2,880,999	66,973,887	76,180,397	74,082,937	74,369,139	76,301,799	7,395,252	9,327,912	2.581	2.648
6/30/89-90	2,855,415	64,036,442	72,978,808	72,214,650	70,970,455	72,125,762	6,934,012	8,089,320	2.485	2.526
6/30/90-91	2,682,613	51,902,120	65,020,980	60,558,879	59,845,859	64,442,914	7,943,739	12,540,794	2.231	2.402
6/30/91-92	2,641,036	32,108,301	38,170,247	37,483,256	37,103,419	38,375,162	4,995,118	6,266,861	1.405	1.453
6/30/92-93	2,639,939	21,406,056	26,423,048	25,687,997	25,548,376	26,398,946	4,142,321	4,992,891	0.968	1.000
6/30/93-94	2,801,390	23,480,349	29,272,717	28,634,646	28,605,000	29,301,000	5,124,651	5,820,651	1.021	1.046
6/30/94-95	2,894,918	22,237,170	27,735,403	27,625,199	27,432,000	27,617,000	5,194,830	5,379,830	0.948	0.954
6/30/95-96	3,029,192	20,819,333	26,530,018	26,558,985	25,954,985	26,750,891	5,135,653	5,931,559	0.857	0.883
6/30/96-97	3,621,274	21,303,231	27,717,264	27,823,010	27,712,838	28,497,286	6,409,607	7,194,055	0.765	0.787
6/30/97-98	3,485,251	23,594,037	30,676,432	30,762,119	30,633,642	31,331,556	7,039,604	7,737,519	0.879	0.899
6/30/98-99	3,717,044	22,019,112	29,695,675	29,858,656	29,693,000	30,562,000	7,673,888	8,542,888	0.799	0.822
6/30/99-00	3,911,384	25,064,852	34,985,450	35,059,138	34,958,000	35,845,000	9,893,148	10,780,148	0.894	0.916
6/30/00-01	3,990,080	28,593,583	40,216,927	40,200,911	40,159,000	41,678,000	11,565,417	13,084,417	1.006	1.045
6/30/01-02	4,107,529	25,938,214	38,046,011	38,091,323	38,027,000	38,902,000	12,088,786	12,963,786	0.926	0.947
6/30/02-03	4,081,731	24,770,368	38,066,598	38,114,943	38,027,000	38,974,000	13,256,632	14,203,632	0.932	0.955
6/30/03-04	4,128,759	23,602,962	37,675,106	37,776,608	37,649,000	38,631,000	14,046,038	15,028,038	0.912	0.936
6/30/04-05	4,274,405	22,140,683	38,045,547	39,142,278	38,019,000	39,804,000	15,878,317	17,663,317	0.889	0.931
6/30/05-06	4,561,005	17,627,314	33,767,071	37,747,258	34,739,000	37,875,000	17,111,686	20,247,686	0.762	0.830
6/30/06-07	4,793,519	12,987,145	29,534,422	36,781,455	31,179,000	37,312,000	18,191,855	24,324,855	0.650	0.778
6/30/07-08	5,105,961	11,023,128	35,764,072	43,787,746	37,687,000	45,543,000	26,663,872	34,519,872	0.738	0.892
6/30/08-09	5,031,931	5,100,871	34,774,631	45,043,434	38,455,000	45,865,000	33,354,129	40,764,129	0.764	0.911
Total	85,315,785	890,158,305	1,083,890,476	1,048,704,315	1,170,853,932	1,239,418,480	280,695,627	349,260,175		
Tot 6/30/84-09	85,315,785	765,911,017	1,040,888,448	1,048,704,315	1,022,941,816	1,078,649,953	257,030,799	312,738,936	1.199	1.264

NOTES:

(2) Provided by Commonwealth of Massachusetts

(3) Sum of Section 1, Exhibit 1, Page 2, Column 3 and Section 1, Exhibit 1, Page 9, Column 8

(4) From Section 1, Exhibit 1, Page 2, Column 8

(5) From Section 1, Exhibit 1, Page 3, Column 8

(6), (7) Selected based on (3), (4), and (5)

(8) = (6) - (3)

(9) = (7) - (3)

(10) = (6) / (2) / 10

(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Implied Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		82,638,206							55	48		76
6/30/82-83		15,118,643	1.146	N/A	17,318,590	772,592	18,091,183		8	7	314,278	79
6/30/83-84		20,149,887	1.154	N/A	23,258,729	1,652,117	24,910,846		7	6	518,140	67
6/30/84-85	1,632,355	31,363,675	1.164	N/A	36,522,828	2,785,213	39,308,041	2.408	11	9	573,239	74
6/30/85-86	1,755,421	42,241,569	1.175	N/A	49,626,518	3,120,655	52,747,173	3.005	15	13	568,073	73
6/30/86-87	2,017,293	44,426,128	1.151	N/A	51,121,930	5,383,260	56,505,190	2.801	11	13	515,062	70
6/30/87-88	2,675,340	62,100,854	1.176	N/A	73,033,575	8,017,644	81,051,220	3.030	28	24	455,530	68
6/30/88-89	2,880,999	57,157,649	1.158	N/A	66,165,761	10,014,636	76,180,397	2.644	23	23	391,657	70
6/30/89-90	2,855,415	54,272,144	1.160	N/A	62,974,577	10,004,231	72,978,808	2.556	21	17	511,908	67
6/30/90-91	2,682,613	43,635,680	1.294	N/A	56,475,965	8,545,016	65,020,980	2.424	22	19	675,804	66
6/30/91-92	2,641,036	26,767,829	1.218	N/A	32,610,568	5,559,679	38,170,247	1.445	22	17	343,691	63
6/30/92-93	2,639,939	17,446,939	1.274	N/A	22,228,082	4,194,966	26,423,048	1.001	9	7	683,020	65
6/30/93-94	2,801,390	19,309,314	1.283	N/A	24,781,805	4,490,911	29,272,717	1.045	16	16	342,031	60
6/30/94-95	2,894,918	18,198,811	1.283	N/A	23,349,751	4,385,653	27,735,403	0.958	16	11	468,267	69
6/30/95-96	3,029,192	17,212,063	1.311	N/A	22,560,525	3,969,493	26,530,018	0.876	10	9	594,274	64
6/30/96-97	3,621,274	16,939,079	1.349	N/A	22,855,316	4,861,947	27,717,264	0.765	10	5	1,183,248	63
6/30/97-98	3,485,251	19,225,160	1.337	N/A	25,700,361	4,976,071	30,676,432	0.880	16	18	359,733	55
6/30/98-99	3,717,044	18,180,175	1.385	N/A	25,181,118	4,514,557	29,695,675	0.799	20	17	411,820	53
6/30/99-00	3,911,384	21,259,984	1.429	N/A	30,370,400	4,615,050	34,985,450	0.894	23	15	607,361	54
6/30/00-01	3,990,080	24,859,220	1.433	N/A	35,626,962	4,589,966	40,216,927	1.008	43	24	448,656	57
6/30/01-02	4,107,529	22,319,683	1.498	N/A	33,437,719	4,608,292	38,046,011	0.926	41	29	383,381	51
6/30/02-03	4,081,731	21,569,956	1.556	N/A	33,558,875	4,507,723	38,066,598	0.933	56	40	299,723	52
6/30/03-04	4,128,759	20,549,944	1.609	N/A	33,065,684	4,609,422	37,675,106	0.913	93	55	227,559	49
6/30/04-05	4,274,405	19,113,731	1.726	N/A	32,997,515	5,048,032	38,045,547	0.890	138	88	157,770	51
6/30/05-06	4,561,005	15,194,558	1.893	N/A	28,764,989	5,002,082	33,767,071	0.740	193	126	107,702	50
6/30/06-07	4,793,519	11,584,810	2.178	N/A	25,229,543	4,304,879	29,534,422	0.616	468	174	78,418	49
6/30/07-08	5,105,961	10,276,897	2.950	N/A	30,318,870	5,445,202	35,764,072	0.700	1,259	503	39,845	47
6/30/08-09	5,031,931	4,815,871	6.059	N/A	29,178,060	5,596,571	34,774,631	0.691		1,168	20,858	46
Total	85,315,785	777,928,458			948,314,616	135,575,860	1,083,890,476		2,634	2,501		

NOTES:

(2) Provided by Commonwealth of Massachusetts

(3) From Section 1, Exhibit 1, Page 7

(4) = (6) / (5) / (3). For this All Clusters Combined exhibit only, this column includes the impact of the "Additional Tail consideration".

(5) Based on information from the MA WCRIB. For this All Clusters Combined exhibit only, impacts shown here are for Escalation of Benefits only.

(6) = (3) x (4) x (5)

(7) From Section 1, Exhibit 1, Page 9, Column 13

(8) = (6) + (7)

(9) = (8) / (2) / 10

(10), (11) Provided by Commonwealth of Massachusetts

(12) = Maximum of [{(6) - (3)} / (11)] and 0

(13) Calculated for claimants that had an indemnity payment within the last calendar year.

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	1,632,355	2.991	31,363,675	1.164	33,416,124	2,785,213	36,201,337	2.218	2.047
6/30/85-86	1,755,421	3.712	42,241,569	1.175	45,369,920	3,120,655	48,490,575	2.762	2.585
6/30/86-87	2,017,293	3.485	44,426,128	1.151	48,436,066	5,383,260	53,819,325	2.668	2.401
6/30/87-88	2,675,340	3.526	62,100,854	1.176	69,140,006	8,017,644	77,157,650	2.884	2.584
6/30/88-89	2,880,999	2.963	57,157,649	1.158	64,068,301	10,014,636	74,082,937	2.571	2.224
6/30/89-90	2,855,415	2.802	54,272,144	1.160	62,210,419	10,004,231	72,214,650	2.529	2.179
6/30/90-91	2,682,613	2.093	43,635,680	1.294	52,013,863	8,545,016	60,558,879	2.257	1.939
6/30/91-92	2,641,036	1.227	26,767,829	1.218	31,923,577	5,559,679	37,483,256	1.419	1.209
6/30/92-93	2,639,939	0.842	17,446,939	1.274	21,493,031	4,194,966	25,687,997	0.973	0.814
6/30/93-94	2,801,390	0.883	19,309,314	1.283	24,143,734	4,490,911	28,634,646	1.022	0.862
6/30/94-95	2,894,918	0.809	18,198,811	1.283	23,239,546	4,385,653	27,625,199	0.954	0.803
6/30/95-96	3,029,192	0.751	17,212,063	1.311	22,589,492	3,969,493	26,558,985	0.877	0.746
6/30/96-97	3,621,274	0.646	16,939,079	1.349	22,961,063	4,861,947	27,823,010	0.768	0.634
6/30/97-98	3,485,251	0.746	19,225,160	1.337	25,786,048	4,976,071	30,762,119	0.883	0.740
6/30/98-99	3,717,044	0.693	18,180,175	1.385	25,344,098	4,514,557	29,858,656	0.803	0.682
6/30/99-00	3,911,384	0.784	21,259,984	1.429	30,444,089	4,615,050	35,059,138	0.896	0.778
6/30/00-01	3,990,080	0.889	24,859,220	1.433	35,610,945	4,589,966	40,200,911	1.008	0.892
6/30/01-02	4,107,529	0.818	22,319,683	1.498	33,483,031	4,608,292	38,091,323	0.927	0.815
6/30/02-03	4,081,731	0.825	21,569,956	1.556	33,607,220	4,507,723	38,114,943	0.934	0.823
6/30/03-04	4,128,759	0.806	20,549,944	1.609	33,167,186	4,609,422	37,776,608	0.915	0.803
6/30/04-05	4,274,405	0.850	19,113,731	1.726	34,094,246	5,048,032	39,142,278	0.916	0.798
6/30/05-06	4,561,005	0.850	15,194,558	1.893	32,745,176	5,002,082	37,747,258	0.828	0.718
6/30/06-07	4,793,519	0.850	11,584,810	2.178	32,476,576	4,304,879	36,781,455	0.767	0.678
6/30/07-08	5,105,961	0.850	10,276,897	2.950	38,342,544	5,445,202	43,787,746	0.858	0.751
6/30/08-09	5,031,931	0.850	4,815,871	6.059	39,446,863	5,596,571	45,043,434	0.895	0.784
Total	85,315,785		660,021,723		915,553,164	133,151,151	1,048,704,315		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 1, Exhibit 1, Page 4, Column 11
(4) From Section 1, Exhibit 1, Page 2, Column 3
(5) From Section 1, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 1, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									2.991	2.991
6/30/85-86									3.712	3.712
6/30/86-87									3.485	3.485
6/30/87-88									3.526	3.526
6/30/88-89									2.963	2.963
6/30/89-90									2.802	2.802
6/30/90-91	2,682,613	56,475,965	2.105	0.937	1.972	1.208	2.382	2.105	2.029	2.093
6/30/91-92	2,641,036	32,610,568	1.235	1.028	1.269	1.196	1.518	1.235	1.338	1.227
6/30/92-93	2,639,939	22,228,082	0.842	1.198	1.009	1.184	1.195	0.842	1.069	0.842
6/30/93-94	2,801,390	24,781,805	0.885	1.183	1.046	1.173	1.227	0.885	1.084	0.883
6/30/94-95	2,894,918	23,349,751	0.807	1.172	0.945	1.161	1.098	0.807	0.993	0.809
6/30/95-96	3,029,192	22,560,525	0.745	1.163	0.866	1.149	0.995	0.745	0.895	0.751
6/30/96-97	3,621,274	22,855,316	0.631	1.151	0.727	1.138	0.827	0.631	0.767	0.646
6/30/97-98	3,485,251	25,700,361	0.737	1.136	0.838	1.127	0.944	0.737	0.858	0.746
6/30/98-99	3,717,044	25,181,118	0.677	1.121	0.760	1.116	0.848	0.677	0.778	0.693
6/30/99-00	3,911,384	30,370,400	0.776	1.103	0.857	1.105	0.946	0.776	0.888	0.784
6/30/00-01	3,990,080	35,626,962	0.893	1.075	0.960	1.094	1.050	0.893	0.993	0.889
6/30/01-02	4,107,529	33,437,719	0.814	1.054	0.858	1.083	0.930	0.814	0.902	0.818
6/30/02-03	4,081,731	33,558,875	0.822	1.051	0.864	1.072	0.926	0.822	0.904	0.825
6/30/03-04	4,128,759	33,065,684	0.801	1.051	0.841	1.062	0.893	0.801	0.889	0.806
6/30/04-05	4,274,405	32,997,515	0.772	1.044	0.806	1.051	0.847	0.772	0.869	0.850
6/30/05-06	4,561,005	28,764,989	0.631	1.033	0.652	1.041	0.678	0.631	0.749	0.850
6/30/06-07	4,793,519	25,229,543	0.526	1.022	0.538	1.030	0.554	0.526	0.766	0.850
6/30/07-08	5,105,961	30,318,870	0.594	1.011	0.600	1.020	0.612	0.594	0.850	0.850
6/30/08-09	5,031,931	29,178,060	0.580	1.000	0.580	1.010	0.586	0.580		0.850
Total	71,498,961	568,292,107								

Trend Last 4 (ex 08-(	-10.2%	Avg 3 (x08-09):	0.615
Trend Last 8 (ex 08-(	-7.5%	Avg 5 (x08-09):	0.717
Trend Last 12 (ex 08-	-2.7%	Avg 10 (x08-09):	0.829
Prior Selected Tren	1.0%	Prior Sel Avg:	0.850
Selected Trend:	1.0%	Sel. Loss Cost:	0.850

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 1, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.960	
(2)	Credibility		95%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.960	
		(Low)		(High)
(5)	Selected Range	0.940		0.970
(6)	Incremental Paid for 2009	1,743,820		1,743,820
(7)	Estimated Reserve	27,319,842		56,383,503
(8)	Paid to Date (82 & Prior)	82,638,206		82,638,206
(9)	Est Ult Paid for 1982 & Prior	109,958,048		139,021,709

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	1,860,978	1,963,606
(11)	Projected Number of Years	2	2
(12)	Estimated Reserve	3,721,956	3,927,211
(13)	Paid to Date (82 & Prior)	82,638,206	80,894,386
(14)	Est Ult Paid for 1982 & Prior	86,360,162	84,821,597
(14a)	Paid Counts During Fiscal Year	48	58
		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	98,159,105	111,921,653
(16)	Lump Sum Ultimates	3,956,353	3,956,353
(17)	Ult Loss Including Lump Sums	**102,115,458**	**115,878,006**
(18)	Implied Tail	1.188	1.354
(19)	Ult Loss Inc Lump Sums @ 6/08	100,910,815	115,184,831

NOTES:

(1) From Section 1, Exhibit 1, Page 6
(2) = (Average of Section 1, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 1, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 1, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 1, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	3,761,035	15.140			
1993	2	3,748,741	15.137	0.997		
1994	3	3,655,655	15.112	0.975		
1995	4	3,194,135	14.977	0.874		
1996	5	3,058,848	14.934	0.958		
1997	6	3,023,014	14.922	0.988		
1998	7	3,014,756	14.919	0.997		
1999	8	2,756,848	14.830	0.914		
2000	9	2,909,790	14.884	1.055	n =	18
2001	10	2,865,446	14.868	0.985	S(x) =	36,009
2002	11	2,547,239	14.751	0.889	S(x-sq) =	72,036,489
2003	12	2,422,167	14.700	0.951	S(xy) =	532,747
2004	13	2,289,077	14.644	0.945	S(y) =	266
2005	14	2,336,964	14.664	1.021	D =	8,721
2006	15	2,051,702	14.534	0.878	slope =	-0.044
2007	16	2,039,778	14.528	0.994	Avg Trend =	0.956
2008	17	1,799,337	14.403	0.882		
2009	18	1,743,820	14.372	0.969		
					Selected Trend:	**0.960**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 0.969 = 1743820 / 1799337

Commonwealth of Massachusetts Workers Compensation
All Clusters Combined
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	858,552	2,079,063	3,017,221	3,810,750	4,609,642	5,393,851	6,194,575	7,153,066	7,958,008	8,806,991	9,470,978	10,033,054	10,617,896	11,118,585	11,511,440	11,832,357	12,136,396	12,447,391	12,810,499	13,089,144	13,380,298	13,654,129	13,942,380	14,231,914	14,539,406	14,849,146	15,118,643
June-84	1,522,536	3,686,963	5,350,672	6,757,899	8,148,886	9,608,045	10,911,357	12,126,179	13,057,188	13,815,581	14,430,389	14,959,403	15,419,688	15,772,255	16,197,151	16,639,612	17,122,286	17,516,764	17,977,580	18,438,292	18,803,484	19,139,323	19,459,619	19,718,217	19,937,128	20,149,887	
June-85	2,512,722	6,084,789	8,830,495	11,054,439	13,342,359	15,590,069	17,427,365	18,998,017	20,498,944	21,563,372	22,525,232	23,442,205	24,219,603	25,046,022	25,818,487	26,459,414	27,121,279	27,778,658	28,406,491	28,976,876	29,543,002	30,030,413	30,523,992	30,983,182	31,363,675		
June-86	3,828,307	9,270,600	13,395,875	16,854,774	20,186,912	22,858,610	24,903,526	26,819,536	28,134,649	29,661,018	30,865,387	32,219,696	33,488,982	34,570,174	35,702,155	36,866,038	37,770,882	38,520,460	39,153,946	39,794,497	40,432,599	41,063,216	41,644,745	42,241,569			
June-87	4,540,457	10,913,697	15,583,325	19,957,432	23,712,974	26,356,678	28,401,253	30,259,862	31,823,542	33,295,483	34,562,410	35,908,967	37,317,032	38,375,710	39,392,496	40,287,844	41,070,876	41,703,092	42,193,153	42,715,548	43,489,344	43,946,144	44,426,128				
June-88	6,620,154	15,480,715	23,458,326	30,204,560	36,116,026	39,838,569	42,256,230	44,503,212	46,313,785	47,917,629	49,366,750	50,785,172	52,214,314	53,499,831	54,758,162	56,029,186	57,216,310	58,242,797	59,272,196	60,251,502	61,225,020	62,100,854					
June-89	6,105,502	16,819,476	24,950,175	31,278,437	35,945,703	38,915,779	41,415,130	43,490,698	45,072,501	46,555,926	47,860,013	49,040,632	50,166,177	51,242,940	52,234,068	53,147,033	54,016,738	54,832,591	55,632,016	56,403,282	57,157,649						
June-90	8,325,393	19,198,639	27,299,181	32,979,315	36,467,113	39,225,080	41,403,021	43,119,245	44,619,978	46,178,291	47,478,622	48,500,081	49,380,975	50,215,035	50,970,670	51,700,073	52,443,554	53,046,968	53,676,223	54,272,144							
June-91	6,727,038	15,771,999	21,820,901	25,665,833	28,606,961	30,755,665	32,249,710	33,434,382	34,630,923	35,639,652	36,661,638	37,733,064	38,765,183	39,734,589	40,612,815	41,479,663	42,275,974	42,925,167	43,635,680								
June-92	5,529,696	11,010,530	14,154,478	16,707,353	18,010,508	19,080,293	19,981,070	20,663,423	21,458,872	22,141,168	22,851,311	23,533,251	24,097,364	24,573,283	25,143,387	25,744,950	26,283,250	26,767,829									
June-93	3,873,223	8,389,572	10,824,326	12,579,041	13,682,345	14,650,572	14,980,197	15,299,706	15,652,059	15,960,508	16,198,969	16,437,335	16,647,751	16,845,525	17,057,906	17,261,464	17,446,939										
June-94	3,781,238	7,763,240	10,451,304	12,041,730	13,184,654	14,033,719	14,780,593	15,679,180	16,229,340	16,777,362	17,232,935	17,804,861	18,235,433	18,616,699	18,971,484	19,309,314											
June-95	4,117,530	8,085,099	10,658,744	12,524,501	13,540,049	14,383,050	15,205,770	15,840,120	16,337,357	16,680,320	17,024,333	17,347,955	17,691,046	17,980,888	18,198,811												
June-96	3,925,641	7,606,581	10,157,406	11,265,946	12,618,021	13,573,564	14,313,197	14,989,243	15,617,069	16,021,237	16,346,275	16,663,225	16,942,675	17,212,063													
June-97	3,802,186	7,776,567	9,916,724	11,863,394	13,377,068	14,556,289	15,406,967	15,928,071	16,176,008	16,397,842	16,558,081	16,798,807	16,939,079														
June-98	3,999,102	8,090,389	11,057,251	13,063,666	14,725,657	15,964,487	16,892,108	17,479,286	18,004,896	18,445,861	18,841,212	19,225,160															
June-99	3,807,499	8,152,795	11,043,621	13,229,580	14,782,416	15,710,384	16,521,760	17,074,054	17,452,452	17,884,931	18,180,175																
June-00	4,950,740	10,538,860	14,135,679	16,504,973	18,268,102	19,419,784	20,242,086	20,650,338	21,022,134	21,259,984																	
June-01	5,803,207	12,402,263	16,670,356	19,654,595	21,577,531	22,938,517	23,908,952	24,600,463	24,859,220																		
June-02	5,765,203	12,277,793	16,238,526	18,865,437	20,310,007	21,368,596	21,931,812	22,319,683																			
June-03	6,502,533	13,090,711	16,966,298	18,968,477	20,360,493	21,059,553	21,569,956																				
June-04	5,782,322	12,007,566	15,781,365	18,294,709	19,693,522	20,549,944																					
June-05	5,772,533	11,867,294	15,701,108	18,020,724	19,113,731																						
June-06	4,757,322	10,205,384	13,459,435	15,194,558																							
June-07	4,763,872	9,431,881	11,584,810																								
June-08	4,973,425	10,276,897																									
June-09	4,815,871																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.422	1.451	1.263	1.210	1.170	1.148	1.155	1.113	1.107	1.075	1.059	1.058	1.047	1.035	1.028	1.026	1.026	1.029	1.022	1.022	1.020	1.021	1.021	1.022	1.021	1.018
June-84	2.422	1.451	1.263	1.206	1.179	1.136	1.111	1.077	1.058	1.045	1.037	1.031	1.023	1.027	1.027	1.029	1.023	1.026	1.026	1.020	1.018	1.017	1.013	1.011	1.011	
June-85	2.422	1.451	1.252	1.207	1.168	1.118	1.090	1.079	1.052	1.045	1.041	1.033	1.034	1.031	1.025	1.025	1.024	1.023	1.020	1.020	1.016	1.016	1.015	1.012		
June-86	2.422	1.445	1.258	1.198	1.132	1.089	1.077	1.049	1.054	1.041	1.044	1.039	1.032	1.033	1.033	1.025	1.020	1.016	1.016	1.016	1.016	1.014	1.014			
June-87	2.404	1.428	1.281	1.188	1.111	1.078	1.065	1.052	1.046	1.038	1.039	1.039	1.028	1.026	1.023	1.019	1.015	1.012	1.012	1.018	1.011	1.011				
June-88	2.338	1.515	1.288	1.196	1.103	1.061	1.053	1.041	1.035	1.030	1.029	1.028	1.025	1.024	1.023	1.021	1.018	1.018	1.017	1.016	1.014					
June-89	2.755	1.483	1.254	1.149	1.083	1.064	1.050	1.036	1.033	1.028	1.025	1.023	1.021	1.019	1.017	1.016	1.015	1.015	1.014	1.013						
June-90	2.306	1.422	1.208	1.106	1.076	1.056	1.041	1.035	1.035	1.028	1.022	1.018	1.017	1.015	1.014	1.014	1.012	1.012	1.011							
June-91	2.345	1.384	1.176	1.115	1.075	1.049	1.037	1.036	1.029	1.029	1.029	1.027	1.025	1.022	1.021	1.019	1.015	1.017								
June-92	1.991	1.286	1.180	1.078	1.059	1.047	1.034	1.038	1.032	1.032	1.030	1.024	1.020	1.023	1.024	1.021	1.018									
June-93	2.166	1.290	1.162	1.088	1.071	1.022	1.021	1.023	1.020	1.015	1.015	1.013	1.012	1.013	1.012	1.011										
June-94	2.053	1.346	1.152	1.095	1.064	1.053	1.061	1.035	1.034	1.027	1.033	1.024	1.021	1.019	1.018											
June-95	1.964	1.318	1.175	1.081	1.062	1.057	1.042	1.031	1.021	1.021	1.019	1.020	1.016	1.012												
June-96	1.938	1.335	1.109	1.120	1.076	1.054	1.047	1.042	1.026	1.020	1.019	1.017	1.016													
June-97	2.045	1.275	1.196	1.128	1.088	1.058	1.034	1.016	1.014	1.010	1.015	1.008														
June-98	2.023	1.367	1.181	1.127	1.084	1.058	1.035	1.030	1.024	1.021	1.020															
June-99	2.141	1.355	1.198	1.117	1.063	1.052	1.033	1.022	1.025	1.017																
June-00	2.129	1.341	1.168	1.107	1.063	1.042	1.020	1.018	1.011																	
June-01	2.137	1.344	1.179	1.098	1.063	1.042	1.029	1.011																		
June-02	2.130	1.323	1.162	1.077	1.052	1.026	1.018																			
June-03	2.013	1.296	1.118	1.073	1.034	1.024																				
June-04	2.077	1.314	1.159	1.076	1.043																					
June-05	2.056	1.323	1.148	1.061																						
June-06	2.145	1.319	1.129																							
June-07	1.980	1.228																								
June-08	2.066																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.188	1.364	1.194	1.126	1.087	1.064	1.053	1.041	1.036	1.031	1.030	1.027	1.024	1.023	1.022	1.021	1.019	1.019	1.017	1.018	1.016	1.016	1.016	1.015	1.016	1.018	
Latest 5	2.065	1.296	1.143	1.077	1.051	1.037	1.027	1.019	1.020	1.018	1.021	1.016	1.017	1.018	1.018	1.016	1.016	1.014	1.014	1.017	1.015	1.016					
Latest 3	2.064	1.290	1.145	1.070	1.043	1.031	1.022	1.017	1.020	1.016	1.018	1.015	1.018	1.015	1.018	1.017	1.015	1.014	1.014	1.016	1.013	1.014	1.014	1.015			
Volume Wtd																											
All Yrs	2.182	1.366	1.195	1.123	1.082	1.059	1.048	1.038	1.035	1.030	1.029	1.027	1.024	1.023	1.022	1.020	1.017	1.017	1.016	1.017	1.015	1.015	1.015	1.014	1.015		
Latest 5	2.065	1.298	1.143	1.077	1.051	1.037	1.026	1.019	1.020	1.018	1.021	1.017	1.017	1.019	1.018	1.017	1.015	1.015	1.014	1.016	1.014						
Latest 3	2.064	1.293	1.146	1.070	1.043	1.031	1.023	1.016	1.020	1.016	1.018	1.015	1.018	1.015	1.019	1.018	1.014	1.014	1.014	1.016	1.014	1.014	1.014				

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	104,778,441	115,817,121	105,796,818	116,253,272	1,018,377	1.0%	436,151	0.4%
6/30/82-83	17,905,256	19,029,192	17,680,529	18,787,809	(224,727)	-1.3%	(241,383)	-1.3%
6/30/83-84	24,887,886	26,211,145	24,434,769	25,727,447	(453,117)	-1.8%	(483,699)	-1.8%
6/30/84-85	36,489,679	39,432,574	36,472,679	38,747,574	(17,000)	0.0%	(685,000)	-1.7%
6/30/85-86	49,090,354	51,759,684	49,243,853	51,148,930	153,499	0.3%	(610,754)	-1.2%
6/30/86-87	52,881,000	55,867,279	52,881,000	55,585,730	0	0.0%	(281,549)	-0.5%
6/30/87-88	78,241,228	82,118,330	77,576,571	81,034,402	(664,657)	-0.8%	(1,083,928)	-1.3%
6/30/88-89	74,440,235	76,546,799	74,369,139	76,301,799	(71,096)	-0.1%	(245,000)	-0.3%
6/30/89-90	72,410,455	73,635,762	70,970,455	72,125,762	(1,440,000)	-2.0%	(1,510,000)	-2.1%
6/30/90-91	59,319,859	64,682,914	59,845,859	64,442,914	526,000	0.9%	(240,000)	-0.4%
6/30/91-92	37,129,380	38,532,341	37,103,419	38,375,162	(25,961)	-0.1%	(157,179)	-0.4%
6/30/92-93	26,360,376	27,092,946	25,548,376	26,398,946	(812,000)	-3.1%	(694,000)	-2.6%
6/30/93-94	28,833,000	30,361,000	28,605,000	29,301,000	(228,000)	-0.8%	(1,060,000)	-3.5%
6/30/94-95	27,845,000	28,776,000	27,432,000	27,617,000	(413,000)	-1.5%	(1,159,000)	-4.0%
6/30/95-96	26,154,985	27,671,891	25,954,985	26,750,891	(200,000)	-0.8%	(921,000)	-3.3%
6/30/96-97	28,278,838	29,470,286	27,712,838	28,497,286	(566,000)	-2.0%	(973,000)	-3.3%
6/30/97-98	30,735,642	31,964,556	30,633,642	31,331,556	(102,000)	-0.3%	(633,000)	-2.0%
6/30/98-99	30,047,000	31,556,000	29,693,000	30,562,000	(354,000)	-1.2%	(994,000)	-3.1%
6/30/99-00	35,597,000	37,030,000	34,958,000	35,845,000	(639,000)	-1.8%	(1,185,000)	-3.2%
6/30/00-01	41,138,000	42,996,000	40,159,000	41,678,000	(979,000)	-2.4%	(1,318,000)	-3.1%
6/30/01-02	38,916,000	40,088,000	38,027,000	38,902,000	(889,000)	-2.3%	(1,186,000)	-3.0%
6/30/02-03	39,224,000	41,428,000	38,027,000	38,974,000	(1,197,000)	-3.1%	(2,454,000)	-5.9%
6/30/03-04	38,027,000	40,958,000	37,649,000	38,631,000	(378,000)	-1.0%	(2,327,000)	-5.7%
6/30/04-05	39,027,000	42,707,000	38,019,000	39,804,000	(1,008,000)	-2.6%	(2,903,000)	-6.8%
6/30/05-06	35,667,000	39,209,000	34,739,000	37,875,000	(928,000)	-2.6%	(1,334,000)	-3.4%
6/30/06-07	34,199,000	40,156,000	31,179,000	37,312,000	(3,020,000)	-8.8%	(2,844,000)	-7.1%
6/30/07-08	38,917,000	46,572,000	37,687,000	45,543,000	(1,230,000)	-3.2%	(1,029,000)	-2.2%
6/30/08-09								
Total	1,146,540,614	1,221,669,821	1,132,398,932	1,193,553,480	(14,141,682)	-1.2%	(28,116,341)	-2.3%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 1, Exhibit 1, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	82,638,206	1.271	105,040,379	0.0%	0.0%	0	3,926,682	3,926,682	3.7%	1.015	3,986,024	3,956,353	3,958,017
6/30/82-83	15,118,643	1.146	17,318,590	0.0%	0.0%	0	771,231	771,231	4.5%	1.004	773,954	772,592	773,045
6/30/83-84	20,149,887	1.154	23,258,729	0.0%	0.0%	0	1,642,639	1,642,639	7.1%	1.012	1,661,595	1,652,117	1,654,812
6/30/84-85	31,363,675	1.164	36,522,828	0.0%	0.0%	0	2,766,264	2,766,264	7.6%	1.014	2,804,162	2,785,213	2,799,294
6/30/85-86	42,241,569	1.175	49,626,518	0.0%	0.0%	0	3,091,602	3,091,602	6.2%	1.019	3,149,708	3,120,655	2,914,959
6/30/86-87	44,426,128	1.151	51,121,930	0.1%	0.1%	38,593	5,312,750	5,351,343	10.5%	1.019	5,415,177	5,383,260	5,422,679
6/30/87-88	62,100,854	1.176	73,033,575	0.1%	0.1%	104,739	7,879,016	7,983,755	10.9%	1.022	8,051,534	8,017,644	7,917,604
6/30/88-89	57,157,649	1.158	66,165,761	0.1%	0.2%	129,897	9,816,238	9,946,134	15.0%	1.027	10,083,137	10,014,636	10,040,381
6/30/89-90	54,272,144	1.160	62,974,577	0.1%	0.3%	163,747	9,764,298	9,928,045	15.8%	1.032	10,080,417	10,004,231	10,097,985
6/30/90-91	43,635,680	1.294	56,475,965	0.1%	0.4%	213,941	8,266,440	8,480,381	15.0%	1.042	8,609,650	8,545,016	8,489,389
6/30/91-92	26,767,829	1.218	32,610,568	0.2%	0.6%	184,298	5,340,473	5,524,771	16.9%	1.048	5,594,588	5,559,679	5,548,740
6/30/92-93	17,446,939	1.274	22,228,082	0.4%	0.9%	209,928	3,959,117	4,169,045	18.8%	1.066	4,220,887	4,194,966	4,211,286
6/30/93-94	19,309,314	1.283	24,781,805	0.2%	1.1%	273,121	4,171,035	4,444,156	17.9%	1.088	4,537,667	4,490,911	4,414,112
6/30/94-95	18,198,811	1.283	23,349,751	-0.1%	1.0%	242,566	4,038,359	4,280,925	18.3%	1.112	4,490,380	4,385,653	4,377,347
6/30/95-96	17,212,063	1.311	22,560,525	0.3%	1.3%	293,286	3,607,270	3,900,556	17.3%	1.120	4,038,430	3,969,493	3,998,147
6/30/96-97	16,939,079	1.349	22,855,316	0.1%	1.4%	329,587	4,364,152	4,693,739	20.5%	1.153	5,030,155	4,861,947	4,922,027
6/30/97-98	19,225,160	1.337	25,700,361	-0.1%	1.4%	355,978	4,368,877	4,724,855	18.4%	1.196	5,227,287	4,976,071	4,815,229
6/30/98-99	18,180,175	1.385	25,181,118	0.4%	1.7%	437,522	3,838,937	4,276,459	17.0%	1.238	4,752,656	4,514,557	4,548,649
6/30/99-00	21,259,984	1.429	30,370,400	0.4%	2.1%	650,056	3,804,868	4,454,924	14.7%	1.255	4,775,176	4,615,050	4,663,315
6/30/00-01	24,859,220	1.433	35,626,962	0.3%	2.4%	864,205	3,734,363	4,598,568	12.9%	1.268	4,736,199	4,589,966	4,677,238
6/30/01-02	22,319,683	1.498	33,437,719	0.5%	3.0%	988,426	3,618,532	4,606,957	13.8%	1.352	4,892,978	4,608,292	4,605,670
6/30/02-03	21,569,956	1.556	33,558,875	0.9%	3.8%	1,278,063	3,200,412	4,478,476	13.3%	1.438	4,603,323	4,507,723	4,713,882
6/30/03-04	20,549,944	1.609	33,065,684	0.8%	4.7%	1,539,727	3,053,018	4,592,745	13.9%	1.564	4,774,037	4,609,422	4,573,238
6/30/04-05	19,113,731	1.726	32,997,515	1.3%	5.9%	1,956,949	3,026,952	4,983,902	15.1%	1.973	5,971,562	5,048,032	5,153,213
6/30/05-06	15,194,558	1.893	28,764,989	2.3%	8.2%	2,368,833	2,432,756	4,801,589	16.7%	2.629	6,394,894	5,002,082	4,729,698
6/30/06-07	11,584,810	2.178	25,229,543	3.3%	11.6%	2,921,863	1,402,335	4,324,198	17.1%	4.743	6,651,002	4,304,879	4,719,365
6/30/07-08	10,276,897	2.950	30,318,870	3.8%	15.3%	4,652,623	746,231	5,398,854	17.8%	13.124	9,793,823	5,445,202	5,535,000
6/30/08-09	4,815,871	6.059	29,178,060	2.0%	17.4%	5,064,332	285,000	5,349,332	18.3%	77.160	21,990,617	5,596,571	
Total	777,928,458		1,053,354,995			25,262,281	112,229,847	137,492,127	13.1%		167,091,018	139,532,213	134,274,321

NOTES:
(2) From Section 1, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 1, Exhibit 1, Page 2, Column 6
(5) From Section 1, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 1, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 1, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensatio
All Clusters Combinec
INDEMNITY
Lump Sum Developmen
Incremental Lump Sum Payments

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0	0	0	0	0	0	12,000	46,500	31,000	20,000	184,000	115,000	138,000	550,984	594,000	318,784	155,500	30,000	362,833	369,668	354,998	72,250	145,500	201,500	118,040	28,000	78,125	0
Jun-83	0	0	0	0	0	20,000	0	32,500	37,500	80,000	153,481	90,750	77,000	110,000	160,000	0	10,000	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	25,750	32,500	110,600	178,437	119,500	233,650	204,200	246,501	48,000	102,001	50,000	30,000	37,500	85,000	45,000	0	0	84,000	0	10,000	0	0		
Jun-85	0	0	0	98,476	35,500	126,500	146,555	201,250	383,400	565,833	337,200	193,500	294,550	40,000	0	133,500	120,000	30,000	35,000	25,000	0	0	0	0	0			
Jun-86	0	0	58,000	116,759	213,100	146,344	336,929	826,899	586,995	10,000	147,000	20,000	86,000	37,500	0	0	0	30,000	55,000	64,000	16,000	45,000	58,275	237,801				
Jun-87	0	81,440	184,322	246,666	253,462	621,607	1,050,537	509,001	398,456	184,806	186,424	102,671	334,859	406,500	240,000	239,999	50,000	132,000	80,000	10,000	0	0	0					
Jun-88	0	106,671	200,428	418,500	836,484	1,573,442	1,192,500	711,383	849,000	373,400	305,326	241,507	328,463	0	59,910	0	191,667	65,000	85,333	100,001	90,000	150,001						
Jun-89	0	239,195	381,000	997,744	1,789,441	1,630,950	1,022,995	995,502	531,500	332,500	603,811	258,100	276,500	92,500	25,000	18,500	63,500	218,333	116,383	160,284	62,500							
Jun-90	0	254,094	1,205,138	1,809,296	1,317,952	1,060,755	985,550	993,000	409,534	438,300	365,512	408,833	40,833	46,000	31,000	25,000	106,000	110,125	129,876	27,500								
Jun-91	13,500	438,707	1,994,750	1,433,327	920,426	1,217,840	758,000	203,289	232,000	140,000	100,001	54,000	0	0	70,000	178,100	102,500	280,000	130,000									
Jun-92	66,000	830,673	583,116	753,497	838,750	535,501	294,500	221,500	181,500	178,000	202,683	31,250	13,500	122,268	33,368	20,867	326,500	107,000										
Jun-93	62,000	654,058	665,328	971,951	408,250	415,801	286,729	103,000	190,000	85,000	12,000	55,000	0	0	0	0	50,000											
Jun-94	90,000	679,356	863,227	715,524	525,377	333,501	199,500	201,500	47,500	40,050	0	234,500	71,000	25,000	25,000	120,000												
Jun-95	219,963	888,102	977,200	797,324	399,770	225,600	67,000	10,000	70,625	134,875	58,400	35,000	0	112,000	42,500													
Jun-96	80,500	705,230	1,049,356	656,831	319,451	110,001	89,167	158,833	123,000	131,001	103,000	62,500	0	18,400														
Jun-97	134,365	1,184,751	1,074,000	820,183	422,500	172,251	16,000	140,600	106,501	109,001	167,000	17,000	0															
Jun-98	408,337	890,613	1,162,675	665,000	431,091	264,909	110,335	161,166	29,000	8,001	10,000	227,750																
Jun-99	251,500	439,250	1,042,681	765,621	367,556	218,197	270,076	179,055	73,001	180,000	52,000																	
Jun-00	135,731	994,493	726,541	532,050	394,551	264,499	364,884	198,118	118,001	76,000																		
Jun-01	108,490	517,820	838,510	515,804	486,170	523,565	239,504	370,500	134,000																			
Jun-02	48,000	251,595	619,400	692,914	768,087	556,815	356,721	325,000																				
Jun-03	20,000	243,617	973,654	830,735	554,982	452,423	125,001																					
Jun-04	47,500	153,200	552,463	917,102	829,753	553,000																						
Jun-05	6,157	171,103	840,367	1,359,602	649,723																							
Jun-06	0	307,301	772,454	1,353,001																								
Jun-07	36,000	451,583	914,752																									
Jun-08	17,730	728,501																										
Jun-09	285,000																											

Cumulative Lump Sum Payment:

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	12,000	58,500	89,500	109,500	293,500	408,500	546,500	1,097,484	1,691,484	2,010,268	2,165,768	2,195,768	2,558,601	2,928,269	3,283,267	3,355,517	3,501,017	3,702,517	3,820,557	3,848,557	3,926,682	3,926,682
Jun-83	0	0	0	0	0	20,000	20,000	52,500	90,000	170,000	323,481	414,231	491,231	601,231	761,231	761,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	
Jun-84	0	0	0	0	25,750	58,250	168,850	347,287	466,787	700,437	904,637	1,151,138	1,199,138	1,301,139	1,351,139	1,381,139	1,418,639	1,503,639	1,548,639	1,548,639	1,548,639	1,632,639	1,632,639	1,642,639	1,642,639	1,642,639		
Jun-85	0	0	0	98,476	133,976	260,476	407,031	608,281	991,681	1,557,514	1,894,714	2,088,214	2,382,764	2,422,764	2,422,764	2,556,264	2,676,264	2,706,264	2,741,264	2,766,264	2,766,264	2,766,264	2,766,264	2,766,264	2,766,264			
Jun-86	0	0	58,000	174,759	387,859	534,203	871,132	1,698,031	2,285,026	2,295,026	2,442,026	2,462,026	2,548,026	2,585,526	2,585,526	2,585,526	2,585,526	2,615,526	2,670,526	2,734,526	2,750,526	2,795,526	2,853,801	3,091,602				
Jun-87	0	81,440	265,762	512,428	765,890	1,387,497	2,438,034	2,947,035	3,345,491	3,530,297	3,716,721	3,819,392	4,154,251	4,560,751	4,800,751	5,040,750	5,090,750	5,222,750	5,302,750	5,312,750	5,312,750	5,312,750	5,312,750					
Jun-88	0	106,671	307,099	725,599	1,562,083	3,135,525	4,328,025	5,039,408	5,888,408	6,261,808	6,567,134	6,808,641	7,137,104	7,137,104	7,197,014	7,197,014	7,388,681	7,453,681	7,539,014	7,639,015	7,729,015	7,879,016						
Jun-89	0	239,195	620,195	1,617,939	3,407,380	5,038,330	6,061,325	7,056,827	7,588,327	7,920,827	8,524,638	8,782,738	9,059,238	9,151,738	9,176,738	9,195,238	9,258,738	9,477,071	9,593,454	9,753,738	9,816,238							
Jun-90	0	254,094	1,459,232	3,268,528	4,586,480	5,647,235	6,632,785	7,625,785	8,035,319	8,473,619	8,839,131	9,247,964	9,288,797	9,334,797	9,365,797	9,390,797	9,496,797	9,606,922	9,736,798	9,764,298								
Jun-91	13,500	452,207	2,446,957	3,880,284	4,800,710	6,018,550	6,776,550	6,979,839	7,211,839	7,351,839	7,451,840	7,505,840	7,505,840	7,505,840	7,575,840	7,753,940	7,856,440	8,136,440	8,266,440									
Jun-92	66,000	896,673	1,479,789	2,233,286	3,072,036	3,607,537	3,902,037	4,123,537	4,305,037	4,483,037	4,685,720	4,716,970	4,730,470	4,852,738	4,886,106	4,906,973	5,233,473	5,340,473										
Jun-93	62,000	716,058	1,381,386	2,353,337	2,761,587	3,177,388	3,464,117	3,567,117	3,757,117	3,842,117	3,854,117	3,909,117	3,909,117	3,909,117	3,909,117	3,909,117	3,959,117											
Jun-94	90,000	769,356	1,632,583	2,348,107	2,873,484	3,206,985	3,406,485	3,607,985	3,655,485	3,695,535	3,695,535	3,930,035	4,001,035	4,026,035	4,051,035	4,171,035												
Jun-95	219,963	1,108,065	2,085,265	2,882,589	3,282,359	3,507,959	3,574,959	3,584,959	3,655,584	3,790,459	3,848,859	3,883,859	3,883,859	3,995,859	4,038,359													
Jun-96	80,500	785,730	1,835,086	2,491,917	2,811,368	2,921,369	3,010,536	3,169,369	3,292,369	3,423,370	3,526,370	3,588,870	3,588,870	3,607,270														
Jun-97	134,365	1,319,116	2,393,116	3,213,299	3,635,799	3,808,050	3,824,050	3,964,650	4,071,151	4,180,152	4,347,152	4,364,152	4,364,152															
Jun-98	408,337	1,298,950	2,461,625	3,126,625	3,557,716	3,822,625	3,932,960	4,094,126	4,123,126	4,131,127	4,141,127	4,368,877																
Jun-99	251,500	690,750	1,733,431	2,499,052	2,866,608	3,084,805	3,354,881	3,533,936	3,606,937	3,786,937	3,838,937																	
Jun-00	135,731	1,130,224	1,856,765	2,388,815	2,783,366	3,047,865	3,412,749	3,610,867	3,728,868	3,804,868																		
Jun-01	108,490	626,310	1,464,820	1,980,624	2,466,794	2,990,359	3,229,863	3,600,363	3,734,363																			
Jun-02	48,000	299,595	918,995	1,611,909	2,379,996	2,936,811	3,293,532	3,618,532																				
Jun-03	20,000	263,617	1,237,271	2,068,006	2,622,988	3,075,411	3,200,412																					
Jun-04	47,500	200,700	753,163	1,670,265	2,500,018	3,053,018																						
Jun-05	6,157	177,260	1,017,627	2,377,229	3,026,952																							
Jun-06	0	307,301	1,079,755	2,432,756																								
Jun-07	36,000	487,583	1,402,335																									
Jun-08	17,730	746,231																										
Jun-09	285,000																											

Commonwealth of Massachusetts Workers Compensatio
All Clusters Combine
INDEMNITY
Lump Sum Developmen
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sum

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.001	0.005	0.006	0.003	0.001	0.000	0.003	0.004	0.003	0.001	0.001	0.002	0.001	0.000	0.001	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.002	0.005	0.009	0.005	0.004	0.006	0.009	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.001	0.001	0.005	0.008	0.005	0.010	0.009	0.011	0.002	0.004	0.002	0.001	0.002	0.004	0.002	0.000	0.000	0.004	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.003	0.001	0.003	0.004	0.006	0.010	0.015	0.009	0.005	0.008	0.001	0.000	0.004	0.003	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.001	0.002	0.004	0.003	0.007	0.017	0.012	0.000	0.003	0.000	0.002	0.001	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.005				
Jun-87	0.000	0.002	0.004	0.005	0.005	0.012	0.021	0.010	0.008	0.004	0.004	0.002	0.007	0.008	0.005	0.005	0.001	0.003	0.002	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.001	0.003	0.006	0.011	0.022	0.016	0.010	0.012	0.005	0.004	0.003	0.004	0.000	0.001	0.000	0.003	0.001	0.001	0.001	0.001	0.002						
Jun-89	0.000	0.004	0.006	0.015	0.027	0.025	0.015	0.015	0.008	0.005	0.009	0.004	0.004	0.001	0.000	0.000	0.001	0.003	0.002	0.002	0.001							
Jun-90	0.000	0.004	0.019	0.029	0.021	0.017	0.016	0.016	0.007	0.007	0.006	0.006	0.001	0.001	0.000	0.000	0.002	0.002	0.002	0.000								
Jun-91	0.000	0.008	0.035	0.025	0.016	0.022	0.013	0.004	0.004	0.002	0.002	0.001	0.000	0.000	0.001	0.003	0.002	0.005	0.002									
Jun-92	0.002	0.025	0.018	0.023	0.026	0.016	0.009	0.007	0.006	0.005	0.006	0.001	0.000	0.004	0.001	0.001	0.010	0.003										
Jun-93	0.003	0.029	0.030	0.044	0.018	0.019	0.013	0.005	0.009	0.004	0.001	0.002	0.000	0.000	0.000	0.000	0.002											
Jun-94	0.004	0.027	0.035	0.029	0.021	0.013	0.008	0.008	0.002	0.002	0.000	0.009	0.003	0.001	0.001	0.005												
Jun-95	0.009	0.038	0.042	0.034	0.017	0.010	0.003	0.000	0.003	0.006	0.003	0.001	0.000	0.005	0.002													
Jun-96	0.004	0.031	0.047	0.029	0.014	0.005	0.004	0.007	0.005	0.006	0.005	0.003	0.000	0.001														
Jun-97	0.006	0.052	0.047	0.036	0.018	0.008	0.001	0.006	0.005	0.005	0.007	0.001	0.000															
Jun-98	0.016	0.035	0.045	0.026	0.017	0.010	0.004	0.006	0.001	0.000	0.000	0.009																
Jun-99	0.010	0.017	0.041	0.030	0.015	0.009	0.011	0.007	0.003	0.007	0.002																	
Jun-00	0.004	0.033	0.024	0.018	0.013	0.009	0.012	0.007	0.004	0.003																		
Jun-01	0.003	0.015	0.024	0.014	0.014	0.015	0.007	0.010	0.004																			
Jun-02	0.001	0.008	0.019	0.021	0.023	0.017	0.011	0.010																				
Jun-03	0.001	0.007	0.029	0.025	0.017	0.013	0.004																					
Jun-04	0.001	0.005	0.017	0.028	0.025	0.017																						
Jun-05	0.000	0.005	0.025	0.041	0.020																							
Jun-06	0.000	0.011	0.027	0.047																								
Jun-07	0.001	0.018	0.036																									
Jun-08	0.001	0.024																										
Jun-09	0.010																											

Averages		*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
Simple Avg																												
All Yrs (ex P)	0.003	0.015	0.023	0.022	0.015	0.012	0.009	0.008	0.006	0.005	0.005	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	
Latest 5	0.002	0.012	0.027	0.032	0.020	0.014	0.009	0.008	0.003	0.004	0.003	0.005	0.001	0.002	0.001	0.002	0.003	0.003	0.002	0.001	0.000	0.001	0.000					
Latest 3	0.004	0.018	0.030	0.039	0.020	0.016	0.007	0.009	0.004	0.003	0.003	0.004	0.000	0.002	0.001	0.002	0.005	0.003	0.002	0.001	0.001	0.001	0.000	0.002	0.000			
Olympic Avg																												
All Yrs (ex P)	0.002	0.014	0.023	0.022	0.015	0.012	0.009	0.008	0.006	0.005	0.005	0.004	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.001	0.000	0.001	0.000	0.000	0.000			
Latest 10	0.002	0.013	0.028	0.028	0.017	0.011	0.006	0.007	0.004	0.004	0.003	0.003	0.001	0.002	0.001	0.002	0.002	0.002										
Latest 5	0.001	0.011	0.027	0.031	0.020	0.015	0.009	0.008	0.004	0.004	0.003	0.004	0.000	0.002	0.001	0.001	0.002	0.003	0.002	0.001	0.000	0.001	0.000					

Commonwealth of Massachusetts Workers Compensatio
All Clusters Combinec
INDEMNITY
Paid Loss Developmen
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	12,000	58,500	89,500	109,500	293,500	408,500	546,500	1,097,484	1,691,484	2,010,268	2,165,768	2,195,768	2,558,601	2,928,269	3,283,267	3,355,517	3,501,017	3,702,517	3,820,557	3,848,557	3,926,682	3,926,682
Jun-83	0	0	0	0	0	20,000	20,000	52,500	90,000	170,000	323,481	414,231	491,231	601,231	761,231	761,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	771,231	
Jun-84	0	0	0	0	25,750	58,250	168,850	347,287	466,787	700,437	904,637	1,151,138	1,199,138	1,301,139	1,351,139	1,381,139	1,418,639	1,503,639	1,548,639	1,548,639	1,548,639	1,632,639	1,632,639	1,642,639	1,642,639	1,642,639		
Jun-85	0	0	0	98,476	133,976	260,476	407,031	608,281	991,681	1,557,514	1,894,714	2,088,214	2,382,764	2,422,764	2,422,764	2,556,264	2,676,264	2,706,264	2,741,264	2,766,264	2,766,264	2,766,264	2,766,264	2,766,264				
Jun-86	0	0	58,000	174,759	387,859	534,203	871,132	1,698,031	2,285,026	2,295,026	2,442,026	2,462,026	2,548,026	2,585,526	2,585,526	2,585,526	2,585,526	2,615,526	2,670,526	2,734,526	2,750,526	2,795,526	2,853,801	3,091,602				
Jun-87	0	81,440	265,762	512,428	765,890	1,387,497	2,438,034	2,947,035	3,345,491	3,530,297	3,716,721	3,819,392	4,154,251	4,560,751	4,800,751	5,040,750	5,090,750	5,222,750	5,302,750	5,312,750	5,312,750	5,312,750	5,312,750					
Jun-88	0	106,671	307,099	725,599	1,562,083	3,135,525	4,328,025	5,039,408	5,888,408	6,261,808	6,567,134	6,808,641	7,137,104	7,137,104	7,197,014	7,197,014	7,388,681	7,453,681	7,539,014	7,639,015	7,729,015	7,879,016						
Jun-89	0	239,195	620,195	1,617,939	3,407,380	5,038,330	6,061,325	7,056,827	7,588,327	7,920,827	8,524,638	8,782,738	9,059,238	9,151,738	9,176,738	9,195,238	9,258,738	9,477,071	9,593,454	9,753,738	9,816,238							
Jun-90	0	254,094	1,459,232	3,268,528	4,586,480	5,647,235	6,632,785	7,625,785	8,035,319	8,473,619	8,839,131	9,247,964	9,288,797	9,334,797	9,365,797	9,390,797	9,496,797	9,606,922	9,736,798	9,764,298								
Jun-91	13,500	452,207	2,446,957	3,880,284	4,800,710	6,018,550	6,776,550	6,979,839	7,211,839	7,351,839	7,451,840	7,505,840	7,505,840	7,505,840	7,575,840	7,753,940	7,856,440	8,136,440	8,266,440									
Jun-92	66,000	896,673	1,479,789	2,233,286	3,072,036	3,607,537	3,902,037	4,123,537	4,305,037	4,483,037	4,685,720	4,716,970	4,730,470	4,852,738	4,886,106	4,906,973	5,233,473	5,340,473										
Jun-93	62,000	716,058	1,381,386	2,353,337	2,761,587	3,177,388	3,464,117	3,567,117	3,757,117	3,842,117	3,854,117	3,909,117	3,909,117	3,909,117	3,909,117	3,909,117	3,959,117											
Jun-94	90,000	769,356	1,632,583	2,348,107	2,873,484	3,206,985	3,406,485	3,607,985	3,655,485	3,695,535	3,695,535	3,930,035	4,001,035	4,026,035	4,051,035	4,171,035												
Jun-95	219,963	1,108,065	2,085,265	2,882,589	3,282,359	3,507,959	3,574,959	3,584,959	3,655,584	3,790,459	3,848,859	3,883,859	3,883,859	3,995,859	4,038,359													
Jun-96	80,500	785,730	1,835,086	2,491,917	2,811,368	2,921,369	3,010,536	3,169,369	3,292,369	3,423,370	3,526,370	3,588,870	3,588,870	3,607,270														
Jun-97	134,365	1,319,116	2,393,116	3,213,299	3,635,799	3,808,050	3,824,050	3,964,650	4,071,151	4,180,152	4,347,152	4,364,152	4,364,152															
Jun-98	408,337	1,298,950	2,461,625	3,126,625	3,557,716	3,822,625	3,932,960	4,094,126	4,123,126	4,131,127	4,141,127	4,368,877																
Jun-99	251,500	690,750	1,733,431	2,499,052	2,866,608	3,084,805	3,354,881	3,533,936	3,606,937	3,786,937	3,838,937																	
Jun-00	135,731	1,130,224	1,856,765	2,388,815	2,783,366	3,047,865	3,412,749	3,610,867	3,728,868	3,804,868																		
Jun-01	108,490	626,310	1,464,820	1,980,624	2,466,794	2,990,359	3,229,863	3,600,363	3,734,363																			
Jun-02	48,000	299,595	918,995	1,611,909	2,379,996	2,936,811	3,293,532	3,618,532																				
Jun-03	20,000	263,617	1,237,271	2,068,006	2,622,988	3,075,411	3,200,412																					
Jun-04	47,500	200,700	753,163	1,670,265	2,500,018	3,053,018																						
Jun-05	6,157	177,260	1,017,627	2,377,229	3,026,952																							
Jun-06	0	307,301	1,079,755	2,432,756																								
Jun-07	36,000	487,583	1,402,335																									
Jun-08	17,730	746,231																										
Jun-09	285,000																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs							4.875	1.530	1.223	2.680	1.392	1.338	2.008	1.541	1.188	1.077	1.014	1.165	1.144	1.121	1.022	1.043	1.058	1.032	1.007	1.020	1.000	
Jun-83						1.000	2.625	1.714	1.889	1.903	1.281	1.186	1.224	1.266	1.000	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84					2.262	2.899	2.057	1.344	1.501	1.292	1.272	1.042	1.085	1.038	1.022	1.027	1.060	1.030	1.000	1.000	1.054	1.000	1.006	1.000	1.000			
Jun-85				1.360	1.944	1.563	1.494	1.630	1.571	1.216	1.102	1.141	1.017	1.000	1.055	1.047	1.011	1.013	1.009	1.000	1.000	1.000	1.000	1.000				
Jun-86			3.013	2.219	1.377	1.631	1.949	1.346	1.004	1.064	1.008	1.035	1.015	1.000	1.000	1.000	1.012	1.021	1.024	1.006	1.016	1.021	1.083					
Jun-87		3.263	1.928	1.495	1.812	1.757	1.209	1.135	1.055	1.053	1.028	1.088	1.098	1.053	1.050	1.010	1.026	1.015	1.002	1.000	1.000	1.000						
Jun-88		2.879	2.363	2.153	2.007	1.380	1.164	1.168	1.063	1.049	1.037	1.048	1.000	1.008	1.000	1.027	1.009	1.011	1.013	1.012	1.019							
Jun-89		2.593	2.609	2.106	1.479	1.203	1.164	1.075	1.044	1.076	1.030	1.031	1.010	1.003	1.002	1.007	1.024	1.012	1.017	1.006								
Jun-90		5.743	2.240	1.403	1.231	1.175	1.150	1.054	1.055	1.043	1.046	1.004	1.005	1.003	1.003	1.011	1.012	1.014	1.003									
Jun-91	33.497	5.411	1.586	1.237	1.254	1.126	1.030	1.033	1.019	1.014	1.007	1.000	1.000	1.009	1.024	1.013	1.036	1.016										
Jun-92	13.586	1.650	1.509	1.376	1.174	1.082	1.057	1.044	1.041	1.045	1.007	1.003	1.026	1.007	1.004	1.067	1.020											
Jun-93	11.549	1.929	1.704	1.173	1.151	1.090	1.030	1.053	1.023	1.003	1.014	1.000	1.000	1.000	1.000	1.013												
Jun-94	8.548	2.122	1.438	1.224	1.116	1.062	1.059	1.013	1.011	1.000	1.063	1.018	1.006	1.006	1.030													
Jun-95	5.038	1.882	1.382	1.139	1.069	1.019	1.003	1.020	1.037	1.015	1.009	1.000	1.029	1.011														
Jun-96	9.761	2.336	1.358	1.128	1.039	1.031	1.053	1.039	1.040	1.030	1.018	1.000	1.005															
Jun-97	9.817	1.814	1.343	1.131	1.047	1.004	1.037	1.027	1.027	1.040	1.004	1.000																
Jun-98	3.181	1.895	1.270	1.138	1.074	1.029	1.041	1.007	1.002	1.002	1.055																	
Jun-99	2.747	2.509	1.442	1.147	1.076	1.088	1.053	1.021	1.050	1.014																		
Jun-00	8.327	1.643	1.287	1.165	1.095	1.120	1.058	1.033	1.020																			
Jun-01	5.773	2.339	1.352	1.245	1.212	1.080	1.115	1.037																				
Jun-02	6.242	3.067	1.754	1.477	1.234	1.121	1.099																					
Jun-03	13.181	4.693	1.671	1.268	1.172	1.041																						
Jun-04	4.225	3.753	2.218	1.497	1.221																							
Jun-05	28.790	5.741	2.336	1.273																								
Jun-06		3.514	2.253																									
Jun-07	13.544	2.876																										
Jun-08	42.089																											

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	12.935	3.031	1.812	1.398	1.336	1.262	1.272	1.147	1.136	1.109	1.061	1.040	1.037	1.031	1.016	1.021	1.021	1.015	1.008	1.003	1.015	1.004	1.022	1.000	1.000	1.000		
Latest 5		4.115	2.046	1.352	1.187	1.090	1.073	1.025	1.028	1.020	1.030	1.004	1.013	1.007	1.012	1.022	1.020	1.014	1.012	1.005	1.018	1.004	1.029					
Latest 3		4.044	2.269	1.346	1.209	1.081	1.090	1.030	1.024	1.019	1.026	1.000	1.013	1.006	1.011	1.031	1.023	1.014	1.011	1.006	1.012	1.007	1.030	1.000				
Volume Wtd																												
All Yrs (ex P)	7.422	2.448	1.613	1.294	1.207	1.131	1.102	1.067	1.047	1.043	1.033	1.024	1.017	1.012	1.013	1.019	1.020	1.014	1.010	1.006	1.013	1.004	1.031	1.000	1.000			
Latest 5		3.822	2.029	1.339	1.184	1.090	1.072	1.024	1.027	1.020	1.029	1.004	1.014	1.007	1.012	1.018	1.020	1.014	1.010	1.006	1.014							
Latest 3		3.600	2.273	1.333	1.208	1.080	1.090	1.030	1.023	1.019	1.026	1.000	1.014	1.006	1.011	1.029	1.022	1.014	1.011	1.007	1.012	1.005	1.034					

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	12.7%	0.0%	4.3%	2.6%	1.000	1.000
324	87.3%	0.7%	12.7%	0.2%	0.1%	0.981	0.971
312	86.6%	0.8%	13.4%	0.3%	0.2%	0.945	0.919
300	85.9%	0.8%	14.1%	0.3%	0.2%	0.912	0.873
288	85.1%	-1.8%	14.9%	-0.7%	-0.5%	0.882	0.831
276	86.9%	1.9%	13.1%	0.8%	0.5%	0.831	0.758
264	85.0%	-1.4%	15.0%	-0.6%	-0.4%	0.821	0.747
252	86.4%	0.2%	13.6%	0.1%	0.1%	0.771	0.678
240	86.2%	8.9%	13.8%	4.2%	2.9%	0.745	0.645
228	77.3%	-4.8%	22.7%	-2.3%	-1.6%	0.820	0.751
216	82.1%	3.6%	17.9%	1.8%	1.3%	0.737	0.638
204	78.5%	0.6%	21.5%	0.3%	0.2%	0.754	0.663
192	77.9%	0.0%	22.1%	0.0%	0.0%	0.731	0.635
180	77.9%	1.6%	22.1%	0.9%	0.7%	0.703	0.598
168	76.3%	2.2%	23.7%	1.3%	1.0%	0.697	0.593
156	74.1%	-0.7%	25.9%	-0.4%	-0.3%	0.696	0.594
144	74.8%	2.6%	25.2%	1.7%	1.3%	0.661	0.549
132	72.2%	2.2%	27.8%	1.5%	1.2%	0.668	0.560
120	70.0%	0.2%	30.0%	0.2%	0.1%	0.667	0.561
108	69.8%	3.0%	30.2%	2.2%	1.8%	0.644	0.533
96	66.8%	2.5%	33.2%	1.8%	1.6%	0.652	0.545
84	64.3%	2.1%	35.7%	1.6%	1.5%	0.651	0.546
72	62.1%	4.2%	37.9%	3.4%	3.1%	0.646	0.541
60	57.9%	5.1%	42.1%	4.3%	3.9%	0.658	0.556
48	52.8%	6.9%	47.2%	6.0%	5.6%	0.670	0.573
36	45.9%	12.0%	54.1%	10.9%	10.4%	0.687	0.596
24	33.9%	17.4%	66.1%	16.4%	15.9%	0.719	0.636
12	16.5%	16.5%	83.5%	16.2%	16.0%	0.751	0.678
Total		100.0%					

NOTES:

(2) = 1 / Section 1, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	19,231,931	29,688,384		16,811,300	25,979,914
6/30/82-83	1,790,655	2,897,935	0.981	1,755,882	2,841,659
6/30/83-84	2,642,243	3,934,920	0.945	2,517,751	3,747,263
6/30/84-85	2,342,740	4,617,635	0.912	2,160,252	4,254,726
6/30/85-86	3,910,683	5,815,760	0.882	3,521,328	5,235,451
6/30/86-87	3,142,122	5,846,852	0.831	2,777,036	5,184,146
6/30/87-88	7,596,702	11,054,532	0.821	6,579,068	9,590,187
6/30/88-89	7,395,252	9,327,912	0.771	6,270,124	7,921,271
6/30/89-90	6,934,012	8,089,320	0.745	5,741,357	6,700,967
6/30/90-91	7,943,739	12,540,794	0.820	6,474,063	10,271,427
6/30/91-92	4,995,118	6,266,861	0.737	4,018,646	5,064,718
6/30/92-93	4,142,321	4,992,891	0.754	3,234,809	3,903,871
6/30/93-94	5,124,651	5,820,651	0.731	3,971,741	4,571,002
6/30/94-95	5,194,830	5,379,830	0.703	3,958,677	4,099,585
6/30/95-96	5,135,653	5,931,559	0.697	3,843,544	4,442,937
6/30/96-97	6,409,607	7,194,055	0.696	4,740,951	5,316,901
6/30/97-98	7,039,604	7,737,519	0.661	5,132,575	5,636,876
6/30/98-99	7,673,888	8,542,888	0.668	5,505,381	6,132,212
6/30/99-00	9,893,148	10,780,148	0.667	6,983,138	7,605,336
6/30/00-01	11,565,417	13,084,417	0.644	8,050,258	9,105,119
6/30/01-02	12,088,786	12,963,786	0.652	8,323,367	8,917,315
6/30/02-03	13,256,632	14,203,632	0.651	9,047,370	9,683,638
6/30/03-04	14,046,038	15,028,038	0.646	9,600,099	10,265,132
6/30/04-05	15,878,317	17,663,317	0.658	10,824,727	12,099,562
6/30/05-06	17,111,686	20,247,686	0.670	11,843,755	14,020,014
6/30/06-07	18,191,855	24,324,855	0.687	12,885,401	17,202,701
6/30/07-08	26,663,872	34,519,872	0.719	19,445,377	25,237,714
6/30/08-09	33,354,129	40,764,129	0.751	25,369,696	31,114,488
Total	280,695,627	349,260,175		211,387,674	266,146,134
			(7) Total Discount Factor:	0.753	0.762

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	19,231,931	29,688,384
(9) Projected Number of Years:	N/A	N/A
(10) Projected Paid Loss per Year:	39	39
(11) Discounted Value at 4%:	2,830,168	4,422,935

NOTES:
(2), (3) From Section 1, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 1, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	19,231,931	29,688,384		15,787,915	24,410,715
6/30/82-83	1,790,655	2,897,935	0.981	1,739,238	2,814,723
6/30/83-84	2,642,243	3,934,920	0.945	2,459,693	3,659,767
6/30/84-85	2,342,740	4,617,635	0.912	2,077,446	4,090,099
6/30/85-86	3,910,683	5,815,760	0.882	3,348,925	4,978,553
6/30/86-87	3,142,122	5,846,852	0.831	2,618,741	4,897,001
6/30/87-88	7,596,702	11,054,532	0.821	6,147,510	8,968,746
6/30/88-89	7,395,252	9,327,912	0.771	5,802,855	7,337,075
6/30/89-90	6,934,012	8,089,320	0.745	5,257,686	6,137,814
6/30/90-91	7,943,739	12,540,794	0.820	5,888,938	9,365,221
6/30/91-92	4,995,118	6,266,861	0.737	3,636,013	4,593,053
6/30/92-93	4,142,321	4,992,891	0.754	2,888,566	3,488,267
6/30/93-94	5,124,651	5,820,651	0.731	3,538,474	4,098,473
6/30/94-95	5,194,830	5,379,830	0.703	3,503,665	3,628,323
6/30/95-96	5,135,653	5,931,559	0.697	3,376,791	3,905,091
6/30/96-97	6,409,607	7,194,055	0.696	4,147,407	4,649,626
6/30/97-98	7,039,604	7,737,519	0.661	4,464,583	4,901,652
6/30/98-99	7,673,888	8,542,888	0.668	4,758,846	5,302,393
6/30/99-00	9,893,148	10,780,148	0.667	5,998,507	6,531,719
6/30/00-01	11,565,417	13,084,417	0.644	6,879,585	7,779,919
6/30/01-02	12,088,786	12,963,786	0.652	7,090,202	7,592,987
6/30/02-03	13,256,632	14,203,632	0.651	7,693,222	8,230,443
6/30/03-04	14,046,038	15,028,038	0.646	8,189,285	8,753,731
6/30/04-05	15,878,317	17,663,317	0.658	9,243,073	10,353,380
6/30/05-06	17,111,686	20,247,686	0.670	10,206,890	12,084,481
6/30/06-07	18,191,855	24,324,855	0.687	11,247,220	15,004,671
6/30/07-08	26,663,872	34,519,872	0.719	17,219,392	22,374,367
6/30/08-09	33,354,129	40,764,129	0.751	22,891,077	28,110,641
Total	280,695,627	349,260,175		188,101,748	238,042,932
			(7) Total Discount Factor:	0.670	0.682

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	19,231,931	29,688,384
(9) Projected Number of Years:	N/A	N/A
(10) Projected Paid Loss per Year:	39	39
(11) Discounted Value at 6%:	2,830,168	4,422,935

NOTES:
(2), (3) From Section 1, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 1, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	112,453,399	123,676,172	92,253,007	20,200,392	31,423,164				1,821,461	2,003,607	9.0%	6.4%
6/30/82-83	18,903,293	20,059,628	17,112,267	1,791,026	2,947,361	87.8%	1.0%	8.2%	137,472	261,740	7.7%	8.9%
6/30/83-84	27,640,359	29,097,686	24,997,723	2,642,636	4,099,963	88.1%	1.0%	8.4%	232,213	382,016	8.8%	9.3%
6/30/84-85	39,587,648	41,910,840	37,192,995	2,394,653	4,717,845	91.3%	1.0%	11.5%	341,537	695,506	14.3%	14.7%
6/30/85-86	54,247,730	56,164,466	50,201,521	4,046,209	5,962,945	90.9%	1.0%	11.0%	485,834	674,237	12.0%	11.3%
6/30/86-87	58,660,246	61,371,167	55,360,403	3,299,843	6,010,764	92.2%	1.0%	12.9%	462,105	776,381	14.0%	12.9%
6/30/87-88	87,380,571	90,852,402	79,486,717	7,893,854	11,365,684	89.2%	1.0%	9.3%	763,425	1,155,049	9.7%	10.2%
6/30/88-89	86,520,369	88,482,024	78,726,286	7,794,083	9,755,738	90.0%	1.0%	10.0%	823,590	1,084,934	10.6%	11.1%
6/30/89-90	83,950,077	85,149,886	76,509,116	7,440,961	8,640,770	90.5%	1.0%	10.5%	1,318,238	1,622,432	17.7%	18.8%
6/30/90-91	71,812,065	76,424,696	63,331,780	8,480,285	13,092,916	85.4%	1.0%	6.9%	1,034,004	1,473,208	12.2%	11.3%
6/30/91-92	47,365,953	48,668,810	41,886,294	5,479,659	6,782,516	87.2%	2.0%	15.7%	983,680	1,220,834	18.0%	18.0%
6/30/92-93	33,557,428	34,430,313	28,985,029	4,572,399	5,445,284	85.3%	2.0%	13.6%	663,872	813,518	14.5%	14.9%
6/30/93-94	36,942,000	37,643,000	31,270,933	5,671,067	6,372,067	83.9%	2.0%	12.4%	655,816	722,908	11.6%	11.3%
6/30/94-95	34,490,423	34,688,476	28,783,199	5,707,224	5,905,278	83.2%	2.0%	11.9%	677,171	721,826	11.9%	12.2%
6/30/95-96	32,934,852	33,763,991	27,231,121	5,703,731	6,532,870	81.7%	2.0%	10.9%	920,596	1,136,143	16.1%	17.4%
6/30/96-97	34,735,838	35,556,086	27,618,995	7,116,843	7,937,091	78.6%	2.0%	9.3%	544,181	596,805	7.6%	7.5%
6/30/97-98	37,202,642	37,957,306	29,444,070	7,758,571	8,513,236	78.4%	2.0%	9.2%	696,106	731,172	9.0%	8.6%
6/30/98-99	36,576,000	37,491,000	28,013,679	8,562,321	9,477,321	75.6%	2.0%	8.2%	778,903	858,443	9.1%	9.1%
6/30/99-00	42,963,000	43,898,000	31,878,827	11,084,173	12,019,173	73.4%	3.0%	11.3%	953,195	1,028,737	8.6%	8.6%
6/30/00-01	49,739,000	51,296,000	36,594,520	13,144,480	14,701,480	72.4%	3.2%	11.6%	1,160,707	1,275,071	8.8%	8.7%
6/30/01-02	45,748,000	46,700,000	32,230,285	13,517,715	14,469,715	69.7%	2.7%	9.0%	908,228	965,107	6.7%	6.7%
6/30/02-03	46,815,000	47,963,000	31,761,354	15,053,646	16,201,646	67.0%	2.7%	8.2%	1,184,074	1,262,510	7.9%	7.8%
6/30/03-04	47,375,000	48,577,100	31,196,071	16,178,929	17,381,029	65.0%	2.0%	5.7%	1,381,909	1,471,908	8.5%	8.5%
6/30/04-05	49,418,000	51,918,600	30,838,920	18,579,080	21,079,680	60.9%	4.2%	10.6%	1,586,799	1,908,842	8.5%	9.1%
6/30/05-06	45,353,000	49,373,250	25,116,273	20,236,727	24,256,977	53.0%	7.8%	16.7%	3,459,026	4,154,064	17.1%	17.1%
6/30/06-07	42,658,000	50,691,700	20,770,722	21,887,278	29,920,978	44.5%	8.5%	15.4%	3,331,106	4,484,908	15.2%	15.0%
6/30/07-08	49,992,000	59,818,350	17,483,251	32,508,749	42,335,099	31.8%	12.7%	18.6%	5,943,778	7,791,212	18.3%	18.4%
6/30/08-09	52,015,000	63,063,550	8,348,005	43,666,995	54,715,545	14.5%	17.3%	20.3%	8,884,787	11,060,861	20.3%	20.2%
Total	1,407,036,893	1,486,687,498	1,084,623,365	322,413,528	402,064,133				42,133,812	52,333,979	13.1%	13.0%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10), (11) Sum of Columns (10), (11) for all clusters
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		5,688,120			6,656,581	7,422,900	968,461	1,734,780		
6/30/82-83		1,222,393	1,249,672		1,222,764	1,271,819	371	49,426		
6/30/83-84		3,205,196	3,284,563		3,205,590	3,370,239	394	165,043		
6/30/84-85	1,632,355	3,063,056	3,135,636	3,130,890	3,114,969	3,163,266	51,913	100,210	0.191	0.194
6/30/85-86	1,755,421	4,868,351	5,004,922	5,000,740	5,003,877	5,015,536	135,526	147,185	0.285	0.286
6/30/86-87	2,017,293	5,621,525	5,777,651	5,783,246	5,779,246	5,785,437	157,721	163,912	0.286	0.287
6/30/87-88	2,675,340	9,506,848	9,804,651	9,816,663	9,804,000	9,818,000	297,152	311,152	0.366	0.367
6/30/88-89	2,880,999	11,752,400	12,151,952	12,156,751	12,151,230	12,180,225	398,830	427,826	0.422	0.423
6/30/89-90	2,855,415	12,472,674	12,984,609	12,993,700	12,979,622	13,024,123	506,948	551,450	0.455	0.456
6/30/90-91	2,682,613	11,429,660	11,967,345	11,966,000	11,966,205	11,981,782	536,546	552,122	0.446	0.447
6/30/91-92	2,641,036	9,777,992	10,263,499	10,262,846	10,262,534	10,293,647	484,542	515,655	0.389	0.390
6/30/92-93	2,639,939	7,578,974	8,013,988	8,015,754	8,009,052	8,031,367	430,078	452,393	0.303	0.304
6/30/93-94	2,801,390	7,790,584	8,339,202	8,341,039	8,337,000	8,342,000	546,416	551,416	0.298	0.298
6/30/94-95	2,894,918	6,546,028	7,071,056	7,079,744	7,058,423	7,071,476	512,395	525,448	0.244	0.244
6/30/95-96	3,029,192	6,411,788	6,981,691	6,996,080	6,979,867	7,013,100	568,078	601,311	0.230	0.232
6/30/96-97	3,621,274	6,315,764	7,024,042	7,048,583	7,023,000	7,058,800	707,236	743,036	0.194	0.195
6/30/97-98	3,485,251	5,850,033	6,569,711	6,602,592	6,569,000	6,625,750	718,967	775,717	0.188	0.190
6/30/98-99	3,717,044	5,994,567	6,883,452	6,929,775	6,883,000	6,929,000	888,433	934,433	0.185	0.186
6/30/99-00	3,911,384	6,813,975	8,005,656	8,053,547	8,005,000	8,053,000	1,191,025	1,239,025	0.205	0.206
6/30/00-01	3,990,080	8,000,937	9,581,816	9,614,992	9,580,000	9,618,000	1,579,063	1,617,063	0.240	0.241
6/30/01-02	4,107,529	6,292,071	7,720,749	7,798,285	7,721,000	7,798,000	1,428,929	1,505,929	0.188	0.190
6/30/02-03	4,081,731	6,990,986	8,929,435	8,989,362	8,788,000	8,989,000	1,797,014	1,998,014	0.215	0.220
6/30/03-04	4,128,759	7,593,109	9,866,764	9,927,160	9,726,000	9,946,100	2,132,891	2,352,991	0.236	0.241
6/30/04-05	4,274,405	8,698,237	12,029,177	12,005,085	11,399,000	12,114,600	2,700,763	3,416,363	0.267	0.283
6/30/05-06	4,561,005	7,488,958	10,862,709	11,480,459	10,614,000	11,498,250	3,125,042	4,009,292	0.233	0.252
6/30/06-07	4,793,519	7,783,576	12,692,680	12,891,237	11,479,000	13,379,700	3,695,424	5,596,124	0.239	0.279
6/30/07-08	5,105,961	6,460,123	13,306,638	14,008,401	12,305,000	14,275,350	5,844,877	7,815,227	0.241	0.280
6/30/08-09	5,031,931	3,247,133	16,488,373	14,641,451	13,560,000	17,198,550	10,312,867	13,951,417	0.269	0.342
Total	85,315,785	194,465,060	235,991,638	231,534,383	236,182,960	247,269,018	41,717,901	52,803,958		
Tot 6/30/84-09	85,315,785	184,349,351	231,457,403	231,534,383	225,098,025	235,204,059	40,748,675	50,854,709	0.264	0.276

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 1, Exhibit 2, Page 2, Column 3
(4) From Section 1, Exhibit 2, Page 2, Column 8
(5) From Section 1, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		5,688,120							30	22	
6/30/82-83		1,222,393	1.022	N/A	1,249,672	N/A	1,249,672		5	3	9,093
6/30/83-84		3,205,196	1.025	N/A	3,284,563	N/A	3,284,563		3	2	39,683
6/30/84-85	1,632,355	3,063,056	1.024	N/A	3,135,636	N/A	3,135,636	0.192	8	6	12,097
6/30/85-86	1,755,421	4,868,351	1.028	N/A	5,004,922	N/A	5,004,922	0.285	10	12	11,381
6/30/86-87	2,017,293	5,621,525	1.028	N/A	5,777,651	N/A	5,777,651	0.286	10	8	19,516
6/30/87-88	2,675,340	9,506,848	1.031	N/A	9,804,651	N/A	9,804,651	0.366	20	18	16,545
6/30/88-89	2,880,999	11,752,400	1.034	N/A	12,151,952	N/A	12,151,952	0.422	22	24	16,648
6/30/89-90	2,855,415	12,472,674	1.041	N/A	12,984,609	N/A	12,984,609	0.455	21	19	26,944
6/30/90-91	2,682,613	11,429,660	1.047	N/A	11,967,345	N/A	11,967,345	0.446	32	26	20,680
6/30/91-92	2,641,036	9,777,992	1.050	N/A	10,263,499	N/A	10,263,499	0.389	24	20	24,275
6/30/92-93	2,639,939	7,578,974	1.057	N/A	8,013,988	N/A	8,013,988	0.304	20	17	25,589
6/30/93-94	2,801,390	7,790,584	1.070	N/A	8,339,202	N/A	8,339,202	0.298	30	29	18,918
6/30/94-95	2,894,918	6,546,028	1.080	N/A	7,071,056	N/A	7,071,056	0.244	27	23	22,827
6/30/95-96	3,029,192	6,411,788	1.089	N/A	6,981,691	N/A	6,981,691	0.230	17	13	43,839
6/30/96-97	3,621,274	6,315,764	1.112	N/A	7,024,042	N/A	7,024,042	0.194	29	22	32,194
6/30/97-98	3,485,251	5,850,033	1.123	N/A	6,569,711	N/A	6,569,711	0.189	32	35	20,562
6/30/98-99	3,717,044	5,994,567	1.148	N/A	6,883,452	N/A	6,883,452	0.185	38	31	28,674
6/30/99-00	3,911,384	6,813,975	1.175	N/A	8,005,656	N/A	8,005,656	0.205	50	44	27,084
6/30/00-01	3,990,080	8,000,937	1.198	N/A	9,581,816	N/A	9,581,816	0.240	79	66	23,953
6/30/01-02	4,107,529	6,292,071	1.227	N/A	7,720,749	N/A	7,720,749	0.188	90	68	21,010
6/30/02-03	4,081,731	6,990,986	1.277	N/A	8,929,435	N/A	8,929,435	0.219	119	86	22,540
6/30/03-04	4,128,759	7,593,109	1.299	N/A	9,866,764	N/A	9,866,764	0.239	167	111	20,483
6/30/04-05	4,274,405	8,698,237	1.383	N/A	12,029,177	N/A	12,029,177	0.281	246	149	22,355
6/30/05-06	4,561,005	7,488,958	1.450	N/A	10,862,709	N/A	10,862,709	0.238	459	235	14,356
6/30/06-07	4,793,519	7,783,576	1.631	N/A	12,692,680	N/A	12,692,680	0.265	1,503	437	11,234
6/30/07-08	5,105,961	6,460,123	2.060	N/A	13,306,638	N/A	13,306,638	0.261	2,455	1,563	4,380
6/30/08-09	5,031,931	3,247,133	5.078	N/A	16,488,373	N/A	16,488,373	0.328		2,467	5,367
Total	85,315,785	194,465,060			235,991,638		235,991,638		5,546	5,556	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 1, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	1,632,355	0.198	3,063,056	1.024	3,130,890	N/A	3,130,890	0.192	0.192
6/30/85-86	1,755,421	0.298	4,868,351	1.028	5,000,740	N/A	5,000,740	0.285	0.285
6/30/86-87	2,017,293	0.308	5,621,525	1.028	5,783,246	N/A	5,783,246	0.287	0.287
6/30/87-88	2,675,340	0.387	9,506,848	1.031	9,816,663	N/A	9,816,663	0.367	0.367
6/30/88-89	2,880,999	0.448	11,752,400	1.034	12,156,751	N/A	12,156,751	0.422	0.422
6/30/89-90	2,855,415	0.489	12,472,674	1.041	12,993,700	N/A	12,993,700	0.455	0.455
6/30/90-91	2,682,613	0.444	11,429,660	1.047	11,966,000	N/A	11,966,000	0.446	0.446
6/30/91-92	2,641,036	0.386	9,777,992	1.050	10,262,846	N/A	10,262,846	0.389	0.389
6/30/92-93	2,639,939	0.302	7,578,974	1.057	8,015,754	N/A	8,015,754	0.304	0.304
6/30/93-94	2,801,390	0.296	7,790,584	1.070	8,341,039	N/A	8,341,039	0.298	0.298
6/30/94-95	2,894,918	0.245	6,546,028	1.080	7,079,744	N/A	7,079,744	0.245	0.245
6/30/95-96	3,029,192	0.232	6,411,788	1.089	6,996,080	N/A	6,996,080	0.231	0.231
6/30/96-97	3,621,274	0.198	6,315,764	1.112	7,048,583	N/A	7,048,583	0.195	0.195
6/30/97-98	3,485,251	0.193	5,850,033	1.123	6,602,592	N/A	6,602,592	0.189	0.189
6/30/98-99	3,717,044	0.191	5,994,567	1.148	6,929,775	N/A	6,929,775	0.186	0.186
6/30/99-00	3,911,384	0.209	6,813,975	1.175	8,053,547	N/A	8,053,547	0.206	0.206
6/30/00-01	3,990,080	0.241	8,000,937	1.198	9,614,992	N/A	9,614,992	0.241	0.241
6/30/01-02	4,107,529	0.194	6,292,071	1.227	7,798,285	N/A	7,798,285	0.190	0.190
6/30/02-03	4,081,731	0.222	6,990,986	1.277	8,989,362	N/A	8,989,362	0.220	0.220
6/30/03-04	4,128,759	0.240	7,593,109	1.299	9,927,160	N/A	9,927,160	0.240	0.240
6/30/04-05	4,274,405	0.250	8,698,237	1.383	12,005,085	N/A	12,005,085	0.281	0.281
6/30/05-06	4,561,005	0.250	7,488,958	1.450	11,480,459	N/A	11,480,459	0.252	0.252
6/30/06-07	4,793,519	0.250	7,783,576	1.631	12,891,237	N/A	12,891,237	0.269	0.269
6/30/07-08	5,105,961	0.250	6,460,123	2.060	14,008,401	N/A	14,008,401	0.274	0.274
6/30/08-09	5,031,931	0.250	3,247,133	5.078	14,641,451	N/A	14,641,451	0.291	0.291
Total	85,315,785		184,349,351		231,534,383		231,534,383		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 1, Exhibit 2, Page 4, Column 11
(4) From Section 1, Exhibit 2, Page 2, Column 3
(5) From Section 1, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.198	0.198
6/30/85-86									0.298	0.298
6/30/86-87									0.308	0.308
6/30/87-88									0.387	0.387
6/30/88-89									0.448	0.448
6/30/89-90									0.489	0.489
6/30/90-91	2,682,613	11,967,345	0.446	1.157	0.516	1.754	0.905	0.446	0.500	0.444
6/30/91-92	2,641,036	10,263,499	0.389	1.152	0.448	1.702	0.762	0.389	0.446	0.386
6/30/92-93	2,639,939	8,013,988	0.304	1.152	0.350	1.653	0.578	0.304	0.346	0.302
6/30/93-94	2,801,390	8,339,202	0.298	1.142	0.340	1.605	0.545	0.298	0.334	0.296
6/30/94-95	2,894,918	7,071,056	0.244	1.134	0.277	1.558	0.431	0.244	0.273	0.245
6/30/95-96	3,029,192	6,981,691	0.230	1.120	0.258	1.513	0.390	0.230	0.256	0.232
6/30/96-97	3,621,274	7,024,042	0.194	1.101	0.214	1.469	0.314	0.194	0.210	0.198
6/30/97-98	3,485,251	6,569,711	0.189	1.100	0.207	1.426	0.296	0.189	0.201	0.193
6/30/98-99	3,717,044	6,883,452	0.185	1.100	0.204	1.384	0.282	0.185	0.197	0.191
6/30/99-00	3,911,384	8,005,656	0.205	1.100	0.225	1.344	0.303	0.205	0.220	0.209
6/30/00-01	3,990,080	9,581,816	0.240	1.075	0.258	1.305	0.337	0.240	0.245	0.241
6/30/01-02	4,107,529	7,720,749	0.188	1.067	0.201	1.267	0.254	0.188	0.195	0.194
6/30/02-03	4,081,731	8,929,435	0.219	1.040	0.227	1.230	0.280	0.219	0.230	0.222
6/30/03-04	4,128,759	9,866,764	0.239	1.014	0.242	1.194	0.289	0.239	0.245	0.240
6/30/04-05	4,274,405	12,029,177	0.281	1.003	0.282	1.159	0.327	0.281	0.275	0.250
6/30/05-06	4,561,005	10,862,709	0.238	1.000	0.238	1.126	0.268	0.238	0.249	0.250
6/30/06-07	4,793,519	12,692,680	0.265	1.000	0.265	1.093	0.289	0.265	0.252	0.250
6/30/07-08	5,105,961	13,306,638	0.261	1.000	0.261	1.061	0.276	0.261	0.250	0.250
6/30/08-09	5,031,931	16,488,373	0.328	1.000	0.328	1.030	0.338	0.328		0.250
Total	71,498,961	182,597,982								

Trend Last 4 (ex 08-09):	-1.3%	Avg 3 (x08-09):	0.278
Trend Last 8 (ex 08-09):	2.1%	Avg 5 (x08-09):	0.290
Trend Last 12 (ex 08-09):	2.3%	Avg 10 (x08-09):	0.291
Prior Selected Trend:	3.0%	Prior Sel Avg:	0.250
Selected Trend:	3.0%	Sel. Loss Cost:	0.250

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 1, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.890	
(2)	Credibility		91%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.890	
		(Low)		(High)
(5)	Selected Range	0.860		0.910
(6)	Incremental Paid for 2009	156,441		156,441
(7)	Estimated Reserve	960,994		1,581,790
(8)	Paid to Date (82 & Prior)	5,688,120		5,688,120
(9)	Est Ult Paid for 1982 & Prior	6,649,113		7,269,910

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	98,424	70,245
(11)	Projected Number of Years	3	3
(12)	Estimated Reserve	295,272	210,735
(13)	Paid to Date (82 & Prior)	5,688,120	5,531,679
(14)	Est Ult Paid for 1982 & Prior	5,983,391	5,742,414
(14a)	Paid Counts During Fiscal Year	22	30

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	6,316,252	7,269,910
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**6,316,252**	**7,269,910**
(18)	Implied Tail	1.110	1.278
(19)	Ult Loss Inc Lump Sums @ 6/08	5,857,793	6,258,373

NOTES:

(1) From Section 1, Exhibit 2, Page 6
(2) = (Average of Section 1, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 1, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 1, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	401,487	12.903			
1993	2	281,130	12.547	0.700		
1994	3	275,063	12.525	0.978		
1995	4	195,978	12.186	0.712		
1996	5	235,244	12.368	1.200		
1997	6	119,211	11.689	0.507		
1998	7	74,969	11.225	0.629		
1999	8	167,971	12.032	2.241		
2000	9	112,165	11.628	0.668	n =	18
2001	10	83,644	11.334	0.746	S(x) =	36,009
2002	11	54,441	10.905	0.651	S(x-sq) =	72,036,489
2003	12	53,298	10.884	0.979	S(xy) =	420,546
2004	13	73,810	11.209	1.385	S(y) =	210
2005	14	86,676	11.370	1.174	D =	8,721
2006	15	71,904	11.183	0.830	slope =	-0.086
2007	16	66,960	11.112	0.931	Avg Trend =	0.914
2008	17	71,871	11.183	1.073		
2009	18	156,441	11.960	2.177		
					Selected Trend:	**0.890**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 2.177 = 156441 / 71871

Commonwealth of Massachusetts Workers Compensation
All Clusters Combined
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	80,157	194,108	281,698	355,785	430,372	505,456	583,349	673,674	790,768	861,582	915,134	975,815	1,007,922	1,082,827	1,139,603	1,141,641	1,147,008	1,150,280	1,152,153	1,152,412	1,154,034	1,170,882	1,177,268	1,193,197	1,205,857	1,216,414	1,222,393
June-84	278,846	675,251	979,952	1,237,679	1,497,148	1,692,853	1,965,008	2,259,281	2,488,041	2,658,528	2,815,940	2,906,236	2,927,914	2,961,604	2,990,903	3,026,971	3,061,107	3,088,013	3,103,364	3,110,882	3,148,274	3,167,361	3,181,238	3,187,495	3,198,788	3,205,196	
June-85	281,180	680,904	988,156	1,248,041	1,524,376	1,767,225	2,056,915	2,259,407	2,404,861	2,595,178	2,656,702	2,691,247	2,723,491	2,743,570	2,791,601	2,825,986	2,858,120	2,885,590	2,909,085	2,936,115	2,962,423	2,989,438	3,016,883	3,039,299	3,063,056		
June-86	525,630	1,272,862	1,847,229	2,295,762	2,801,909	3,261,873	3,656,708	3,915,488	4,146,092	4,242,208	4,302,418	4,368,117	4,405,703	4,495,556	4,540,345	4,569,414	4,631,690	4,679,159	4,717,866	4,751,566	4,788,347	4,826,166	4,848,695	4,868,351			
June-87	679,622	1,645,768	2,495,914	3,175,646	3,758,601	4,235,026	4,616,701	4,839,601	4,982,646	5,092,983	5,194,073	5,273,395	5,401,744	5,450,543	5,483,690	5,500,132	5,518,035	5,536,163	5,551,275	5,565,383	5,582,877	5,601,832	5,621,525				
June-88	1,191,827	3,330,054	5,139,009	6,298,489	7,138,465	7,736,797	8,238,504	8,487,549	8,654,240	8,771,119	8,871,380	8,936,796	8,998,468	9,039,583	9,080,840	9,108,289	9,182,392	9,269,235	9,323,809	9,379,358	9,460,451	9,506,848					
June-89	1,301,800	4,749,050	6,698,392	8,042,212	9,005,556	9,741,252	10,145,151	10,401,975	10,588,606	10,754,116	10,897,219	11,056,485	11,133,041	11,233,906	11,311,779	11,394,541	11,460,208	11,520,998	11,631,220	11,709,730	11,752,400						
June-90	1,971,011	6,207,955	8,378,887	9,502,646	10,377,079	10,866,795	11,178,293	11,460,398	11,654,311	11,744,612	11,853,219	11,929,544	12,013,692	12,102,616	12,193,641	12,288,370	12,363,890	12,414,703	12,454,464	12,472,674							
June-91	2,079,021	6,481,845	8,128,761	9,129,342	9,569,888	9,922,223	10,074,064	10,149,765	10,198,433	10,318,761	10,419,870	10,494,642	10,576,694	10,667,922	10,767,927	10,925,448	11,031,802	11,209,381	11,429,660								
June-92	2,582,717	6,069,511	7,466,854	8,202,774	8,503,875	8,669,993	8,827,343	9,030,623	9,135,160	9,257,875	9,372,582	9,437,134	9,514,021	9,594,979	9,639,410	9,684,641	9,729,562	9,777,992									
June-93	1,951,667	5,170,869	6,081,502	6,489,487	6,751,595	6,861,506	6,914,496	6,958,865	7,037,255	7,082,866	7,132,331	7,201,081	7,259,683	7,329,612	7,401,491	7,505,162	7,578,974										
June-94	2,254,109	4,622,918	5,401,604	5,967,695	6,235,895	6,548,173	6,736,695	6,864,534	6,987,145	7,147,202	7,266,001	7,394,198	7,524,153	7,640,660	7,736,000	7,790,584											
June-95	2,029,019	3,973,539	4,748,104	5,104,898	5,297,904	5,458,376	5,592,474	5,756,438	5,903,503	6,059,664	6,161,322	6,276,889	6,428,588	6,491,856	6,546,028												
June-96	1,766,253	4,182,294	4,865,024	5,174,865	5,452,218	5,598,854	5,739,120	5,855,214	5,980,868	6,100,238	6,209,752	6,290,753	6,361,945	6,411,788													
June-97	1,766,725	3,725,485	4,494,601	4,941,702	5,201,917	5,412,606	5,536,117	5,694,640	5,852,834	5,984,835	6,131,050	6,244,244	6,315,764														
June-98	1,434,653	3,363,240	4,046,082	4,435,465	4,731,267	4,919,954	5,122,526	5,375,830	5,487,330	5,608,858	5,703,803	5,850,033															
June-99	1,427,577	3,215,372	3,912,893	4,351,301	4,694,328	4,986,960	5,249,952	5,556,545	5,746,199	5,876,662	5,994,567																
June-00	1,919,617	4,021,129	4,792,481	5,313,057	5,734,824	6,105,211	6,329,799	6,555,866	6,681,932	6,813,975																	
June-01	1,955,272	4,077,952	5,089,014	5,933,836	6,650,457	7,105,631	7,471,084	7,767,438	8,000,937																		
June-02	1,477,425	3,509,146	4,573,760	5,338,916	5,731,628	5,955,713	6,085,017	6,292,071																			
June-03	969,154	3,818,930	5,475,517	6,135,434	6,529,665	6,778,078	6,990,986																				
June-04	1,457,859	4,815,053	6,238,712	6,959,935	7,262,547	7,593,109																					
June-05	2,296,467	6,044,403	7,443,461	8,222,874	8,698,237																						
June-06	2,480,251	5,605,314	6,838,991	7,488,958																							
June-07	2,697,227	6,287,742	7,783,576																								
June-08	3,229,281	6,460,123																									
June-09	3,247,133																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.422	1.451	1.263	1.210	1.174	1.154	1.155	1.174	1.090	1.062	1.066	1.033	1.074	1.052	1.002	1.005	1.003	1.002	1.000	1.001	1.015	1.005	1.014	1.011	1.009	1.005
June-84	2.422	1.451	1.263	1.210	1.131	1.161	1.150	1.101	1.069	1.059	1.032	1.007	1.012	1.010	1.012	1.011	1.009	1.005	1.002	1.012	1.006	1.004	1.002	1.004	1.002	
June-85	2.422	1.451	1.263	1.221	1.159	1.164	1.098	1.064	1.079	1.024	1.013	1.012	1.007	1.018	1.012	1.011	1.010	1.008	1.009	1.009	1.009	1.009	1.007	1.008		
June-86	2.422	1.451	1.243	1.220	1.164	1.121	1.071	1.059	1.023	1.014	1.015	1.009	1.020	1.010	1.006	1.014	1.010	1.008	1.007	1.008	1.008	1.005	1.004			
June-87	2.422	1.517	1.272	1.184	1.127	1.090	1.048	1.030	1.022	1.020	1.015	1.024	1.009	1.006	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.004				
June-88	2.794	1.543	1.226	1.133	1.084	1.065	1.030	1.020	1.014	1.011	1.007	1.007	1.005	1.005	1.003	1.008	1.009	1.006	1.006	1.009	1.005					
June-89	3.648	1.410	1.201	1.120	1.082	1.041	1.025	1.018	1.016	1.013	1.015	1.007	1.009	1.007	1.007	1.006	1.005	1.010	1.007	1.004						
June-90	3.150	1.350	1.134	1.092	1.047	1.029	1.025	1.017	1.008	1.009	1.006	1.007	1.007	1.008	1.008	1.006	1.004	1.003	1.001							
June-91	3.118	1.254	1.123	1.048	1.037	1.015	1.008	1.005	1.012	1.010	1.007	1.008	1.009	1.009	1.015	1.010	1.016	1.020								
June-92	2.350	1.230	1.099	1.037	1.020	1.018	1.023	1.012	1.013	1.012	1.007	1.008	1.009	1.005	1.005	1.005	1.005									
June-93	2.649	1.176	1.067	1.040	1.016	1.008	1.006	1.011	1.006	1.007	1.010	1.008	1.010	1.010	1.014	1.010										
June-94	2.051	1.168	1.105	1.045	1.050	1.029	1.019	1.018	1.023	1.017	1.018	1.018	1.015	1.012	1.007											
June-95	1.958	1.195	1.075	1.038	1.030	1.025	1.029	1.026	1.026	1.017	1.019	1.024	1.010	1.008												
June-96	2.368	1.163	1.064	1.054	1.027	1.025	1.020	1.021	1.020	1.018	1.013	1.011	1.008													
June-97	2.109	1.206	1.099	1.053	1.041	1.023	1.029	1.028	1.023	1.024	1.018	1.011														
June-98	2.344	1.203	1.096	1.067	1.040	1.041	1.049	1.021	1.022	1.017	1.026															
June-99	2.252	1.217	1.112	1.079	1.062	1.053	1.058	1.034	1.023	1.020																
June-00	2.095	1.192	1.109	1.079	1.065	1.037	1.036	1.019	1.020																	
June-01	2.086	1.248	1.166	1.121	1.068	1.051	1.040	1.030																		
June-02	2.375	1.303	1.167	1.074	1.039	1.022	1.034																			
June-03	3.940	1.434	1.121	1.064	1.038	1.031																				
June-04	3.303	1.296	1.116	1.043	1.046																					
June-05	2.632	1.231	1.105	1.058																						
June-06	2.260	1.220	1.095																							
June-07	2.331	1.238																								
June-08	2.000																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.535	1.304	1.149	1.100	1.070	1.057	1.048	1.037	1.028	1.021	1.018	1.013	1.015	1.012	1.008	1.008	1.007	1.007	1.004	1.007	1.008	1.005	1.007	1.007	1.005	1.005	
Latest 5	2.505	1.284	1.121	1.072	1.051	1.039	1.043	1.026	1.021	1.019	1.019	1.015	1.010	1.009	1.010	1.007	1.008	1.008	1.005	1.006	1.006	1.005					
Latest 3	2.197	1.230	1.105	1.055	1.041	1.035	1.036	1.028	1.022	1.020	1.019	1.016	1.011	1.010	1.009	1.008	1.008	1.011	1.005	1.005	1.005	1.006	1.004	1.007			
Volume Wtd																											
All Yrs	2.476	1.271	1.128	1.078	1.055	1.040	1.033	1.024	1.020	1.016	1.013	1.011	1.010	1.009	1.008	1.008	1.008	1.008	1.005	1.006	1.006	1.005	1.005	1.006	1.004		
Latest 5	2.402	1.271	1.117	1.070	1.051	1.039	1.043	1.026	1.021	1.019	1.019	1.014	1.010	1.009	1.010	1.007	1.008	1.009	1.005	1.006	1.006						
Latest 3	2.183	1.230	1.105	1.055	1.041	1.036	1.037	1.028	1.021	1.021	1.019	1.016	1.011	1.010	1.008	1.008	1.008	1.011	1.005	1.005	1.005	1.005	1.004				

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	6,067,769	6,235,627	6,656,581	7,422,900	588,812	9.7%	1,187,272	19.0%
6/30/82-83	1,216,785	1,273,257	1,222,764	1,271,819	5,979	0.5%	(1,438)	-0.1%
6/30/83-84	3,199,182	3,390,055	3,205,590	3,370,239	6,408	0.2%	(19,816)	-0.6%
6/30/84-85	3,130,282	3,148,329	3,114,969	3,163,266	(15,312)	-0.5%	14,936	0.5%
6/30/85-86	5,015,002	5,025,734	5,003,877	5,015,536	(11,125)	-0.2%	(10,198)	-0.2%
6/30/86-87	5,818,397	5,825,583	5,779,246	5,785,437	(39,151)	-0.7%	(40,147)	-0.7%
6/30/87-88	9,880,000	9,902,000	9,804,000	9,818,000	(76,000)	-0.8%	(84,000)	-0.8%
6/30/88-89	12,288,230	12,319,225	12,151,230	12,180,225	(137,000)	-1.1%	(139,000)	-1.1%
6/30/89-90	13,145,622	13,195,123	12,979,622	13,024,123	(166,000)	-1.3%	(171,000)	-1.3%
6/30/90-91	11,944,205	12,037,782	11,966,205	11,981,782	22,000	0.2%	(56,000)	-0.5%
6/30/91-92	10,355,534	10,461,647	10,262,534	10,293,647	(93,000)	-0.9%	(168,000)	-1.6%
6/30/92-93	8,065,052	8,156,367	8,009,052	8,031,367	(56,000)	-0.7%	(125,000)	-1.5%
6/30/93-94	8,410,000	8,475,000	8,337,000	8,342,000	(73,000)	-0.9%	(133,000)	-1.6%
6/30/94-95	7,099,294	7,167,613	7,058,423	7,071,476	(40,871)	-0.6%	(96,137)	-1.3%
6/30/95-96	7,070,867	7,158,100	6,979,867	7,013,100	(91,000)	-1.3%	(145,000)	-2.0%
6/30/96-97	7,094,000	7,186,800	7,023,000	7,058,800	(71,000)	-1.0%	(128,000)	-1.8%
6/30/97-98	6,562,000	6,712,350	6,569,000	6,625,750	7,000	0.1%	(86,600)	-1.3%
6/30/98-99	6,945,000	7,100,000	6,883,000	6,929,000	(62,000)	-0.9%	(171,000)	-2.4%
6/30/99-00	8,093,000	8,257,000	8,005,000	8,053,000	(88,000)	-1.1%	(204,000)	-2.5%
6/30/00-01	9,622,000	9,736,000	9,580,000	9,618,000	(42,000)	-0.4%	(118,000)	-1.2%
6/30/01-02	7,836,000	8,046,000	7,721,000	7,798,000	(115,000)	-1.5%	(248,000)	-3.1%
6/30/02-03	8,953,000	9,225,000	8,788,000	8,989,000	(165,000)	-1.8%	(236,000)	-2.6%
6/30/03-04	9,910,000	10,741,900	9,726,000	9,946,100	(184,000)	-1.9%	(795,800)	-7.4%
6/30/04-05	11,504,000	12,475,200	11,399,000	12,114,600	(105,000)	-0.9%	(360,600)	-2.9%
6/30/05-06	11,114,000	12,166,350	10,614,000	11,498,250	(500,000)	-4.5%	(668,100)	-5.5%
6/30/06-07	12,214,000	14,326,000	11,479,000	13,379,700	(735,000)	-6.0%	(946,300)	-6.6%
6/30/07-08	14,352,000	16,066,000	12,305,000	14,275,350	(2,047,000)	-14.3%	(1,790,650)	-11.1%
6/30/08-09								
Total	226,905,220	235,810,044	222,622,960	230,070,468	(4,282,260)	-1.9%	(5,739,576)	-2.4%

NOTES:
(2), (3) From Aon analysis as of June 30, 2008
(4), (5) From Section 1, Exhibit 2, Page 1, Columns 6, 7
(6) = (4) - (2)
(7) = (4) / (2) - 1
(8) = (5) - (3)
(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	2.2%	0.0%	0.7%	0.4%	1.000	1.000
324	97.8%	0.2%	2.2%	0.1%	0.0%	0.981	0.971
312	97.6%	-0.1%	2.4%	0.0%	0.0%	0.947	0.922
300	97.7%	0.4%	2.3%	0.2%	0.1%	0.907	0.865
288	97.3%	0.0%	2.7%	0.0%	0.0%	0.889	0.840
276	97.3%	0.3%	2.7%	0.1%	0.1%	0.853	0.790
264	97.0%	0.3%	3.0%	0.1%	0.1%	0.838	0.770
252	96.7%	0.7%	3.3%	0.3%	0.2%	0.819	0.745
240	96.1%	0.6%	3.9%	0.3%	0.2%	0.820	0.748
228	95.5%	0.2%	4.5%	0.1%	0.1%	0.812	0.738
216	95.3%	0.7%	4.7%	0.4%	0.3%	0.791	0.710
204	94.6%	1.2%	5.4%	0.6%	0.4%	0.788	0.709
192	93.4%	0.8%	6.6%	0.5%	0.3%	0.797	0.721
180	92.6%	0.7%	7.4%	0.4%	0.3%	0.791	0.714
168	91.8%	1.9%	8.2%	1.1%	0.9%	0.780	0.700
156	89.9%	0.9%	10.1%	0.5%	0.4%	0.794	0.720
144	89.0%	2.0%	11.0%	1.2%	1.0%	0.781	0.702
132	87.1%	2.0%	12.9%	1.3%	1.1%	0.786	0.709
120	85.1%	1.6%	14.9%	1.1%	0.9%	0.785	0.709
108	83.5%	2.0%	16.5%	1.4%	1.2%	0.777	0.699
96	81.5%	3.2%	18.5%	2.4%	2.1%	0.773	0.693
84	78.3%	1.3%	21.7%	1.0%	0.9%	0.778	0.701
72	77.0%	4.6%	23.0%	3.7%	3.4%	0.761	0.679
60	72.3%	3.4%	27.7%	2.8%	2.6%	0.774	0.696
48	68.9%	7.6%	31.1%	6.6%	6.2%	0.770	0.691
36	61.3%	12.8%	38.7%	11.6%	11.0%	0.787	0.715
24	48.5%	28.9%	51.5%	27.2%	26.4%	0.813	0.748
12	19.7%	19.7%	80.3%	19.3%	19.1%	0.853	0.801
Total		100.0%					

NOTES:

(2) = 1 / Section 1, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
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All Clusters Combined
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	968,461	1,734,780		882,174	1,597,669
6/30/82-83	371	49,426	0.981	371	48,485
6/30/83-84	394	165,043	0.947	394	155,485
6/30/84-85	51,913	100,210	0.907	47,465	92,015
6/30/85-86	135,526	147,185	0.889	121,182	132,124
6/30/86-87	157,721	163,912	0.853	136,991	142,402
6/30/87-88	297,152	311,152	0.838	251,830	263,369
6/30/88-89	398,830	427,826	0.819	330,933	357,905
6/30/89-90	506,948	551,450	0.820	414,910	454,400
6/30/90-91	536,546	552,122	0.812	430,564	444,744
6/30/91-92	484,542	515,655	0.791	387,439	415,538
6/30/92-93	430,078	452,393	0.788	336,591	356,294
6/30/93-94	546,416	551,416	0.797	428,635	432,376
6/30/94-95	512,395	525,448	0.791	399,194	409,456
6/30/95-96	568,078	601,311	0.780	437,985	464,565
6/30/96-97	707,236	743,036	0.794	540,034	567,792
6/30/97-98	718,967	775,717	0.781	545,052	589,676
6/30/98-99	888,433	934,433	0.786	672,199	707,079
6/30/99-00	1,191,025	1,239,025	0.785	902,022	938,403
6/30/00-01	1,579,063	1,617,063	0.777	1,191,977	1,220,823
6/30/01-02	1,428,929	1,505,929	0.773	1,078,403	1,136,440
6/30/02-03	1,797,014	1,998,014	0.778	1,362,531	1,513,052
6/30/03-04	2,132,891	2,352,991	0.761	1,620,512	1,787,303
6/30/04-05	2,700,763	3,416,363	0.774	2,045,087	2,591,342
6/30/05-06	3,125,042	4,009,292	0.770	2,381,322	3,057,426
6/30/06-07	3,695,424	5,596,124	0.787	2,887,624	4,366,729
6/30/07-08	5,844,877	7,815,227	0.813	4,723,255	6,317,714
6/30/08-09	10,312,867	13,951,417	0.853	8,752,175	11,858,417
Total	41,717,901	52,803,958		33,308,850	42,419,023
			(7) Total Discount Facto	0.798	0.803

	Discount Calculation for All Prior Years (Low)	(High)
(8) Estimated Total Reserv	968,461	1,734,780
(9) Projected Number of Ye	3	3
(10) Projected Paid Loss per	322,820	578,260
(11) Discounted Value at 4	913,773	1,636,819

NOTES:
(2), (3) From Section 1, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 1, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
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Reserve Analysis at June 30, 2009

All Clusters Combined
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	968,461	1,734,780		844,746	1,537,526
6/30/82-83	371	49,426	0.971	371	48,034
6/30/83-84	394	165,043	0.922	394	151,044
6/30/84-85	51,913	100,210	0.865	45,458	88,311
6/30/85-86	135,526	147,185	0.840	114,858	125,484
6/30/86-87	157,721	163,912	0.790	128,093	133,168
6/30/87-88	297,152	311,152	0.770	232,844	243,371
6/30/88-89	398,830	427,826	0.745	303,167	329,259
6/30/89-90	506,948	551,450	0.748	378,053	415,451
6/30/90-91	536,546	552,122	0.738	388,962	402,535
6/30/91-92	484,542	515,655	0.710	349,998	376,780
6/30/92-93	430,078	452,393	0.709	301,195	319,787
6/30/93-94	546,416	551,416	0.721	384,590	387,888
6/30/94-95	512,395	525,448	0.714	357,556	366,782
6/30/95-96	568,078	601,311	0.700	390,771	414,813
6/30/96-97	707,236	743,036	0.720	480,064	504,889
6/30/97-98	718,967	775,717	0.702	483,496	523,685
6/30/98-99	888,433	934,433	0.709	596,550	627,545
6/30/99-00	1,191,025	1,239,025	0.709	801,799	834,146
6/30/00-01	1,579,063	1,617,063	0.699	1,059,102	1,084,780
6/30/01-02	1,428,929	1,505,929	0.693	958,747	1,010,317
6/30/02-03	1,797,014	1,998,014	0.701	1,215,154	1,348,679
6/30/03-04	2,132,891	2,352,991	0.679	1,447,111	1,595,927
6/30/04-05	2,700,763	3,416,363	0.696	1,824,683	2,313,572
6/30/05-06	3,125,042	4,009,292	0.691	2,131,666	2,737,585
6/30/06-07	3,695,424	5,596,124	0.715	2,615,728	3,953,382
6/30/07-08	5,844,877	7,815,227	0.748	4,341,967	5,808,818
6/30/08-09	10,312,867	13,951,417	0.801	8,209,575	11,130,179
Total	41,717,901	52,803,958		30,386,698	38,813,737
			(7) Total Discount Factor:	0.728	0.735

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	968,461	1,734,780
(9) Projected Number of Years:	3	3
(10) Projected Paid Loss per Year:	322,820	578,260
(11) Discounted Value at 6%:	888,790	1,592,067

NOTES:
(2), (3) From Section 1, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 1, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		18,755,983			23,950,080	26,342,380	5,194,097	7,586,398		
6/30/82-83		4,457,750	4,943,282		4,819,700	5,066,864	361,950	609,114		
6/30/83-84		7,576,956	9,208,556		9,024,385	9,392,727	1,447,429	1,815,771		
6/30/84-85	181,529	6,780,053	6,991,021	6,996,283	6,848,000	6,916,000	67,947	135,947	3.772	3.810
6/30/85-86	195,215	10,212,827	10,664,515	10,657,529	10,519,000	10,621,000	306,173	408,173	5.388	5.441
6/30/86-87	224,337	13,450,072	14,161,112	14,168,801	13,854,000	13,988,000	403,928	537,928	6.176	6.235
6/30/87-88	262,830	18,567,932	21,483,668	19,751,689	19,752,000	20,618,000	1,184,068	2,050,068	7.515	7.845
6/30/88-89	283,848	19,454,627	20,849,542	20,869,816	20,850,000	20,870,000	1,395,373	1,415,373	7.345	7.353
6/30/89-90	285,041	14,962,973	16,131,473	16,259,354	15,113,000	15,262,000	150,027	299,027	5.302	5.354
6/30/90-91	267,694	10,860,545	11,762,925	11,757,148	11,078,000	11,186,000	217,455	325,455	4.138	4.179
6/30/91-92	261,403	7,324,893	7,967,450	7,961,007	7,961,000	7,967,000	636,107	642,107	3.045	3.048
6/30/92-93	259,951	4,189,576	4,588,826	4,586,282	4,586,000	4,589,000	396,424	399,424	1.764	1.765
6/30/93-94	257,021	3,493,187	3,841,937	3,841,379	3,841,000	3,842,000	347,813	348,813	1.494	1.495
6/30/94-95	255,811	2,081,529	2,311,784	2,317,310	2,312,000	2,317,000	230,471	235,471	0.904	0.906
6/30/95-96	255,494	2,934,067	3,290,598	3,292,004	3,291,000	3,292,000	356,933	357,933	1.288	1.288
6/30/96-97	270,025	2,467,027	2,784,883	2,791,918	2,785,000	2,792,000	317,973	324,973	1.031	1.034
6/30/97-98	245,319	2,492,867	2,848,425	2,851,785	2,848,000	2,852,000	355,133	359,133	1.161	1.163
6/30/98-99	251,404	2,257,288	2,598,142	2,605,931	2,598,000	2,606,000	340,712	348,712	1.033	1.037
6/30/99-00	255,590	2,098,336	2,458,483	2,466,566	2,458,000	2,467,000	359,664	368,664	0.962	0.965
6/30/00-01	263,866	2,944,070	3,545,079	3,539,138	3,539,000	3,545,000	594,930	600,930	1.341	1.343
6/30/01-02	267,544	2,217,530	2,715,025	2,723,154	2,715,000	2,723,000	497,470	505,470	1.015	1.018
6/30/02-03	274,409	2,774,317	3,550,474	3,547,290	3,547,000	3,550,000	772,683	775,683	1.293	1.294
6/30/03-04	272,327	2,668,732	3,543,223	3,539,304	3,539,000	3,543,000	870,268	874,268	1.300	1.301
6/30/04-05	273,587	2,396,953	3,439,585	3,422,835	3,423,000	3,440,000	1,026,047	1,043,047	1.251	1.257
6/30/05-06	285,078	1,946,569	3,060,961	3,190,432	3,061,000	3,190,000	1,114,431	1,243,431	1.074	1.119
6/30/06-07	298,452	1,606,705	3,034,574	3,276,027	3,035,000	3,276,000	1,428,295	1,669,295	1.017	1.098
6/30/07-08	314,165	877,226	2,451,838	3,218,924	2,452,000	3,219,000	1,574,774	2,341,774	0.780	1.025
6/30/08-09	302,930	609,589	3,266,651	3,622,937	3,267,000	3,623,000	2,657,411	3,013,411	1.078	1.196
Total	6,564,872	172,460,181	177,494,031	163,254,844	197,066,165	203,095,972	24,605,983	30,635,791		
Tot 6/30/84-09	6,564,872	141,669,492	163,342,193	163,254,844	159,272,000	162,294,000	17,602,508	20,624,508	2.426	2.472

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) Sum of Section 2, Exhibit 1, Page 2, Column 3 and Section 2, Exhibit 1, Page 9, Column 8
(4) From Section 2, Exhibit 1, Page 2, Column 8
(5) From Section 2, Exhibit 1, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		17,490,485							12	11		71
6/30/82-83		4,067,350	1.018	1.100	4,552,882	390,400	4,943,282		2	2	242,766	79
6/30/83-84		7,027,806	1.027	1.200	8,659,132	549,425	9,208,556		4	3	543,775	63
6/30/84-85	181,529	5,650,202	1.037	1.000	5,859,474	1,131,547	6,991,021	3.851	0	0		
6/30/85-86	195,215	9,275,183	1.048	1.000	9,724,523	939,992	10,664,515	5.463	1	1	449,340	72
6/30/86-87	224,337	11,382,355	1.061	1.000	12,076,984	2,084,128	14,161,112	6.312	1	1	694,629	79
6/30/87-88	262,830	15,776,168	1.075	1.100	18,652,197	2,831,471	21,483,668	8.174	6	4	719,007	65
6/30/88-89	283,848	15,815,015	1.084	1.000	17,147,523	3,702,019	20,849,542	7.345	3	4	333,127	75
6/30/89-90	285,041	11,610,392	1.094	1.000	12,704,788	3,426,685	16,131,473	5.659	1	0		
6/30/90-91	267,694	8,295,115	1.101	1.000	9,129,786	2,633,139	11,762,925	4.394	1	2	417,336	65
6/30/91-92	261,403	5,518,481	1.106	1.000	6,103,899	1,863,551	7,967,450	3.048	3	2	292,709	58
6/30/92-93	259,951	3,210,473	1.112	1.000	3,570,532	1,018,294	4,588,826	1.765	1	0		
6/30/93-94	257,021	2,524,486	1.120	1.000	2,828,407	1,013,529	3,841,937	1.495	1	2	151,961	70
6/30/94-95	255,811	1,526,329	1.130	1.000	1,724,616	587,168	2,311,784	0.904	0	0		
6/30/95-96	255,494	2,187,427	1.138	1.000	2,489,767	800,831	3,290,598	1.288	0	1	302,340	53
6/30/96-97	270,025	1,787,477	1.147	1.000	2,049,729	735,155	2,784,883	1.031	1	1	262,251	54
6/30/97-98	245,319	1,959,704	1.151	1.000	2,256,112	592,312	2,848,425	1.161	2	2	148,204	50
6/30/98-99	251,404	1,735,217	1.160	1.000	2,013,438	584,704	2,598,142	1.033	1	1	278,221	55
6/30/99-00	255,590	1,814,835	1.166	1.000	2,116,350	342,133	2,458,483	0.962	1	2	150,758	60
6/30/00-01	263,866	2,692,967	1.176	1.000	3,167,284	377,794	3,545,079	1.344	9	6	79,053	53
6/30/01-02	267,544	1,934,317	1.197	1.000	2,316,011	399,014	2,715,025	1.015	6	2	190,847	50
6/30/02-03	274,409	2,476,294	1.232	1.000	3,050,474	500,000	3,550,474	1.294	11	5	114,836	58
6/30/03-04	272,327	2,394,408	1.271	1.000	3,043,223	500,000	3,543,223	1.301	15	8	81,102	45
6/30/04-05	273,587	2,203,801	1.334	1.000	2,939,585	500,000	3,439,585	1.257	22	13	56,599	50
6/30/05-06	285,078	1,794,067	1.427	1.000	2,560,961	500,000	3,060,961	1.074	36	21	36,519	52
6/30/06-07	298,452	1,513,205	1.675	1.000	2,534,574	500,000	3,034,574	1.017	74	28	36,477	48
6/30/07-08	314,165	840,226	2.323	1.000	1,951,838	500,000	2,451,838	0.780	228	49	22,686	44
6/30/08-09	302,930	609,589	4.465	1.000	2,721,651	545,000	3,266,651	1.078		244	8,656	47
Total	6,564,872	145,113,375			147,945,740	29,548,291	177,494,031		442	415		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 2, Exhibit 1, Page 7
(5) Based on information from the MA WCIRB
(6) = (3) x (4) x (5)
(7) From Section 2, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0
(13) Calculated for claimants that had an indemnity payment within the last calendar year.

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	181,529	3.309	5,650,202	1.037	5,864,736	1,131,547	6,996,283	3.854	3.231
6/30/85-86	195,215	4.904	9,275,183	1.048	9,717,538	939,992	10,657,529	5.459	4.978
6/30/86-87	224,337	5.443	11,382,355	1.061	12,084,673	2,084,128	14,168,801	6.316	5.387
6/30/87-88	262,830	6.253	15,776,168	1.075	16,920,219	2,831,471	19,751,689	7.515	6.438
6/30/88-89	283,848	6.133	15,815,015	1.084	17,167,797	3,702,019	20,869,816	7.352	6.048
6/30/89-90	285,041	4.978	11,610,392	1.094	12,832,669	3,426,685	16,259,354	5.704	4.502
6/30/90-91	267,694	3.387	8,295,115	1.101	9,124,009	2,633,139	11,757,148	4.392	3.408
6/30/91-92	261,403	2.309	5,518,481	1.106	6,097,456	1,863,551	7,961,007	3.045	2.333
6/30/92-93	259,951	1.364	3,210,473	1.112	3,567,988	1,018,294	4,586,282	1.764	1.373
6/30/93-94	257,021	1.098	2,524,486	1.120	2,827,850	1,013,529	3,841,379	1.495	1.100
6/30/94-95	255,811	0.693	1,526,329	1.130	1,730,143	587,168	2,317,310	0.906	0.676
6/30/95-96	255,494	0.979	2,187,427	1.138	2,491,173	800,831	3,292,004	1.288	0.975
6/30/96-97	270,025	0.779	1,787,477	1.147	2,056,764	735,155	2,791,918	1.034	0.762
6/30/97-98	245,319	0.930	1,959,704	1.151	2,259,473	592,312	2,851,785	1.162	0.921
6/30/98-99	251,404	0.823	1,735,217	1.160	2,021,227	584,704	2,605,931	1.037	0.804
6/30/99-00	255,590	0.850	1,814,835	1.166	2,124,433	342,133	2,466,566	0.965	0.831
6/30/00-01	263,866	1.185	2,692,967	1.176	3,161,344	377,794	3,539,138	1.341	1.198
6/30/01-02	267,544	0.884	1,934,317	1.197	2,324,140	399,014	2,723,154	1.018	0.869
6/30/02-03	274,409	1.105	2,476,294	1.232	3,047,290	500,000	3,547,290	1.293	1.110
6/30/03-04	272,327	1.111	2,394,408	1.271	3,039,304	500,000	3,539,304	1.300	1.116
6/30/04-05	273,587	1.050	2,203,801	1.334	2,922,835	500,000	3,422,835	1.251	1.068
6/30/05-06	285,078	1.050	1,794,067	1.427	2,690,432	500,000	3,190,432	1.119	0.944
6/30/06-07	298,452	1.050	1,513,205	1.675	2,776,027	500,000	3,276,027	1.098	0.930
6/30/07-08	314,165	1.050	840,226	2.323	2,718,924	500,000	3,218,924	1.025	0.865
6/30/08-09	302,930	1.050	609,589	4.465	3,077,937	545,000	3,622,937	1.196	1.016
Total	6,564,872		116,527,733		134,646,377	28,608,467	163,254,844		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 2, Exhibit 1, Page 4, Column 11
(4) From Section 2, Exhibit 1, Page 2, Column 3
(5) From Section 2, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 2, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Benefit Adjusted Loss Cost	Loss Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									3.309	3.309
6/30/85-86									4.904	4.904
6/30/86-87									5.443	5.443
6/30/87-88									6.253	6.253
6/30/88-89									6.133	6.133
6/30/89-90									4.978	4.978
6/30/90-91	267,694	9,129,786	3.411	0.937	3.195	1.208	3.860	3.411	3.322	3.387
6/30/91-92	261,403	6,103,899	2.335	1.028	2.400	1.196	2.870	2.335	2.383	2.309
6/30/92-93	259,951	3,570,532	1.374	1.198	1.646	1.184	1.949	1.374	1.621	1.364
6/30/93-94	257,021	2,828,407	1.100	1.183	1.302	1.173	1.526	1.100	1.227	1.098
6/30/94-95	255,811	1,724,616	0.674	1.172	0.790	1.161	0.917	0.674	0.799	0.693
6/30/95-96	255,494	2,489,767	0.974	1.163	1.133	1.149	1.302	0.974	1.124	0.979
6/30/96-97	270,025	2,049,729	0.759	1.151	0.874	1.138	0.995	0.759	0.899	0.779
6/30/97-98	245,319	2,256,112	0.920	1.136	1.045	1.127	1.178	0.920	1.008	0.930
6/30/98-99	251,404	2,013,438	0.801	1.121	0.898	1.116	1.002	0.801	0.917	0.823
6/30/99-00	255,590	2,116,350	0.828	1.103	0.914	1.105	1.009	0.828	0.912	0.850
6/30/00-01	263,866	3,167,284	1.200	1.075	1.291	1.094	1.412	1.200	1.209	1.185
6/30/01-02	267,544	2,316,011	0.866	1.054	0.913	1.083	0.988	0.866	0.969	0.884
6/30/02-03	274,409	3,050,474	1.112	1.051	1.168	1.072	1.252	1.112	1.147	1.105
6/30/03-04	272,327	3,043,223	1.117	1.051	1.174	1.062	1.246	1.117	1.101	1.111
6/30/04-05	273,587	2,939,585	1.074	1.044	1.122	1.051	1.179	1.074	1.060	1.050
6/30/05-06	285,078	2,560,961	0.898	1.033	0.928	1.041	0.966	0.898	1.060	1.050
6/30/06-07	298,452	2,534,574	0.849	1.022	0.868	1.030	0.894	0.849	1.060	1.050
6/30/07-08	314,165	1,951,838	0.621	1.011	0.628	1.020	0.641	0.621	1.060	1.050
6/30/08-09	302,930	2,721,651	0.898	1.000	0.898	1.010	0.907	0.898		1.050
Total	5,132,071	58,568,237								

Trend Last 4 (ex 08-09):	-16.5%	Avg 3 (x08-09):	0.834
Trend Last 8 (ex 08-09):	-6.9%	Avg 5 (x08-09):	0.985
Trend Last 12 (ex 08-09):	-1.4%	Avg 10 (x08-09):	1.059
Prior Selected Trend:	1.0%	Prior Sel Avg:	1.060
Selected Trend:	1.0%	Sel. Loss Cost:	1.050

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 2, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend	0.960	
(2)	Credibility	44%	
(3)	Average Pmt Trend Statewide	0.960	
(4)	Credibility Weighted Trend	0.960	
		(Low)	(High)
(5)	Selected Range	0.950	0.965
(6)	Incremental Paid for 2009	397,505	397,505
(7)	Estimated Reserve	7,552,595	10,895,251
(8)	Paid to Date (82 & Prior)	17,490,485	17,490,485
(9)	Est Ult Paid for 1982 & Prior	25,043,080	28,385,736

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	405,086	431,518
(11)	Projected Number of Years	7	7
(12)	Estimated Reserve	2,835,599	3,020,623
(13)	Paid to Date (82 & Prior)	17,490,485	17,092,980
(14)	Est Ult Paid for 1982 & Prior	20,326,083	20,113,602
(14a)	Paid Counts During Fiscal Year	11	12
		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	22,684,582	25,076,882
(16)	Lump Sum Ultimates	1,265,498	1,265,498
(17)	Ult Loss Including Lump Sums	**23,950,080**	**26,342,380**
(18)	Implied Tail	1.297	1.434
(19)	Ult Loss Inc Lump Sums @6/08	23,561,369	25,871,104

NOTES:

(1) From Section 2, Exhibit 1, Page 6
(2) = (Average of Section 2, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 2, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 2, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 2, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	689,918	13.444			
1993	2	793,381	13.584	1.150		
1994	3	677,152	13.426	0.854		
1995	4	616,229	13.331	0.910		
1996	5	581,038	13.273	0.943		
1997	6	667,765	13.412	1.149		
1998	7	676,041	13.424	1.012		
1999	8	626,143	13.347	0.926		
2000	9	638,144	13.366	1.019	n =	18
2001	10	586,837	13.283	0.920	S(x) =	36,009
2002	11	551,859	13.221	0.940	S(x-sq) =	72,036,489
2003	12	510,510	13.143	0.925	S(xy) =	476,452
2004	13	475,438	13.072	0.931	S(y) =	238
2005	14	461,151	13.041	0.970	D =	8,721
2006	15	476,801	13.075	1.034	slope =	-0.036
2007	16	429,059	12.969	0.900	Avg Trend =	0.964
2008	17	388,693	12.871	0.906		
2009	18	397,505	12.893	1.023		
					Selected Trend:	**0.960**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 1.023 = 397505 / 388693

Commonwealth of Massachusetts Workers Compensation
Department of Mental Retardation - Cluster 1
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Accident Yr End	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	303,088	716,212	1,018,528	1,273,160	1,522,276	1,772,634	2,026,466	2,293,172	2,479,591	2,709,942	2,878,245	2,989,792	3,133,165	3,273,307	3,334,466	3,383,940	3,420,864	3,471,952	3,531,863	3,593,426	3,656,287	3,718,769	3,782,583	3,849,168	3,918,660	3,991,417	4,067,350
June-84	588,752	1,391,250	1,978,503	2,473,129	2,957,038	3,430,512	3,850,638	4,248,292	4,569,012	4,852,567	5,084,077	5,325,765	5,500,225	5,591,777	5,716,071	5,844,905	5,981,927	6,097,750	6,217,962	6,335,407	6,446,404	6,561,447	6,682,092	6,807,737	6,918,835	7,027,806	
June-85	722,238	1,706,685	2,427,085	3,021,356	3,575,162	4,153,362	4,555,210	4,859,145	5,067,185	5,195,242	5,289,258	5,335,046	5,422,572	5,464,010	5,505,997	5,522,923	5,523,036	5,580,502	5,609,877	5,639,252	5,659,166	5,650,202	5,650,202	5,650,202	5,650,202		
June-86	1,095,655	2,589,088	3,658,454	4,589,190	5,452,112	6,125,447	6,630,963	7,055,749	7,268,651	7,575,650	7,835,016	8,089,718	8,284,822	8,452,458	8,677,431	8,856,536	8,960,945	9,024,666	9,066,019	9,108,290	9,147,296	9,188,006	9,230,664	9,275,183			
June-87	1,432,565	3,348,783	4,705,173	6,001,822	7,077,490	7,800,986	8,402,000	9,027,460	9,393,871	9,735,307	10,048,389	10,319,413	10,602,871	10,771,580	10,933,614	11,088,267	11,148,911	11,204,986	11,255,712	11,281,293	11,313,500	11,347,192	11,382,355				
June-88	2,142,725	4,931,624	7,312,968	9,157,962	10,751,119	11,652,385	12,239,990	12,826,004	13,145,803	13,410,989	13,647,380	13,914,189	14,176,053	14,393,869	14,564,189	14,732,219	14,899,699	15,069,301	15,232,127	15,401,826	15,590,731	15,776,168					
June-89	2,139,859	5,737,843	8,345,508	10,235,005	11,538,085	12,380,476	13,056,104	13,607,875	13,950,193	14,223,676	14,460,790	14,677,503	14,820,152	14,959,611	15,088,991	15,215,644	15,354,762	15,504,713	15,612,328	15,710,703	15,815,015						
June-90	2,678,119	5,989,136	8,059,169	9,355,215	10,163,757	10,729,296	11,079,915	11,298,239	11,383,933	11,541,269	11,650,902	11,599,979	11,605,663	11,609,714	11,609,714	11,609,714	11,609,714	11,609,714	11,610,392	11,610,392							
June-91	2,055,995	4,525,519	5,956,270	6,809,892	7,377,934	7,700,162	7,848,119	7,941,980	8,070,661	8,111,443	8,150,308	8,195,730	8,243,748	8,275,457	8,287,806	8,289,633	8,289,633	8,289,927	8,295,115								
June-92	1,556,680	2,907,997	3,613,911	4,262,894	4,511,682	4,736,540	4,868,155	4,962,680	5,049,867	5,098,658	5,131,848	5,177,939	5,259,492	5,311,896	5,373,855	5,435,773	5,480,341	5,518,481									
June-93	931,603	1,916,981	2,439,817	2,755,036	2,906,872	3,136,998	3,162,217	3,209,301	3,219,019	3,198,001	3,197,828	3,197,728	3,197,728	3,197,728	3,204,287	3,210,473	3,210,473										
June-94	923,316	1,598,259	1,935,049	2,093,050	2,066,940	2,146,254	2,134,209	2,198,365	2,247,827	2,310,431	2,340,041	2,380,852	2,417,221	2,452,624	2,487,353	2,524,486											
June-95	684,696	1,108,550	1,371,127	1,495,864	1,512,391	1,513,346	1,516,782	1,516,872	1,519,087	1,525,732	1,525,732	1,526,329	1,526,329	1,526,329	1,526,329												
June-96	662,860	1,328,147	1,644,584	1,839,246	1,990,102	2,077,055	2,112,857	2,140,474	2,201,270	2,201,845	2,202,890	2,202,890	2,182,890	2,187,427													
June-97	698,135	1,214,849	1,461,845	1,657,511	1,722,983	1,773,677	1,788,438	1,787,621	1,785,332	1,785,117	1,785,270	1,787,627	1,787,477														
June-98	573,338	1,086,539	1,414,459	1,559,175	1,673,532	1,729,564	1,772,059	1,810,392	1,842,420	1,881,278	1,926,278	1,959,704															
June-99	474,980	1,002,186	1,286,380	1,461,855	1,602,851	1,676,266	1,728,806	1,734,926	1,734,926	1,735,176	1,735,217																
June-00	554,623	1,006,163	1,264,666	1,446,800	1,556,201	1,579,597	1,684,607	1,741,958	1,774,284	1,814,835																	
June-01	727,441	1,320,455	1,784,558	2,038,666	2,257,429	2,391,407	2,505,985	2,630,995	2,692,967																		
June-02	660,993	1,170,323	1,474,134	1,719,436	1,840,352	1,925,268	1,929,260	1,934,317																			
June-03	681,649	1,386,238	1,930,433	2,233,645	2,345,508	2,434,780	2,476,294																				
June-04	615,642	1,250,196	1,708,083	2,040,603	2,220,200	2,394,408																					
June-05	629,880	1,271,294	1,746,413	2,055,018	2,203,801																						
June-06	562,846	1,157,132	1,564,874	1,794,067																							
June-07	526,806	1,054,827	1,513,205																								
June-08	492,006	840,226																									
June-09	609,589																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.363	1.422	1.250	1.196	1.164	1.143	1.132	1.081	1.093	1.062	1.039	1.048	1.045	1.019	1.015	1.011	1.015	1.017	1.017	1.017	1.017	1.017	1.018	1.018	1.019	1.019
June-84	2.363	1.422	1.250	1.196	1.160	1.122	1.103	1.075	1.062	1.048	1.048	1.033	1.017	1.022	1.023	1.023	1.019	1.020	1.019	1.018	1.018	1.018	1.019	1.016	1.016	
June-85	2.363	1.422	1.245	1.183	1.162	1.097	1.067	1.043	1.025	1.018	1.009	1.016	1.008	1.008	1.003	1.000	1.010	1.005	1.005	1.004	0.998	1.000	1.000	1.000		
June-86	2.363	1.413	1.254	1.188	1.123	1.083	1.064	1.030	1.042	1.034	1.033	1.024	1.020	1.027	1.021	1.012	1.007	1.005	1.005	1.004	1.004	1.005	1.005			
June-87	2.338	1.405	1.276	1.179	1.102	1.077	1.074	1.041	1.036	1.032	1.027	1.027	1.016	1.015	1.014	1.005	1.005	1.005	1.002	1.003	1.003	1.003				
June-88	2.302	1.483	1.252	1.174	1.084	1.050	1.048	1.025	1.020	1.018	1.020	1.019	1.015	1.012	1.012	1.011	1.011	1.011	1.011	1.012	1.012					
June-89	2.681	1.454	1.226	1.127	1.073	1.055	1.042	1.025	1.020	1.017	1.015	1.010	1.009	1.009	1.008	1.009	1.010	1.007	1.006	1.007						
June-90	2.236	1.346	1.161	1.086	1.056	1.033	1.020	1.008	1.014	1.009	0.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
June-91	2.201	1.316	1.143	1.083	1.044	1.019	1.012	1.016	1.005	1.005	1.006	1.006	1.004	1.001	1.000	1.000	1.000	1.001								
June-92	1.868	1.243	1.180	1.058	1.050	1.028	1.019	1.018	1.010	1.007	1.009	1.016	1.010	1.012	1.012	1.008	1.007									
June-93	2.058	1.273	1.129	1.055	1.079	1.008	1.015	1.003	0.993	1.000	1.000	1.000	1.000	1.002	1.002	1.000										
June-94	1.731	1.211	1.082	0.988	1.038	0.994	1.030	1.022	1.028	1.013	1.017	1.015	1.015	1.014	1.015											
June-95	1.619	1.237	1.091	1.011	1.001	1.002	1.000	1.001	1.004	1.000	1.000	1.000	1.000	1.000												
June-96	2.004	1.238	1.118	1.082	1.044	1.017	1.013	1.028	1.000	1.000	1.000	0.991	1.002													
June-97	1.740	1.203	1.134	1.040	1.029	1.008	1.000	0.999	1.000	1.000	1.001	1.000														
June-98	1.895	1.302	1.102	1.073	1.033	1.025	1.022	1.018	1.021	1.024	1.017															
June-99	2.110	1.284	1.136	1.096	1.046	1.031	1.004	1.000	1.000	1.000																
June-00	1.814	1.257	1.144	1.076	1.015	1.066	1.034	1.019	1.023																	
June-01	1.815	1.351	1.142	1.107	1.059	1.048	1.050	1.024																		
June-02	1.771	1.260	1.166	1.070	1.046	1.002	1.003																			
June-03	2.034	1.393	1.157	1.050	1.038	1.017																				
June-04	2.031	1.366	1.195	1.088	1.078																					
June-05	2.018	1.374	1.177	1.072																						
June-06	2.056	1.352	1.146																							
June-07	2.002	1.435																								
June-08	1.708																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.057	1.338	1.173	1.099	1.069	1.044	1.038	1.025	1.022	1.017	1.015	1.014	1.011	1.011	1.010	1.007	1.008	1.008	1.008	1.009	1.009	1.009	1.010	1.011	1.017	1.019	
Latest 5	1.963	1.384	1.168	1.078	1.047	1.033	1.022	1.012	1.009	1.005	1.007	1.001	1.005	1.006	1.006	1.003	1.006	1.005	1.005	1.006	1.007	1.009					
Latest 3	1.922	1.387	1.173	1.070	1.054	1.022	1.029	1.014	1.015	1.008	1.006	0.997	1.006	1.005	1.009	1.003	1.002	1.003	1.006	1.007	1.006	1.003	1.008	1.011			
Volume Wtd																											
All Yrs	2.132	1.359	1.189	1.113	1.075	1.048	1.041	1.026	1.023	1.019	1.016	1.015	1.011	1.011	1.010	1.007	1.008	1.007	1.007	1.008	1.008	1.007	1.009	1.011	1.017		
Latest 5	1.971	1.383	1.168	1.077	1.049	1.032	1.024	1.013	1.009	1.005	1.008	1.001	1.006	1.006	1.003	1.004	1.006	1.005	1.005	1.007	1.008						
Latest 3	1.930	1.385	1.173	1.070	1.054	1.024	1.031	1.015	1.015	1.008	1.006	0.996	1.007	1.006	1.010	1.003	1.002	1.003	1.006	1.008	1.007	1.003	1.008				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	*2.025*	*1.364*	*1.175*	*1.069*	*1.042*	*1.034*	*1.029*	*1.017*	*1.005*	*1.005*	*1.004*	*1.007*	*1.008*	*1.009*	*1.006*	*1.008*	*1.006*	*1.007*	*1.007*	*1.010*	*1.008*	*1.013*	*1.012*	*1.011*	*1.010*	*1.019*	
Selected	1.922	1.387	1.173	1.070	1.049	1.032	1.029	1.018	1.009	1.005	1.008	1.004	1.007	1.007	1.008	1.007	1.005	1.005	1.006	1.009	1.009	1.013	1.012	1.011	1.010	1.009	1.018
FacToUlt	4.465	2.323	1.675	1.427	1.334	1.271	1.232	1.197	1.176	1.166	1.160	1.151	1.147	1.138	1.130	1.120	1.112	1.106	1.101	1.094	1.084	1.075	1.061	1.048	1.037	1.027	1.018
Percent of Ult	22.4%	43.0%	59.7%	70.1%	75.0%	78.7%	81.2%	83.5%	85.0%	85.8%	86.2%	86.9%	87.2%	87.9%	88.5%	89.3%	89.9%	90.4%	90.9%	91.4%	92.2%	93.0%	94.2%	95.4%	96.4%	97.4%	98.3%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	23,561,369	25,871,104	23,950,080	26,342,380	388,711	1.6%	471,277	1.8%
6/30/82-83	4,828,763	5,076,392	4,819,700	5,066,864	(9,063)	-0.2%	(9,528)	-0.2%
6/30/83-84	9,081,128	9,451,787	9,024,385	9,392,727	(56,743)	-0.6%	(59,059)	-0.6%
6/30/84-85	6,848,000	6,916,000	6,848,000	6,916,000	0	0.0%	0	0.0%
6/30/85-86	10,473,000	10,575,000	10,519,000	10,621,000	46,000	0.4%	46,000	0.4%
6/30/86-87	13,817,000	13,952,000	13,854,000	13,988,000	37,000	0.3%	36,000	0.3%
6/30/87-88	20,438,000	21,288,000	19,752,000	20,618,000	(686,000)	-3.4%	(670,000)	-3.1%
6/30/88-89	20,799,000	20,812,000	20,850,000	20,870,000	51,000	0.2%	58,000	0.3%
6/30/89-90	16,203,000	16,267,000	15,113,000	15,262,000	(1,090,000)	-6.7%	(1,005,000)	-6.2%
6/30/90-91	11,181,000	11,290,000	11,078,000	11,186,000	(103,000)	-0.9%	(104,000)	-0.9%
6/30/91-92	7,943,000	7,959,000	7,961,000	7,967,000	18,000	0.2%	8,000	0.1%
6/30/92-93	4,612,000	4,677,000	4,586,000	4,589,000	(26,000)	-0.6%	(88,000)	-1.9%
6/30/93-94	3,816,000	3,855,000	3,841,000	3,842,000	25,000	0.7%	(13,000)	-0.3%
6/30/94-95	2,323,000	2,360,000	2,312,000	2,317,000	(11,000)	-0.5%	(43,000)	-1.8%
6/30/95-96	3,302,000	3,349,000	3,291,000	3,292,000	(11,000)	-0.3%	(57,000)	-1.7%
6/30/96-97	2,799,000	2,847,000	2,785,000	2,792,000	(14,000)	-0.5%	(55,000)	-1.9%
6/30/97-98	2,796,000	2,829,000	2,848,000	2,852,000	52,000	1.9%	23,000	0.8%
6/30/98-99	2,609,000	2,650,000	2,598,000	2,606,000	(11,000)	-0.4%	(44,000)	-1.7%
6/30/99-00	2,419,000	2,456,000	2,458,000	2,467,000	39,000	1.6%	11,000	0.4%
6/30/00-01	3,524,000	3,535,000	3,539,000	3,545,000	15,000	0.4%	10,000	0.3%
6/30/01-02	2,752,000	2,795,000	2,715,000	2,723,000	(37,000)	-1.3%	(72,000)	-2.6%
6/30/02-03	3,573,000	3,589,000	3,547,000	3,550,000	(26,000)	-0.7%	(39,000)	-1.1%
6/30/03-04	3,437,000	3,456,000	3,539,000	3,543,000	102,000	3.0%	87,000	2.5%
6/30/04-05	3,388,000	3,392,000	3,423,000	3,440,000	35,000	1.0%	48,000	1.4%
6/30/05-06	3,085,000	3,257,000	3,061,000	3,190,000	(24,000)	-0.8%	(67,000)	-2.1%
6/30/06-07	2,877,000	3,315,000	3,035,000	3,276,000	158,000	5.5%	(39,000)	-1.2%
6/30/07-08	2,746,000	3,531,000	2,452,000	3,219,000	(294,000)	-10.7%	(312,000)	-8.8%
6/30/08-09								
Total	195,231,260	201,351,282	193,799,165	199,472,972	(1,432,095)	-0.7%	(1,878,311)	-0.9%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 2, Exhibit 1, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	17,490,485	1.365	23,880,732	0.0%	0.0%	0	1,265,498	1,265,498	5.3%	1.000	1,265,498	1,265,498	1,265,498
6/30/82-83	4,067,350	1.119	4,552,882	0.0%	0.0%	0	390,400	390,400	8.6%	1.000	390,400	390,400	390,595
6/30/83-84	7,027,806	1.232	8,659,132	0.0%	0.0%	0	549,150	549,150	6.3%	1.001	549,699	549,425	549,974
6/30/84-85	5,650,202	1.037	5,859,474	0.0%	0.0%	0	1,129,851	1,129,851	19.3%	1.003	1,133,243	1,131,547	1,132,680
6/30/85-86	9,275,183	1.048	9,724,523	0.0%	0.0%	0	937,644	937,644	9.6%	1.005	942,340	939,992	947,309
6/30/86-87	11,382,355	1.061	12,076,984	0.1%	0.1%	12,077	2,067,717	2,079,794	17.2%	1.010	2,088,462	2,084,128	2,095,478
6/30/87-88	15,776,168	1.182	18,652,197	0.1%	0.2%	37,304	2,791,764	2,829,068	15.2%	1.015	2,833,873	2,831,471	2,847,563
6/30/88-89	15,815,015	1.084	17,147,523	0.1%	0.3%	51,443	3,639,613	3,691,055	21.5%	1.020	3,712,982	3,702,019	3,728,221
6/30/89-90	11,610,392	1.094	12,704,788	0.2%	0.5%	63,524	3,352,581	3,416,105	26.9%	1.025	3,437,265	3,426,685	3,451,492
6/30/90-91	8,295,115	1.101	9,129,786	0.2%	0.7%	63,909	2,565,430	2,629,339	28.8%	1.028	2,636,940	2,633,139	2,654,437
6/30/91-92	5,518,481	1.106	6,103,899	0.2%	0.9%	54,935	1,806,412	1,861,347	30.5%	1.033	1,865,755	1,863,551	1,880,019
6/30/92-93	3,210,473	1.112	3,570,532	0.3%	1.2%	42,846	979,103	1,021,949	28.6%	1.036	1,014,638	1,018,294	1,032,575
6/30/93-94	2,524,486	1.120	2,828,407	0.3%	1.5%	42,426	968,701	1,011,127	35.7%	1.049	1,015,932	1,013,529	1,025,267
6/30/94-95	1,526,329	1.130	1,724,616	0.3%	1.8%	31,043	555,200	586,243	34.0%	1.059	588,092	587,168	595,801
6/30/95-96	2,187,427	1.138	2,489,767	0.3%	2.1%	52,285	746,640	798,925	32.1%	1.075	802,737	800,831	812,773
6/30/96-97	1,787,477	1.147	2,049,729	0.3%	2.4%	49,193	679,550	728,743	35.6%	1.091	741,566	735,155	745,860
6/30/97-98	1,959,704	1.151	2,256,112	0.3%	2.7%	60,915	533,163	594,078	26.3%	1.108	590,547	592,312	574,583
6/30/98-99	1,735,217	1.160	2,013,438	0.3%	3.0%	60,403	522,071	582,474	28.9%	1.124	586,935	584,704	598,645
6/30/99-00	1,814,835	1.166	2,116,350	0.5%	3.5%	74,072	283,501	357,573	16.9%	1.152	326,692	342,133	352,232
6/30/00-01	2,692,967	1.176	3,167,284	0.5%	4.0%	126,691	251,103	377,794	11.9%	1.187	298,039	377,794	406,947
6/30/01-02	1,934,317	1.197	2,316,011	1.0%	5.0%	115,801	283,214	399,014	17.2%	1.223	346,236	399,014	399,344
6/30/02-03	2,476,294	1.232	3,050,474	1.0%	6.0%	183,028	298,024	481,052	15.8%	1.296	386,188	500,000	502,937
6/30/03-04	2,394,408	1.271	3,043,223	1.0%	7.0%	213,026	274,324	487,350	16.0%	1.431	392,549	500,000	519,410
6/30/04-05	2,203,801	1.334	2,939,585	1.4%	8.4%	246,925	193,152	440,077	15.0%	1.638	316,447	500,000	500,000
6/30/05-06	1,794,067	1.427	2,560,961	2.5%	10.9%	279,145	152,502	431,647	16.9%	2.515	383,513	500,000	500,000
6/30/06-07	1,513,205	1.675	2,534,574	3.5%	14.4%	364,979	93,500	458,479	18.1%	4.105	383,811	500,000	500,000
6/30/07-08	840,226	2.323	1,951,838	3.1%	17.5%	342,348	37,000	379,348	19.4%	10.839	401,057	500,000	500,000
6/30/08-09	609,589	4.465	2,721,651	2.5%	20.0%	545,412	0	545,412	20.0%	59.617	0	545,000	
Total	145,113,375		171,826,472			3,113,731	27,346,807	30,460,538	17.7%		29,431,438	30,813,789	30,509,641

NOTES:
(2) From Section 2, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 2, Exhibit 1, Page 2, Column 6
(5) From Section 2, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 2, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 2, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensation
Department of Mental Retardation - Cluster 1
INDEMNITY
Lump Sum Development
Incremental Lump Sum Payments

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0	0	0	0	0	0	12,000	24,000	9,000	0	0	40,000	0	172,000	110,000	50,000	70,500	30,000	208,333	116,667	324,998	0	60,000	35,000	0	3,000	0	0
Jun-83	0	0	0	0	0	0	0	0	25,500	25,000	52,900	7,000	30,000	95,000	145,000	0	10,000	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	32,500	19,000	0	45,000	108,650	69,000	145,000	0	45,000	0	30,000	10,000	0	45,000	0	0	0	0	0	0	0		
Jun-85	0	0	0	12,500	32,500	24,500	92,001	128,250	196,400	182,000	70,000	48,500	205,700	0	0	30,000	52,500	30,000	0	25,000	0	0	0	0	0			
Jun-86	0	0	23,500	19,200	19,100	93,844	174,500	476,000	95,500	0	0	0	36,000	0	0	0	0	0	0	0	0	0	0	0				
Jun-87	0	36,440	6,089	107,500	67,961	393,241	517,987	205,500	149,499	10,000	92,500	15,000	146,000	125,000	120,000	75,000	0	0	0	0	0	0	0					
Jun-88	0	9,000	98,700	314,201	299,750	663,711	365,000	263,001	345,000	230,400	71,500	91,500	40,000	0	0	0	0	0	0	0	0	1						
Jun-89	0	51,500	107,000	525,918	831,350	467,250	201,495	468,000	227,500	96,000	182,000	228,100	128,500	0	0	0	0	33,333	45,833	45,834	0							
Jun-90	0	83,875	561,509	740,856	246,000	295,600	525,500	290,000	127,241	77,000	235,834	135,833	33,333	0	0	0	0	0	0	0								
Jun-91	10,000	315,052	866,050	279,500	174,700	509,340	313,000	57,788	15,000	25,000	0	0	0	0	0	0	0	0	0									
Jun-92	54,000	344,161	128,250	87,501	545,500	236,500	52,500	15,000	30,000	60,000	88,000	0	0	0	0	0	165,000	0										
Jun-93	33,000	174,000	164,503	395,750	49,500	66,500	75,850	0	20,000	0	0	0	0	0	0	0	0											
Jun-94	20,500	90,701	289,500	222,500	110,000	82,500	118,000	0	35,000	0	0	0	0	0	0	0												
Jun-95	4,000	156,500	207,200	162,500	15,000	0	0	10,000	0	0	0	0	0	0	0													
Jun-96	52,000	212,180	221,000	48,960	42,000	0	48,667	18,833	43,000	35,000	25,000	0	0	0														
Jun-97	36,500	178,250	214,000	155,300	85,500	10,000	0	0	0	0	0	0	0															
Jun-98	10,000	108,163	240,000	120,000	30,000	0	0	0	0	0	0	25,000																
Jun-99	0	182,500	192,000	113,220	1,824	7,437	11,035	14,055	0	0	0																	
Jun-00	12,500	57,501	82,000	36,500	38,500	8,500	10,500	27,500	10,000	0																		
Jun-01	17,500	22,844	43,510	37,903	34,170	41,676	38,500	15,000	0																			
Jun-02	0	800	23,940	52,775	72,135	32,564	76,000	25,000																				
Jun-03	0	0	48,352	99,400	91,822	48,450	10,000																					
Jun-04	0	0	88,974	64,100	121,250	0																						
Jun-05	0	7,500	39,052	104,600	42,000																							
Jun-06	0	14,800	50,202	87,500																								
Jun-07	0	8,500	85,000																									
Jun-08	0	37,000																										
Jun-09	0																											

Cumulative Lump Sum Payments

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*	*336*
All Prior Yrs	0	0	0	0	0	0	12,000	36,000	45,000	45,000	45,000	85,000	85,000	257,000	367,000	417,000	487,500	517,500	725,833	842,500	1,167,498	1,167,498	1,227,498	1,262,498	1,262,498	1,265,498	1,265,498	1,265,498
Jun-83	0	0	0	0	0	0	0	0	25,500	50,500	103,400	110,400	140,400	235,400	380,400	380,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	
Jun-84	0	0	0	0	0	32,500	51,500	51,500	96,500	205,150	274,150	419,150	419,150	464,150	464,150	494,150	504,150	504,150	549,150	549,150	549,150	549,150	549,150	549,150	549,150	549,150		
Jun-85	0	0	0	12,500	45,000	69,500	161,501	289,751	486,151	668,151	738,151	786,651	992,351	992,351	992,351	1,022,351	1,074,851	1,104,851	1,104,851	1,129,851	1,129,851	1,129,851	1,129,851	1,129,851	1,129,851			
Jun-86	0	0	23,500	42,700	61,800	155,644	330,144	806,144	901,644	901,644	901,644	901,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644				
Jun-87	0	36,440	42,529	150,029	217,990	611,231	1,129,218	1,334,718	1,484,217	1,494,217	1,586,717	1,601,717	1,747,717	1,872,717	1,992,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717					
Jun-88	0	9,000	107,700	421,901	721,651	1,385,362	1,750,362	2,013,363	2,358,363	2,588,763	2,660,263	2,751,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,764						
Jun-89	0	51,500	158,500	684,418	1,515,768	1,983,018	2,184,513	2,652,513	2,880,013	2,976,013	3,158,013	3,386,113	3,514,613	3,514,613	3,514,613	3,514,613	3,514,613	3,547,946	3,593,779	3,639,613	3,639,613							
Jun-90	0	83,875	645,384	1,386,240	1,632,240	1,927,840	2,453,340	2,743,340	2,870,581	2,947,581	3,183,415	3,319,248	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581								
Jun-91	10,000	325,052	1,191,102	1,470,602	1,645,302	2,154,642	2,467,642	2,525,430	2,540,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430									
Jun-92	54,000	398,161	526,411	613,912	1,159,412	1,395,912	1,448,412	1,463,412	1,493,412	1,553,412	1,641,412	1,641,412	1,641,412	1,641,412	1,641,412	1,641,412	1,806,412	1,806,412										
Jun-93	33,000	207,000	371,503	767,253	816,753	883,253	959,103	959,103	979,103	979,103	979,103	979,103	979,103	979,103	979,103	979,103	979,103											
Jun-94	20,500	111,201	400,701	623,201	733,201	815,701	933,701	933,701	968,701	968,701	968,701	968,701	968,701	968,701	968,701	968,701												
Jun-95	4,000	160,500	367,700	530,200	545,200	545,200	545,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200													
Jun-96	52,000	264,180	485,180	534,140	576,140	576,140	624,807	643,640	686,640	721,640	746,640	746,640	746,640	746,640														
Jun-97	36,500	214,750	428,750	584,050	669,550	679,550	679,550	679,550	679,550	679,550	679,550	679,550	679,550															
Jun-98	10,000	118,163	358,163	478,163	508,163	508,163	508,163	508,163	508,163	508,163	508,163	533,163																
Jun-99	0	182,500	374,500	487,720	489,544	496,981	508,016	522,071	522,071	522,071	522,071																	
Jun-00	12,500	70,001	152,001	188,501	227,001	235,501	246,001	273,501	283,501	283,501																		
Jun-01	17,500	40,344	83,854	121,757	155,927	197,603	236,103	251,103	251,103																			
Jun-02	0	800	24,740	77,515	149,650	182,214	258,214	283,214																				
Jun-03	0	0	48,352	147,752	239,574	288,024	298,024																					
Jun-04	0	0	88,974	153,074	274,324	274,324																						
Jun-05	0	7,500	46,552	151,152	193,152																							
Jun-06	0	14,800	65,002	152,502																								
Jun-07	0	8,500	93,500																									
Jun-08	0	37,000																										
Jun-09	0																											

Commonwealth of Massachusetts Workers Compensation
Department of Mental Retardation - Cluster 1
INDEMNITY
Lump Sum Developmen
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sum

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.002	0.000	0.007	0.005	0.002	0.003	0.001	0.009	0.005	0.014	0.000	0.003	0.001	0.000	0.000	0.000	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.005	0.012	0.002	0.007	0.021	0.032	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.000	0.004	0.002	0.000	0.005	0.013	0.008	0.017	0.000	0.005	0.000	0.003	0.001	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.002	0.006	0.004	0.016	0.022	0.034	0.031	0.012	0.008	0.035	0.000	0.000	0.005	0.009	0.005	0.000	0.004	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.002	0.002	0.002	0.010	0.018	0.049	0.010	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
Jun-87	0.000	0.003	0.001	0.009	0.006	0.033	0.043	0.017	0.012	0.001	0.008	0.001	0.012	0.010	0.010	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.000	0.005	0.017	0.016	0.036	0.020	0.014	0.018	0.012	0.004	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						
Jun-89	0.000	0.003	0.006	0.031	0.048	0.027	0.012	0.027	0.013	0.006	0.011	0.013	0.007	0.000	0.000	0.000	0.000	0.002	0.003	0.003	0.000							
Jun-90	0.000	0.007	0.044	0.058	0.019	0.023	0.041	0.023	0.010	0.006	0.019	0.011	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
Jun-91	0.001	0.035	0.095	0.031	0.019	0.056	0.034	0.006	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000									
Jun-92	0.009	0.056	0.021	0.014	0.089	0.039	0.009	0.002	0.005	0.010	0.014	0.000	0.000	0.000	0.000	0.000	0.027	0.000										
Jun-93	0.009	0.049	0.046	0.111	0.014	0.019	0.021	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000											
Jun-94	0.007	0.032	0.102	0.079	0.039	0.029	0.042	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000												
Jun-95	0.002	0.091	0.120	0.094	0.009	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000													
Jun-96	0.021	0.085	0.089	0.020	0.017	0.000	0.020	0.008	0.017	0.014	0.010	0.000	0.000	0.000														
Jun-97	0.018	0.087	0.104	0.076	0.042	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000															
Jun-98	0.004	0.048	0.106	0.053	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.011																
Jun-99	0.000	0.091	0.095	0.056	0.001	0.004	0.005	0.007	0.000	0.000	0.000																	
Jun-00	0.006	0.027	0.039	0.017	0.018	0.004	0.005	0.013	0.005	0.000																		
Jun-01	0.006	0.007	0.014	0.012	0.011	0.013	0.012	0.005	0.000																			
Jun-02	0.000	0.000	0.010	0.023	0.031	0.014	0.033	0.011																				
Jun-03	0.000	0.000	0.016	0.033	0.030	0.016	0.003																					
Jun-04	0.000	0.000	0.029	0.021	0.040	0.000																						
Jun-05	0.000	0.003	0.013	0.036	0.014																							
Jun-06	0.000	0.006	0.020	0.034																								
Jun-07	0.000	0.003	0.034																									
Jun-08	0.000	0.019																										
Jun-09	0.000																											

Averages		*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
Simple Avg																												
All Yrs (ex P)	0.003	0.025	0.040	0.034	0.021	0.015	0.016	0.010	0.008	0.006	0.006	0.004	0.005	0.003	0.003	0.001	0.004	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Latest 5	0.000	0.006	0.022	0.029	0.025	0.009	0.012	0.007	0.001	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.005	0.000	0.001	0.001	0.000	0.000	0.000					
Latest 3	0.000	0.009	0.022	0.030	0.028	0.010	0.016	0.010	0.002	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.009	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000			
Olympic Avg																												
All Yrs (ex P)	0.002	0.023	0.039	0.033	0.019	0.014	0.015	0.009	0.007	0.004	0.005	0.004	0.003	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Latest 10	0.001	0.008	0.032	0.034	0.022	0.005	0.010	0.004	0.003	0.002	0.003	0.003	0.001	0.000	0.000	0.001	0.001	0.000										
Latest 5	0.000	0.004	0.022	0.030	0.025	0.010	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					

Dev Factor Selection																												
Prior	*NA*	*0.025*	*0.029*	*0.035*	*0.025*	*0.014*	*0.010*	*0.010*	*0.010*	*0.005*	*0.005*	*0.003*	*0.003*	*0.003*	*0.003*	*0.003*	*0.003*	*0.003*	*0.002*	*0.002*	*0.002*	*0.001*	*0.001*	*0.001*	*0.000*	*0.000*	*0.000*	
Selected	NA	0.025	0.031	0.035	0.025	0.014	0.010	0.010	0.010	0.005	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000
FacToUlt	NA	0.200	0.175	0.144	0.109	0.084	0.070	0.060	0.050	0.040	0.035	0.030	0.027	0.024	0.021	0.018	0.015	0.012	0.009	0.007	0.005	0.003	0.002	0.001	0.000	0.000	0.000	0.000

Commonwealth of Massachusetts Workers Compensation
Department of Mental Retardation - Cluster 1
INDEMNITY
Paid Loss Development
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	12,000	36,000	45,000	45,000	45,000	85,000	85,000	257,000	367,000	417,000	487,500	517,500	725,833	842,500	1,167,498	1,167,498	1,227,498	1,262,498	1,262,498	1,265,498	1,265,498	1,265,498
Jun-83	0	0	0	0	0	0	0	0	25,500	50,500	103,400	110,400	140,400	235,400	380,400	380,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	390,400	
Jun-84	0	0	0	0	0	32,500	51,500	51,500	96,500	205,150	274,150	419,150	419,150	464,150	464,150	494,150	504,150	504,150	549,150	549,150	549,150	549,150	549,150	549,150	549,150	549,150		
Jun-85	0	0	0	12,500	45,000	69,500	161,501	289,751	486,151	668,151	738,151	786,651	992,351	992,351	992,351	1,022,351	1,074,851	1,104,851	1,104,851	1,129,851	1,129,851	1,129,851	1,129,851	1,129,851	1,129,851			
Jun-86	0	0	23,500	42,700	61,800	155,644	330,144	806,144	901,644	901,644	901,644	901,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644	937,644				
Jun-87	0	36,440	42,529	150,029	217,990	611,231	1,129,218	1,334,718	1,484,217	1,494,217	1,586,717	1,601,717	1,747,717	1,872,717	1,992,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717	2,067,717					
Jun-88	0	9,000	107,700	421,901	721,651	1,385,362	1,750,362	2,013,363	2,358,363	2,588,763	2,660,263	2,751,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,763	2,791,764						
Jun-89	0	51,500	158,500	684,418	1,515,768	1,983,018	2,184,513	2,652,513	2,880,013	2,976,013	3,158,013	3,386,113	3,514,613	3,514,613	3,514,613	3,514,613	3,514,613	3,547,946	3,593,779	3,639,613	3,639,613							
Jun-90	0	83,875	645,384	1,386,240	1,632,240	1,927,840	2,453,340	2,743,340	2,870,581	2,947,581	3,183,415	3,319,248	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581	3,352,581								
Jun-91	10,000	325,052	1,191,102	1,470,602	1,645,302	2,154,642	2,467,642	2,525,430	2,540,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430	2,565,430									
Jun-92	54,000	398,161	526,411	613,912	1,159,412	1,395,912	1,448,412	1,463,412	1,493,412	1,553,412	1,641,412	1,641,412	1,641,412	1,641,412	1,641,412	1,641,412	1,806,412	1,806,412										
Jun-93	33,000	207,000	371,503	767,253	816,753	883,253	959,103	959,103	979,103	979,103	979,103	979,103	979,103	979,103	979,103	979,103	979,103											
Jun-94	20,500	111,201	400,701	623,201	733,201	815,701	933,701	933,701	968,701	968,701	968,701	968,701	968,701	968,701	968,701	968,701												
Jun-95	4,000	160,500	367,700	530,200	545,200	545,200	545,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200													
Jun-96	52,000	264,180	485,180	534,140	576,140	576,140	624,807	643,640	686,640	721,640	746,640	746,640	746,640	746,640														
Jun-97	36,500	214,750	428,750	584,050	669,550	679,550	679,550	679,550	679,550	679,550	679,550	679,550	679,550															
Jun-98	10,000	118,163	358,163	478,163	508,163	508,163	508,163	508,163	508,163	508,163	508,163	533,163																
Jun-99	0	182,500	374,500	487,720	489,544	496,981	508,016	522,071	522,071	522,071	522,071																	
Jun-00	12,500	70,001	152,001	188,501	227,001	235,501	246,001	273,501	283,501	283,501																		
Jun-01	17,500	40,344	83,854	121,757	155,927	197,603	236,103	251,103	251,103																			
Jun-02	0	800	24,740	77,515	149,650	182,214	258,214	283,214																				
Jun-03	0	0	48,352	147,752	239,574	288,024	298,024																					
Jun-04	0	0	88,974	153,074	274,324	274,324																						
Jun-05	0	7,500	46,552	151,152	193,152																							
Jun-06	0	14,800	65,002	152,502																								
Jun-07	0	8,500	93,500																									
Jun-08	0	37,000																										
Jun-09	0																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs							3.000	1.250	1.000	1.000	1.889	1.000	3.024	1.428	1.136	1.169	1.062	1.403	1.161	1.386	1.000	1.051	1.029	1.000	1.002	1.000	1.000	
Jun-83									1.980	2.048	1.068	1.272	1.677	1.616	1.000	1.026	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84						1.585	1.000	1.874	2.126	1.336	1.529	1.000	1.107	1.000	1.065	1.020	1.000	1.089	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Jun-85				3.600	1.544	2.324	1.794	1.678	1.374	1.105	1.066	1.261	1.000	1.000	1.030	1.051	1.028	1.000	1.023	1.000	1.000	1.000	1.000	1.000				
Jun-86			1.817	1.447	2.519	2.121	2.442	1.118	1.000	1.000	1.000	1.040	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Jun-87		1.167	3.528	1.453	2.804	1.847	1.182	1.112	1.007	1.062	1.009	1.091	1.072	1.064	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
Jun-88		11.967	3.917	1.710	1.920	1.263	1.150	1.171	1.098	1.028	1.034	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
Jun-89		3.078	4.318	2.215	1.308	1.102	1.214	1.086	1.033	1.061	1.072	1.038	1.000	1.000	1.000	1.000	1.009	1.013	1.013	1.000								
Jun-90		7.695	2.148	1.177	1.181	1.273	1.118	1.046	1.027	1.080	1.043	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
Jun-91	32.505	3.664	1.235	1.119	1.310	1.145	1.023	1.006	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
Jun-92	7.373	1.322	1.166	1.889	1.204	1.038	1.010	1.021	1.040	1.057	1.000	1.000	1.000	1.000	1.000	1.101	1.000											
Jun-93	6.273	1.795	2.065	1.065	1.081	1.086	1.000	1.021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
Jun-94	5.424	3.603	1.555	1.177	1.113	1.145	1.000	1.037	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
Jun-95	40.125	2.291	1.442	1.028	1.000	1.000	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
Jun-96	5.080	1.837	1.101	1.079	1.000	1.084	1.030	1.067	1.051	1.035	1.000	1.000	1.000															
Jun-97	5.884	1.997	1.362	1.146	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000																
Jun-98	11.816	3.031	1.335	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.049																	
Jun-99		2.052	1.302	1.004	1.015	1.022	1.028	1.000	1.000	1.000																		
Jun-00	5.600	2.171	1.240	1.204	1.037	1.045	1.112	1.037	1.000																			
Jun-01	2.305	2.078	1.452	1.281	1.267	1.195	1.064	1.000																				
Jun-02		30.925	3.133	1.931	1.218	1.417	1.097																					
Jun-03			3.056	1.621	1.202	1.035																						
Jun-04			1.720	1.792	1.000																							
Jun-05		6.207	3.247	1.278																								
Jun-06		4.392	2.346																									
Jun-07		11.000																										
Jun-08																												

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	12.239	5.383	2.118	1.489	1.337	1.286	1.173	1.126	1.153	1.107	1.054	1.048	1.061	1.052	1.011	1.018	1.004	1.011	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Latest 5		7.200	2.700	1.581	1.145	1.143	1.060	1.007	1.010	1.007	1.010	1.000	1.000	1.000	1.000	1.020	1.002	1.003	1.003	1.000	1.000	1.000	1.006					
Latest 3		7.200	2.438	1.564	1.140	1.216	1.091	1.012	1.000	1.000	1.016	1.000	1.000	1.000	1.000	1.034	1.000	1.004	1.004	1.000	1.000	1.000	1.000	1.000				
Volume Wtd																												
All Yrs (ex P)	9.365	2.641	1.632	1.306	1.243	1.175	1.115	1.071	1.042	1.042	1.033	1.029	1.012	1.013	1.007	1.012	1.003	1.005	1.005	1.000	1.000	1.000	1.000	1.000	1.000			
Latest 5			2.492	1.555	1.125	1.104	1.046	1.004	1.013	1.008	1.007	1.000	1.000	1.000	1.000	1.014	1.002	1.003	1.004	1.000	1.000							
Latest 3		6.658	2.278	1.564	1.122	1.186	1.091	1.010	1.000	1.000	1.013	1.000	1.000	1.000	1.000	1.032	1.000	1.005	1.005	1.000	1.000	1.000	1.000					

Dev Factor Selection	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Prior	5.500	2.610	1.624	1.533	1.148	1.136	1.057	1.030	1.030	1.025	1.015	1.015	1.015	1.015	1.010	1.013	1.004	1.005	1.007	1.005	1.005	1.005	1.005	1.002	1.002	1.001	1.000	
Selected	5.500	2.641	1.632	1.535	1.145	1.104	1.060	1.030	1.030	1.025	1.015	1.015	1.015	1.015	1.010	1.012	1.003	1.005	1.003	1.005	1.005	1.005	1.005	1.002	1.002	1.001	1.000	1.000
FacToUlt	59.617	10.839	4.105	2.515	1.638	1.431	1.296	1.223	1.187	1.152	1.124	1.108	1.091	1.075	1.059	1.049	1.036	1.033	1.028	1.025	1.020	1.015	1.010	1.005	1.003	1.001	1.000	1.000
Percent of Ult	1.7%	9.2%	24.4%	39.8%	61.0%	69.9%	77.2%	81.8%	84.3%	86.8%	88.9%	90.3%	91.6%	93.0%	94.4%	95.4%	96.5%	96.8%	97.3%	97.5%	98.0%	98.5%	99.0%	99.5%	99.7%	99.9%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	1.7%	0.0%	0.6%	0.3%	1.000	1.000
324	98.3%	0.9%	1.7%	0.3%	0.2%	0.981	0.971
312	97.4%	1.0%	2.6%	0.4%	0.2%	0.956	0.935
300	96.4%	1.0%	3.6%	0.4%	0.3%	0.935	0.906
288	95.4%	1.1%	4.6%	0.4%	0.3%	0.918	0.881
276	94.2%	1.2%	5.8%	0.5%	0.3%	0.902	0.859
264	93.0%	0.8%	7.0%	0.3%	0.2%	0.887	0.838
252	92.2%	0.8%	7.8%	0.4%	0.3%	0.866	0.810
240	91.4%	0.5%	8.6%	0.2%	0.2%	0.847	0.784
228	90.9%	0.4%	9.1%	0.2%	0.2%	0.824	0.753
216	90.4%	0.5%	9.6%	0.2%	0.2%	0.801	0.723
204	89.9%	0.7%	10.1%	0.3%	0.3%	0.781	0.696
192	89.3%	0.8%	10.7%	0.4%	0.3%	0.765	0.676
180	88.5%	0.6%	11.5%	0.4%	0.3%	0.752	0.659
168	87.9%	0.7%	12.1%	0.4%	0.3%	0.736	0.641
156	87.2%	0.3%	12.8%	0.2%	0.2%	0.722	0.623
144	86.9%	0.7%	13.1%	0.4%	0.3%	0.702	0.598
132	86.2%	0.4%	13.8%	0.3%	0.2%	0.690	0.584
120	85.8%	0.7%	14.2%	0.5%	0.4%	0.673	0.564
108	85.0%	1.5%	15.0%	1.1%	0.9%	0.663	0.553
96	83.5%	2.3%	16.5%	1.7%	1.5%	0.669	0.563
84	81.2%	2.5%	18.8%	1.9%	1.7%	0.685	0.586
72	78.7%	3.7%	21.3%	3.0%	2.7%	0.696	0.602
60	75.0%	4.9%	25.0%	4.1%	3.8%	0.716	0.627
48	70.1%	10.4%	29.9%	9.0%	8.4%	0.736	0.654
36	59.7%	16.7%	40.3%	15.1%	14.4%	0.778	0.708
24	43.0%	20.7%	57.0%	19.5%	18.9%	0.816	0.757
12	22.4%	22.4%	77.6%	22.0%	21.8%	0.837	0.782
Total		100.0%					

NOTES:

(2) = 1 / Section 2, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	5,194,097	7,586,398		4,542,680	6,634,951
6/30/82-83	361,950	609,114	0.981	354,921	597,285
6/30/83-84	1,447,429	1,815,771	0.956	1,383,084	1,735,052
6/30/84-85	67,947	135,947	0.935	63,563	127,175
6/30/85-86	306,173	408,173	0.918	281,039	374,665
6/30/86-87	403,928	537,928	0.902	364,290	485,140
6/30/87-88	1,184,068	2,050,068	0.887	1,050,132	1,818,174
6/30/88-89	1,395,373	1,415,373	0.866	1,208,519	1,225,841
6/30/89-90	150,027	299,027	0.847	127,110	253,349
6/30/90-91	217,455	325,455	0.824	179,237	268,256
6/30/91-92	636,107	642,107	0.801	509,738	514,546
6/30/92-93	396,424	399,424	0.781	309,526	311,868
6/30/93-94	347,813	348,813	0.765	266,044	266,809
6/30/94-95	230,471	235,471	0.752	173,203	176,961
6/30/95-96	356,933	357,933	0.736	262,822	263,559
6/30/96-97	317,973	324,973	0.722	229,540	234,593
6/30/97-98	355,133	359,133	0.702	249,165	251,971
6/30/98-99	340,712	348,712	0.690	234,985	240,502
6/30/99-00	359,664	368,664	0.673	241,951	248,005
6/30/00-01	594,930	600,930	0.663	394,484	398,462
6/30/01-02	497,470	505,470	0.669	332,758	338,109
6/30/02-03	772,683	775,683	0.685	529,407	531,462
6/30/03-04	870,268	874,268	0.696	606,136	608,922
6/30/04-05	1,026,047	1,043,047	0.716	734,431	746,599
6/30/05-06	1,114,431	1,243,431	0.736	820,487	915,462
6/30/06-07	1,428,295	1,669,295	0.778	1,111,164	1,298,653
6/30/07-08	1,574,774	2,341,774	0.816	1,285,085	1,910,992
6/30/08-09	2,657,411	3,013,411	0.837	2,223,705	2,521,603
Total	24,605,983	30,635,791		20,069,204	25,298,968
			(7) Total Discount Factor:	0.816	0.826

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	5,194,097	7,586,398
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	742,014	1,083,771
(11) Discounted Value at 4%:	4,542,680	6,634,951

NOTES:
(2), (3) From Section 2, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 2, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	5,194,097	7,586,398		4,266,471	6,231,524
6/30/82-83	361,950	609,114	0.971	351,557	591,624
6/30/83-84	1,447,429	1,815,771	0.935	1,353,043	1,697,366
6/30/84-85	67,947	135,947	0.906	61,561	123,170
6/30/85-86	306,173	408,173	0.881	269,799	359,681
6/30/86-87	403,928	537,928	0.859	346,910	461,994
6/30/87-88	1,184,068	2,050,068	0.838	992,499	1,718,390
6/30/88-89	1,395,373	1,415,373	0.810	1,129,658	1,145,850
6/30/89-90	150,027	299,027	0.784	117,631	234,456
6/30/90-91	217,455	325,455	0.753	163,758	245,089
6/30/91-92	636,107	642,107	0.723	459,676	464,012
6/30/92-93	396,424	399,424	0.696	275,871	277,959
6/30/93-94	347,813	348,813	0.676	235,079	235,755
6/30/94-95	230,471	235,471	0.659	151,983	155,281
6/30/95-96	356,933	357,933	0.641	228,684	229,325
6/30/96-97	317,973	324,973	0.623	198,127	202,489
6/30/97-98	355,133	359,133	0.598	212,317	214,708
6/30/98-99	340,712	348,712	0.584	198,996	203,669
6/30/99-00	359,664	368,664	0.564	202,724	207,797
6/30/00-01	594,930	600,930	0.553	329,072	332,391
6/30/01-02	497,470	505,470	0.563	280,010	284,513
6/30/02-03	772,683	775,683	0.586	452,629	454,386
6/30/03-04	870,268	874,268	0.602	523,614	526,021
6/30/04-05	1,026,047	1,043,047	0.627	643,793	654,460
6/30/05-06	1,114,431	1,243,431	0.654	729,062	813,454
6/30/06-07	1,428,295	1,669,295	0.708	1,011,431	1,182,093
6/30/07-08	1,574,774	2,341,774	0.757	1,191,678	1,772,090
6/30/08-09	2,657,411	3,013,411	0.782	2,079,127	2,357,657
Total	24,605,983	30,635,791		18,456,762	23,377,205
			(7) Total Discount Factor:	0.750	0.763

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	5,194,097	7,586,398
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	742,014	1,083,771
(11) Discounted Value at 6%:	4,266,471	6,231,524

NOTES:
(2), (3) From Section 2, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 2, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09 - 10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	25,177,176	27,568,258	19,960,516	5,216,660	7,607,742				383,397	421,737	7.3%	5.5%
6/30/82-83	5,080,669	5,337,491	4,718,719	361,950	618,772	90.6%	1.0%	10.6%	38,450	65,732	10.6%	10.6%
6/30/83-84	10,387,673	10,823,183	8,940,245	1,447,429	1,882,938	84.3%	1.0%	6.4%	92,186	119,923	6.4%	6.4%
6/30/84-85	7,579,218	7,684,779	7,511,271	67,947	173,508	98.4%	1.5%	94.8%	64,431	164,529	94.8%	94.8%
6/30/85-86	12,152,000	12,255,000	11,809,550	342,450	445,450	96.8%	1.5%	46.5%	159,123	206,982	46.5%	46.5%
6/30/86-87	15,797,000	15,934,000	15,346,425	450,575	587,575	96.7%	1.0%	30.6%	137,718	179,592	30.6%	30.6%
6/30/87-88	22,299,000	23,170,000	21,048,354	1,250,646	2,121,646	92.6%	1.0%	13.5%	168,626	286,064	13.5%	13.5%
6/30/88-89	24,781,000	24,804,000	23,275,495	1,505,505	1,528,505	93.9%	1.0%	16.3%	246,046	249,804	16.3%	16.3%
6/30/89-90	18,902,000	19,060,000	18,640,237	261,763	419,763	98.2%	1.0%	55.7%	145,806	233,814	55.7%	55.7%
6/30/90-91	14,031,000	14,139,000	13,723,515	307,485	415,485	97.4%	1.0%	39.0%	119,809	161,891	39.0%	39.0%
6/30/91-92	10,416,000	10,423,000	9,702,320	713,680	720,680	93.1%	2.0%	29.1%	207,373	209,407	29.1%	29.1%
6/30/92-93	6,388,000	6,391,000	5,930,160	457,840	460,840	92.8%	0.3%	4.3%	19,483	19,611	4.3%	4.3%
6/30/93-94	5,152,000	5,154,000	4,756,135	395,865	397,865	92.3%	0.5%	6.7%	26,350	26,483	6.7%	6.7%
6/30/94-95	3,277,000	3,283,000	3,008,308	268,692	274,692	91.7%	0.6%	7.0%	18,868	19,289	7.0%	7.0%
6/30/95-96	4,338,000	4,340,000	3,937,947	400,053	402,053	90.8%	1.0%	10.4%	41,538	41,746	10.4%	10.4%
6/30/96-97	3,707,000	3,715,000	3,348,340	358,660	366,660	90.2%	0.5%	5.4%	19,436	19,870	5.4%	5.4%
6/30/97-98	3,630,000	3,635,000	3,237,860	392,140	397,140	89.1%	1.1%	10.0%	39,400	39,902	10.0%	10.0%
6/30/98-99	3,260,000	3,270,000	2,885,671	374,329	384,329	88.4%	0.8%	6.5%	24,290	24,939	6.5%	6.5%
6/30/99-00	3,234,000	3,245,000	2,832,345	401,655	412,655	87.4%	1.0%	7.6%	30,373	31,205	7.6%	7.6%
6/30/00-01	4,726,000	4,732,000	4,061,516	664,484	670,484	85.9%	1.5%	11.0%	72,792	73,450	11.0%	11.0%
6/30/01-02	3,545,000	3,556,000	2,986,387	558,613	569,613	84.1%	1.8%	11.2%	62,357	63,585	11.2%	11.2%
6/30/02-03	4,457,000	4,463,000	3,589,145	867,855	873,855	80.5%	3.6%	18.6%	161,679	162,797	18.6%	18.6%
6/30/03-04	4,450,000	4,459,000	3,456,843	993,157	1,002,157	77.6%	2.9%	12.8%	127,299	128,452	12.8%	12.8%
6/30/04-05	4,582,000	4,662,000	3,384,787	1,197,213	1,277,213	73.2%	4.4%	16.3%	195,509	208,573	16.3%	16.3%
6/30/05-06	4,237,000	4,439,000	2,888,064	1,348,936	1,550,936	66.6%	6.7%	19.9%	268,631	308,858	19.9%	19.9%
6/30/06-07	4,293,000	4,674,000	2,542,796	1,750,204	2,131,204	56.7%	9.9%	22.8%	398,736	485,536	22.8%	22.8%
6/30/07-08	3,651,000	4,591,000	1,569,498	2,081,502	3,021,502	38.1%	18.6%	30.1%	626,292	909,123	30.1%	30.1%
6/30/08-09	4,787,000	5,628,000	1,100,878	3,686,122	4,527,122	21.1%	16.9%	21.5%	792,062	972,774	21.5%	21.5%
Total	238,316,736	245,435,711	210,193,328	28,123,408	35,242,383				4,688,059	5,835,669	16.7%	16.6%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		1,204,533			1,227,096	1,225,877	22,563	21,344		
6/30/82-83		260,969	265,320		260,969	270,627	0	9,658		
6/30/83-84		1,363,288	1,388,792		1,363,288	1,430,456	0	67,168		
6/30/84-85	181,529	731,218	746,387	747,635	731,218	768,779	0	37,561	0.403	0.424
6/30/85-86	195,215	1,596,723	1,633,107	1,634,039	1,633,000	1,634,000	36,277	37,277	0.837	0.837
6/30/86-87	224,337	1,896,353	1,943,443	1,946,416	1,943,000	1,946,000	46,647	49,647	0.866	0.867
6/30/87-88	262,830	2,480,422	2,547,100	2,551,565	2,547,000	2,552,000	66,578	71,578	0.969	0.971
6/30/88-89	283,848	3,820,868	3,931,426	3,933,977	3,931,000	3,934,000	110,132	113,132	1.385	1.386
6/30/89-90	285,041	3,677,264	3,789,168	3,798,063	3,789,000	3,798,000	111,736	120,736	1.329	1.332
6/30/90-91	267,694	2,862,970	2,953,345	2,952,809	2,953,000	2,953,000	90,030	90,030	1.103	1.103
6/30/91-92	261,403	2,377,427	2,456,177	2,455,356	2,455,000	2,456,000	77,573	78,573	0.939	0.940
6/30/92-93	259,951	1,740,584	1,802,352	1,801,702	1,802,000	1,802,000	61,416	61,416	0.693	0.693
6/30/93-94	257,021	1,262,948	1,311,703	1,311,473	1,311,000	1,312,000	48,052	49,052	0.510	0.510
6/30/94-95	255,811	926,779	965,187	965,557	965,000	966,000	38,221	39,221	0.377	0.378
6/30/95-96	255,494	1,003,880	1,047,444	1,047,699	1,047,000	1,048,000	43,120	44,120	0.410	0.410
6/30/96-97	270,025	881,313	922,115	923,023	922,000	923,000	40,687	41,687	0.341	0.342
6/30/97-98	245,319	744,993	781,685	782,895	782,000	783,000	37,007	38,007	0.319	0.319
6/30/98-99	251,404	628,383	661,970	664,113	662,000	664,000	33,617	35,617	0.263	0.264
6/30/99-00	255,590	734,009	776,334	778,372	776,000	778,000	41,991	43,991	0.304	0.304
6/30/00-01	263,866	1,117,446	1,186,992	1,186,995	1,187,000	1,187,000	69,554	69,554	0.450	0.450
6/30/01-02	267,544	768,857	829,905	832,657	830,000	833,000	61,143	64,143	0.310	0.311
6/30/02-03	274,409	814,827	909,569	912,957	910,000	913,000	95,173	98,173	0.332	0.333
6/30/03-04	272,327	788,111	911,344	915,592	911,000	916,000	122,889	127,889	0.335	0.336
6/30/04-05	273,587	987,834	1,219,667	1,221,848	1,159,000	1,222,000	171,166	234,166	0.424	0.447
6/30/05-06	285,078	941,494	1,237,903	1,248,666	1,176,000	1,249,000	234,506	307,506	0.413	0.438
6/30/06-07	298,452	936,091	1,398,240	1,379,994	1,258,000	1,398,000	321,909	461,909	0.422	0.468
6/30/07-08	314,165	692,272	1,332,045	1,371,285	1,199,000	1,372,000	506,728	679,728	0.382	0.437
6/30/08-09	302,930	491,289	2,004,544	1,520,375	1,520,000	2,005,000	1,028,711	1,513,711	0.502	0.662
Total	6,564,872	37,733,146	40,953,267	38,885,063	41,250,571	42,339,739	3,517,425	4,606,592		
Tot 6/30/84-09	6,564,872	34,904,356	39,299,154	38,885,063	38,399,218	39,412,779	3,494,862	4,508,423	0.585	0.600

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 2, Exhibit 2, Page 2, Column 3
(4) From Section 2, Exhibit 2, Page 2, Column 8
(5) From Section 2, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		1,204,533							4	3	
6/30/82-83		260,969	1.017	1.000	265,320	N/A	265,320		0	0	
6/30/83-84		1,363,288	1.019	1.000	1,388,792	N/A	1,388,792		2	1	25,504
6/30/84-85	181,529	731,218	1.021	1.000	746,387	N/A	746,387	0.411	0	0	
6/30/85-86	195,215	1,596,723	1.023	1.000	1,633,107	N/A	1,633,107	0.837	1	1	36,384
6/30/86-87	224,337	1,896,353	1.025	1.000	1,943,443	N/A	1,943,443	0.866	1	0	
6/30/87-88	262,830	2,480,422	1.027	1.000	2,547,100	N/A	2,547,100	0.969	3	2	33,339
6/30/88-89	283,848	3,820,868	1.029	1.000	3,931,426	N/A	3,931,426	1.385	4	3	36,853
6/30/89-90	285,041	3,677,264	1.030	1.000	3,789,168	N/A	3,789,168	1.329	1	0	
6/30/90-91	267,694	2,862,970	1.032	1.000	2,953,345	N/A	2,953,345	1.103	3	2	45,187
6/30/91-92	261,403	2,377,427	1.033	1.000	2,456,177	N/A	2,456,177	0.940	4	3	26,250
6/30/92-93	259,951	1,740,584	1.035	1.000	1,802,352	N/A	1,802,352	0.693	3	1	61,768
6/30/93-94	257,021	1,262,948	1.039	1.000	1,311,703	N/A	1,311,703	0.510	2	2	24,377
6/30/94-95	255,811	926,779	1.041	1.000	965,187	N/A	965,187	0.377	0	1	38,408
6/30/95-96	255,494	1,003,880	1.043	1.000	1,047,444	N/A	1,047,444	0.410	1	2	21,782
6/30/96-97	270,025	881,313	1.046	1.000	922,115	N/A	922,115	0.341	1	1	40,802
6/30/97-98	245,319	744,993	1.049	1.000	781,685	N/A	781,685	0.319	1	1	36,692
6/30/98-99	251,404	628,383	1.053	1.000	661,970	N/A	661,970	0.263	3	3	11,196
6/30/99-00	255,590	734,009	1.058	1.000	776,334	N/A	776,334	0.304	1	3	14,108
6/30/00-01	263,866	1,117,446	1.062	1.000	1,186,992	N/A	1,186,992	0.450	10	11	6,322
6/30/01-02	267,544	768,857	1.079	1.000	829,905	N/A	829,905	0.310	13	8	7,631
6/30/02-03	274,409	814,827	1.116	1.000	909,569	N/A	909,569	0.331	16	14	6,767
6/30/03-04	272,327	788,111	1.156	1.000	911,344	N/A	911,344	0.335	20	17	7,249
6/30/04-05	273,587	987,834	1.235	1.000	1,219,667	N/A	1,219,667	0.446	33	25	9,273
6/30/05-06	285,078	941,494	1.315	1.000	1,237,903	N/A	1,237,903	0.434	70	38	7,800
6/30/06-07	298,452	936,091	1.494	1.000	1,398,240	N/A	1,398,240	0.468	271	78	5,925
6/30/07-08	314,165	692,272	1.924	1.000	1,332,045	N/A	1,332,045	0.424	365	202	3,167
6/30/08-09	302,930	491,289	4.080	1.000	2,004,544	N/A	2,004,544	0.662		394	3,841
Total	6,564,872	37,733,146			40,953,267		40,953,267		833	816	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 2, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	181,529	0.445	731,218	1.021	747,635	N/A	747,635	0.412	0.412
6/30/85-86	195,215	0.858	1,596,723	1.023	1,634,039	N/A	1,634,039	0.837	0.837
6/30/86-87	224,337	0.921	1,896,353	1.025	1,946,416	N/A	1,946,416	0.868	0.868
6/30/87-88	262,830	1.034	2,480,422	1.027	2,551,565	N/A	2,551,565	0.971	0.971
6/30/88-89	283,848	1.417	3,820,868	1.029	3,933,977	N/A	3,933,977	1.386	1.386
6/30/89-90	285,041	1.435	3,677,264	1.030	3,798,063	N/A	3,798,063	1.332	1.332
6/30/90-91	267,694	1.097	2,862,970	1.032	2,952,809	N/A	2,952,809	1.103	1.103
6/30/91-92	261,403	0.930	2,377,427	1.033	2,455,356	N/A	2,455,356	0.939	0.939
6/30/92-93	259,951	0.686	1,740,584	1.035	1,801,702	N/A	1,801,702	0.693	0.693
6/30/93-94	257,021	0.508	1,262,948	1.039	1,311,473	N/A	1,311,473	0.510	0.510
6/30/94-95	255,811	0.381	926,779	1.041	965,557	N/A	965,557	0.377	0.377
6/30/95-96	255,494	0.412	1,003,880	1.043	1,047,699	N/A	1,047,699	0.410	0.410
6/30/96-97	270,025	0.349	881,313	1.046	923,023	N/A	923,023	0.342	0.342
6/30/97-98	245,319	0.329	744,993	1.049	782,895	N/A	782,895	0.319	0.319
6/30/98-99	251,404	0.280	628,383	1.053	664,113	N/A	664,113	0.264	0.264
6/30/99-00	255,590	0.318	734,009	1.058	778,372	N/A	778,372	0.305	0.305
6/30/00-01	263,866	0.450	1,117,446	1.062	1,186,995	N/A	1,186,995	0.450	0.450
6/30/01-02	267,544	0.324	768,857	1.079	832,657	N/A	832,657	0.311	0.311
6/30/02-03	274,409	0.343	814,827	1.116	912,957	N/A	912,957	0.333	0.333
6/30/03-04	272,327	0.346	788,111	1.156	915,592	N/A	915,592	0.336	0.336
6/30/04-05	273,587	0.450	987,834	1.235	1,221,848	N/A	1,221,848	0.447	0.447
6/30/05-06	285,078	0.450	941,494	1.315	1,248,666	N/A	1,248,666	0.438	0.438
6/30/06-07	298,452	0.450	936,091	1.494	1,379,994	N/A	1,379,994	0.462	0.462
6/30/07-08	314,165	0.450	692,272	1.924	1,371,285	N/A	1,371,285	0.436	0.436
6/30/08-09	302,930	0.450	491,289	4.080	1,520,375	N/A	1,520,375	0.502	0.502
Total	6,564,872		34,904,356		38,885,063		38,885,063		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 2, Exhibit 2, Page 4, Column 11
(4) From Section 2, Exhibit 2, Page 2, Column 3
(5) From Section 2, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.445	0.445
6/30/85-86									0.858	0.858
6/30/86-87									0.921	0.921
6/30/87-88									1.034	1.034
6/30/88-89									1.417	1.417
6/30/89-90									1.435	1.435
6/30/90-91	267,694	2,953,345	1.103	1.157	1.276	1.457	1.859	1.103	1.257	1.097
6/30/91-92	261,403	2,456,177	0.940	1.152	1.082	1.428	1.546	0.940	1.060	0.930
6/30/92-93	259,951	1,802,352	0.693	1.152	0.799	1.400	1.119	0.693	0.781	0.686
6/30/93-94	257,021	1,311,703	0.510	1.142	0.583	1.373	0.800	0.510	0.580	0.508
6/30/94-95	255,811	965,187	0.377	1.134	0.428	1.346	0.576	0.377	0.431	0.381
6/30/95-96	255,494	1,047,444	0.410	1.120	0.459	1.319	0.606	0.410	0.461	0.412
6/30/96-97	270,025	922,115	0.341	1.101	0.376	1.294	0.487	0.341	0.371	0.349
6/30/97-98	245,319	781,685	0.319	1.100	0.350	1.268	0.444	0.319	0.352	0.329
6/30/98-99	251,404	661,970	0.263	1.100	0.290	1.243	0.360	0.263	0.305	0.280
6/30/99-00	255,590	776,334	0.304	1.100	0.334	1.219	0.407	0.304	0.338	0.318
6/30/00-01	263,866	1,186,992	0.450	1.075	0.483	1.195	0.578	0.450	0.425	0.450
6/30/01-02	267,544	829,905	0.310	1.067	0.331	1.172	0.388	0.310	0.332	0.324
6/30/02-03	274,409	909,569	0.331	1.040	0.345	1.149	0.396	0.331	0.347	0.343
6/30/03-04	272,327	911,344	0.335	1.014	0.339	1.126	0.382	0.335	0.319	0.346
6/30/04-05	273,587	1,219,667	0.446	1.003	0.447	1.104	0.494	0.446	0.450	0.450
6/30/05-06	285,078	1,237,903	0.434	1.000	0.434	1.082	0.470	0.434	0.450	0.450
6/30/06-07	298,452	1,398,240	0.468	1.000	0.468	1.061	0.497	0.468	0.450	0.450
6/30/07-08	314,165	1,332,045	0.424	1.000	0.424	1.040	0.441	0.424	0.450	0.450
6/30/08-09	302,930	2,004,544	0.662	1.000	0.662	1.020	0.675	0.662		0.450
Total	5,132,071	24,708,522								

Trend Last 4 (ex 08-09):	-0.8%	Avg 3 (x08-09):	0.469
Trend Last 8 (ex 08-09):	2.2%	Avg 5 (x08-09):	0.457
Trend Last 12 (ex 08-09):	2.6%	Avg 10 (x08-09):	0.441
Prior Selected Trend:	2.0%	Prior Sel Avg:	0.450
Selected Trend:	2.0%	Sel. Loss Cost:	0.450

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 2, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCIRB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.820	
(2)	Credibility		37%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.864	
		(Low)		(High)
(5)	Selected Range	0.820		0.907
(6)	Incremental Paid for 2009	2,186		2,186
(7)	Estimated Reserve	9,957		21,344
(8)	Paid to Date (82 & Prior)	1,204,533		1,204,533
(9)	Est Ult Paid for 1982 & Prior	1,214,490		1,225,877

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	5,024	6,230
(11)	Projected Number of Years	7	7
(12)	Estimated Reserve	35,169	43,607
(13)	Paid to Date (82 & Prior)	1,204,533	1,202,348
(14)	Est Ult Paid for 1982 & Prior	1,239,702	1,245,955
(14a)	Paid Counts During Fiscal Year	3	4

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	1,227,096	1,225,877
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**1,227,096**	**1,225,877**
(18)	Implied Tail	1.019	1.018
(19)	Ult Loss Inc Lump Sums @ 6/08	1,233,062	1,240,227

NOTES:

(1) From Section 2, Exhibit 2, Page 6
(2) = (Average of Section 2, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 2, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 2, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Retardation - Cluster 1
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	76,171	11.241			
1993	2	75,723	11.235	0.994		
1994	3	63,040	11.052	0.833		
1995	4	28,227	10.248	0.448		
1996	5	63,291	11.055	2.242		
1997	6	29,585	10.295	0.467		
1998	7	13,039	9.476	0.441		
1999	8	13,407	9.504	1.028		
2000	9	11,930	9.387	0.890	n =	18
2001	10	9,078	9.114	0.761	S(x) =	36,009
2002	11	5,110	8.539	0.563	S(x-sq) =	72,036,489
2003	12	6,295	8.748	1.232	S(xy) =	343,423
2004	13	4,115	8.322	0.654	S(y) =	172
2005	14	17,494	9.770	4.251	D =	8,721
2006	15	5,802	8.666	0.332	slope =	-0.185
2007	16	8,975	9.102	1.547	Avg Trend =	0.815
2008	17	3,912	8.272	0.436		
2009	18	2,186	7.690	0.559		
					Selected Trend:	**0.820**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 0.559 = 2186 / 3912

Commonwealth of Massachusetts Workers Compensation
Department of Mental Retardation - Cluster 1
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	21,006	49,638	70,591	88,239	105,504	122,855	138,893	160,692	180,838	198,763	206,648	244,385	249,094	254,712	256,363	256,876	257,735	258,257	258,537	258,637	259,334	259,869	260,265	260,719	260,969	260,969	260,969
June-84	130,216	307,707	437,592	546,990	654,018	741,928	857,012	959,232	1,050,170	1,118,632	1,160,913	1,192,447	1,199,268	1,203,920	1,225,075	1,249,653	1,268,798	1,290,858	1,296,673	1,300,275	1,316,793	1,333,199	1,342,906	1,349,107	1,358,330	1,363,288	
June-85	89,170	210,713	299,656	374,570	455,180	522,720	582,177	634,207	685,633	702,603	713,358	717,026	720,062	720,920	726,880	729,520	730,301	731,081	731,204	731,204	731,218	731,218	731,218	731,218	731,218		
June-86	189,273	447,261	636,052	765,617	939,707	1,103,818	1,243,019	1,358,130	1,444,684	1,485,929	1,499,042	1,514,132	1,520,647	1,537,037	1,547,606	1,553,176	1,564,852	1,567,432	1,573,496	1,575,982	1,582,467	1,586,081	1,593,552	1,596,723			
June-87	243,465	575,319	884,604	1,135,085	1,272,135	1,441,924	1,619,831	1,685,111	1,741,279	1,772,270	1,801,621	1,842,953	1,884,775	1,889,603	1,894,366	1,894,597	1,895,476	1,895,651	1,895,651	1,895,651	1,896,140	1,896,353	1,896,353				
June-88	363,164	980,917	1,485,789	1,802,447	2,044,603	2,209,730	2,337,274	2,381,902	2,440,826	2,450,413	2,453,714	2,458,155	2,468,582	2,469,709	2,470,273	2,472,242	2,472,926	2,474,120	2,475,679	2,476,698	2,479,622	2,480,422					
June-89	524,148	1,718,544	2,367,574	2,805,123	3,095,247	3,298,078	3,424,849	3,485,100	3,510,635	3,573,650	3,625,589	3,649,159	3,663,581	3,699,511	3,725,869	3,746,061	3,765,157	3,783,602	3,796,379	3,809,734	3,820,868						
June-90	721,216	2,076,487	2,697,946	3,042,168	3,365,956	3,509,844	3,547,356	3,618,254	3,660,798	3,669,321	3,673,294	3,674,043	3,675,267	3,676,903	3,676,903	3,676,975	3,676,975	3,677,208	3,677,264	3,677,264							
June-91	573,775	1,832,452	2,336,684	2,570,536	2,690,503	2,737,602	2,767,093	2,783,177	2,796,096	2,807,853	2,815,389	2,817,526	2,821,013	2,824,311	2,824,746	2,835,316	2,844,386	2,852,912	2,862,970								
June-92	682,252	1,646,809	2,002,754	2,139,991	2,195,456	2,229,059	2,250,251	2,258,976	2,271,388	2,282,222	2,299,759	2,312,696	2,324,613	2,341,522	2,353,263	2,361,934	2,370,332	2,377,427									
June-93	530,227	1,313,078	1,537,374	1,593,966	1,619,013	1,650,226	1,662,183	1,669,637	1,672,913	1,676,324	1,679,743	1,683,745	1,688,008	1,694,444	1,700,344	1,735,033	1,740,584										
June-94	507,386	988,866	1,093,334	1,170,915	1,212,098	1,230,432	1,235,833	1,243,122	1,247,382	1,251,645	1,252,686	1,255,338	1,260,284	1,261,941	1,262,624	1,262,948											
June-95	419,212	715,818	815,621	863,086	890,307	917,113	922,985	923,881	924,606	926,605	926,605	926,605	926,605	926,605	926,779												
June-96	382,658	780,302	879,753	927,773	959,109	977,572	986,429	994,587	997,113	999,835	999,878	999,878	1,002,373	1,003,880													
June-97	375,777	680,288	796,380	819,630	848,942	854,522	862,163	870,431	872,306	876,115	878,979	880,535	881,313														
June-98	271,043	554,887	629,610	674,301	694,718	711,568	723,173	728,434	739,218	743,949	744,590	744,993															
June-99	200,054	434,499	509,933	556,932	596,752	611,737	618,749	622,442	625,193	627,351	628,383																
June-00	278,690	480,160	554,610	607,363	639,042	681,279	703,362	725,333	730,593	734,009																	
June-01	312,280	500,976	665,683	751,467	818,710	893,280	968,370	1,062,045	1,117,446																		
June-02	197,389	476,132	547,189	630,575	673,854	722,281	746,769	768,857																			
June-03	163,049	459,264	666,927	739,223	775,337	800,620	814,827																				
June-04	79,919	361,725	544,497	684,486	731,761	788,111																					
June-05	394,825	766,546	887,167	942,140	987,834																						
June-06	318,539	662,581	842,645	941,494																							
June-07	310,954	746,618	936,091																								
June-08	418,873	692,272																									
June-09	491,289																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.363	1.422	1.250	1.196	1.164	1.131	1.157	1.125	1.099	1.040	1.183	1.019	1.023	1.006	1.002	1.003	1.002	1.001	1.000	1.003	1.002	1.002	1.002	1.001	1.000	1.000
June-84	2.363	1.422	1.250	1.196	1.134	1.155	1.119	1.095	1.065	1.038	1.027	1.006	1.004	1.018	1.020	1.015	1.017	1.005	1.003	1.013	1.012	1.007	1.005	1.007	1.004	
June-85	2.363	1.422	1.250	1.215	1.148	1.114	1.089	1.081	1.025	1.015	1.005	1.004	1.001	1.008	1.004	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
June-86	2.363	1.422	1.204	1.227	1.175	1.126	1.093	1.064	1.029	1.009	1.010	1.004	1.011	1.007	1.004	1.008	1.002	1.004	1.002	1.004	1.002	1.005	1.002			
June-87	2.363	1.538	1.283	1.121	1.133	1.123	1.040	1.033	1.018	1.017	1.023	1.023	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
June-88	2.701	1.515	1.213	1.134	1.081	1.058	1.019	1.025	1.004	1.001	1.002	1.004	1.000	1.000	1.001	1.000	1.000	1.001	1.000	1.001	1.000					
June-89	3.279	1.378	1.185	1.103	1.066	1.038	1.018	1.007	1.018	1.015	1.007	1.004	1.010	1.007	1.005	1.005	1.005	1.003	1.004	1.003						
June-90	2.879	1.299	1.128	1.106	1.043	1.011	1.020	1.012	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
June-91	3.194	1.275	1.100	1.047	1.018	1.011	1.006	1.005	1.004	1.003	1.001	1.001	1.001	1.000	1.004	1.003	1.003	1.004								
June-92	2.414	1.216	1.069	1.026	1.015	1.010	1.004	1.005	1.005	1.008	1.006	1.005	1.007	1.005	1.004	1.004	1.003									
June-93	2.476	1.171	1.037	1.016	1.019	1.007	1.004	1.002	1.002	1.002	1.002	1.003	1.004	1.003	1.020	1.003										
June-94	1.949	1.106	1.071	1.035	1.015	1.004	1.006	1.003	1.003	1.001	1.002	1.004	1.001	1.001	1.000											
June-95	1.708	1.139	1.058	1.032	1.030	1.006	1.001	1.001	1.002	1.000	1.000	1.000	1.000	1.000												
June-96	2.039	1.127	1.055	1.034	1.019	1.009	1.008	1.003	1.003	1.000	1.000	1.002	1.002													
June-97	1.810	1.171	1.029	1.036	1.007	1.009	1.010	1.002	1.004	1.003	1.002	1.001														
June-98	2.047	1.135	1.071	1.030	1.024	1.016	1.007	1.015	1.006	1.001	1.001															
June-99	2.172	1.174	1.092	1.071	1.025	1.011	1.006	1.004	1.003	1.002																
June-00	1.723	1.155	1.095	1.052	1.066	1.032	1.031	1.007	1.005																	
June-01	1.604	1.329	1.129	1.089	1.091	1.084	1.097	1.052																		
June-02	2.412	1.149	1.152	1.069	1.072	1.034	1.030																			
June-03	2.817	1.452	1.108	1.049	1.033	1.018																				
June-04	4.526	1.505	1.257	1.069	1.077																					
June-05	1.941	1.157	1.062	1.049																						
June-06	2.080	1.272	1.117																							
June-07	2.401	1.254																								
June-08	1.653																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.371	1.288	1.136	1.087	1.066	1.048	1.038	1.029	1.017	1.009	1.017	1.005	1.005	1.004	1.005	1.004	1.003	1.002	1.001	1.003	1.003	1.003	1.002	1.003	1.002	1.000	
Latest 5	2.520	1.328	1.139	1.065	1.068	1.036	1.034	1.016	1.004	1.001	1.001	1.002	1.003	1.002	1.006	1.003	1.002	1.002	1.001	1.002	1.003	1.003					
Latest 3	2.045	1.228	1.145	1.055	1.060	1.045	1.053	1.021	1.005	1.002	1.001	1.001	1.001	1.001	1.008	1.003	1.002	1.002	1.001	1.001	1.001	1.002	1.002	1.003			
Volume Wtd																											
All Yrs	2.352	1.271	1.123	1.078	1.054	1.037	1.026	1.019	1.011	1.007	1.007	1.004	1.004	1.004	1.005	1.003	1.003	1.002	1.001	1.003	1.003	1.003	1.003	1.004	1.003		
Latest 5	2.120	1.294	1.129	1.064	1.068	1.039	1.039	1.019	1.004	1.001	1.001	1.002	1.004	1.002	1.005	1.003	1.002	1.002	1.001	1.002	1.003						
Latest 3	2.005	1.225	1.129	1.055	1.060	1.047	1.057	1.026	1.005	1.002	1.001	1.001	1.001	1.002	1.008	1.003	1.002	1.002	1.001	1.002	1.001	1.002	1.003				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.124*	*1.280*	*1.137*	*1.066*	*1.057*	*1.036*	*1.030*	*1.006*	*1.004*	*1.004*	*1.004*	*1.003*	*1.003*	*1.002*	*1.003*	*1.002*	*1.002*	*1.002*	*1.001*	*1.002*	*1.002*	*1.002*	*1.002*	*1.002*	*1.002*	*1.019*	
Selected	2.120	1.288	1.136	1.065	1.068	1.036	1.034	1.016	1.004	1.004	1.004	1.003	1.003	1.002	1.003	1.003	1.002	1.002	1.001	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.017
FacToUlt	4.080	1.924	1.494	1.315	1.235	1.156	1.116	1.079	1.062	1.058	1.053	1.049	1.046	1.043	1.041	1.039	1.035	1.033	1.032	1.030	1.029	1.027	1.025	1.023	1.021	1.019	1.017
Percent of Ult	24.5%	52.0%	66.9%	76.1%	81.0%	86.5%	89.6%	92.6%	94.1%	94.5%	94.9%	95.3%	95.6%	95.8%	96.0%	96.3%	96.6%	96.8%	96.9%	97.0%	97.2%	97.4%	97.6%	97.8%	98.0%	98.2%	98.4%

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Department of Mental Retardation - Cluster 1
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	1,233,062	1,240,227	1,227,096	1,225,877	(5,966)	-0.5%	(14,350)	-1.2%
6/30/82-83	260,969	271,219	260,969	270,627	0	0.0%	(592)	-0.2%
6/30/83-84	1,358,330	1,428,372	1,363,288	1,430,456	4,958	0.4%	2,084	0.1%
6/30/84-85	738,530	745,842	731,218	768,779	(7,312)	-1.0%	22,936	3.1%
6/30/85-86	1,633,000	1,634,000	1,633,000	1,634,000	0	0.0%	0	0.0%
6/30/86-87	1,948,000	1,951,000	1,943,000	1,946,000	(5,000)	-0.3%	(5,000)	-0.3%
6/30/87-88	2,552,000	2,557,000	2,547,000	2,552,000	(5,000)	-0.2%	(5,000)	-0.2%
6/30/88-89	3,928,000	3,931,000	3,931,000	3,934,000	3,000	0.1%	3,000	0.1%
6/30/89-90	3,796,000	3,805,000	3,789,000	3,798,000	(7,000)	-0.2%	(7,000)	-0.2%
6/30/90-91	2,949,000	2,963,000	2,953,000	2,953,000	4,000	0.1%	(10,000)	-0.3%
6/30/91-92	2,455,000	2,466,000	2,455,000	2,456,000	0	0.0%	(10,000)	-0.4%
6/30/92-93	1,801,000	1,809,000	1,802,000	1,802,000	1,000	0.1%	(7,000)	-0.4%
6/30/93-94	1,314,000	1,321,000	1,311,000	1,312,000	(3,000)	-0.2%	(9,000)	-0.7%
6/30/94-95	935,871	945,137	965,000	966,000	29,129	3.1%	20,863	2.2%
6/30/95-96	1,048,000	1,054,000	1,047,000	1,048,000	(1,000)	-0.1%	(6,000)	-0.6%
6/30/96-97	923,000	927,000	922,000	923,000	(1,000)	-0.1%	(4,000)	-0.4%
6/30/97-98	784,000	788,000	782,000	783,000	(2,000)	-0.3%	(5,000)	-0.6%
6/30/98-99	663,000	669,000	662,000	664,000	(1,000)	-0.2%	(5,000)	-0.7%
6/30/99-00	775,000	780,000	776,000	778,000	1,000	0.1%	(2,000)	-0.3%
6/30/00-01	1,133,000	1,134,000	1,187,000	1,187,000	54,000	4.8%	53,000	4.7%
6/30/01-02	821,000	827,000	830,000	833,000	9,000	1.1%	6,000	0.7%
6/30/02-03	912,000	917,000	910,000	913,000	(2,000)	-0.2%	(4,000)	-0.4%
6/30/03-04	879,000	881,000	911,000	916,000	32,000	3.6%	35,000	4.0%
6/30/04-05	1,088,000	1,214,000	1,159,000	1,222,000	71,000	6.5%	8,000	0.7%
6/30/05-06	1,107,000	1,246,000	1,176,000	1,249,000	69,000	6.2%	3,000	0.2%
6/30/06-07	1,255,000	1,394,000	1,258,000	1,398,000	3,000	0.2%	4,000	0.3%
6/30/07-08	1,451,000	1,662,000	1,199,000	1,372,000	(252,000)	-17.4%	(290,000)	-17.4%
6/30/08-09								
Total	39,741,762	40,560,797	39,730,571	40,334,739	(11,191)	0.0%	(226,059)	-0.6%

NOTES:
(2), (3) From Aon analysis as of June 30, 2008
(4), (5) From Section 2, Exhibit 2, Page 1, Columns 6, 7
(6) = (4) - (2)
(7) = (4) / (2) - 1
(8) = (5) - (3)
(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
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Department of Mental Retardation - Cluster 1
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	1.6%	0.0%	0.6%	0.3%	1.000	1.000
324	98.4%	0.2%	1.6%	0.1%	0.0%	0.981	0.971
312	98.2%	0.2%	1.8%	0.1%	0.0%	0.947	0.922
300	98.0%	0.2%	2.0%	0.1%	0.0%	0.917	0.880
288	97.8%	0.2%	2.2%	0.1%	0.0%	0.891	0.842
276	97.6%	0.2%	2.4%	0.1%	0.1%	0.866	0.809
264	97.4%	0.2%	2.6%	0.1%	0.1%	0.844	0.779
252	97.2%	0.1%	2.8%	0.1%	0.0%	0.823	0.751
240	97.0%	0.1%	3.0%	0.0%	0.0%	0.801	0.721
228	96.9%	0.1%	3.1%	0.1%	0.0%	0.777	0.690
216	96.8%	0.2%	3.2%	0.1%	0.1%	0.758	0.666
204	96.6%	0.3%	3.4%	0.2%	0.1%	0.745	0.650
192	96.3%	0.3%	3.7%	0.1%	0.1%	0.737	0.641
180	96.0%	0.2%	4.0%	0.1%	0.1%	0.727	0.629
168	95.8%	0.3%	4.2%	0.2%	0.1%	0.711	0.610
156	95.6%	0.3%	4.4%	0.2%	0.1%	0.701	0.599
144	95.3%	0.4%	4.7%	0.2%	0.2%	0.692	0.589
132	94.9%	0.4%	5.1%	0.3%	0.2%	0.689	0.586
120	94.5%	0.4%	5.5%	0.3%	0.2%	0.684	0.582
108	94.1%	1.5%	5.9%	1.1%	0.9%	0.681	0.579
96	92.6%	3.1%	7.4%	2.3%	2.0%	0.721	0.632
84	89.6%	3.1%	10.4%	2.4%	2.1%	0.778	0.707
72	86.5%	5.5%	13.5%	4.4%	4.0%	0.801	0.737
60	81.0%	4.9%	19.0%	4.1%	3.8%	0.831	0.775
48	76.1%	9.1%	23.9%	7.9%	7.4%	0.836	0.780
36	66.9%	15.0%	33.1%	13.6%	12.9%	0.853	0.801
24	52.0%	27.5%	48.0%	25.9%	25.2%	0.870	0.823
12	24.5%	24.5%	75.5%	24.0%	23.8%	0.889	0.847
Total		100.0%					

NOTES:

(2) = 1 / Section 2, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
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Department of Mental Retardation - Cluster 1
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	22,563	21,344		19,733	18,667
6/30/82-83	0	9,658	0.981	0	9,470
6/30/83-84	0	67,168	0.947	0	63,601
6/30/84-85	0	37,561	0.917	0	34,452
6/30/85-86	36,277	37,277	0.891	32,309	33,199
6/30/86-87	46,647	49,647	0.866	40,414	43,013
6/30/87-88	66,578	71,578	0.844	56,193	60,413
6/30/88-89	110,132	113,132	0.823	90,665	93,135
6/30/89-90	111,736	120,736	0.801	89,457	96,662
6/30/90-91	90,030	90,030	0.777	69,969	69,969
6/30/91-92	77,573	78,573	0.758	58,793	59,551
6/30/92-93	61,416	61,416	0.745	45,754	45,754
6/30/93-94	48,052	49,052	0.737	35,411	36,148
6/30/94-95	38,221	39,221	0.727	27,768	28,495
6/30/95-96	43,120	44,120	0.711	30,649	31,360
6/30/96-97	40,687	41,687	0.701	28,534	29,235
6/30/97-98	37,007	38,007	0.692	25,605	26,296
6/30/98-99	33,617	35,617	0.689	23,157	24,535
6/30/99-00	41,991	43,991	0.684	28,741	30,109
6/30/00-01	69,554	69,554	0.681	47,333	47,333
6/30/01-02	61,143	64,143	0.721	44,069	46,231
6/30/02-03	95,173	98,173	0.778	73,997	76,329
6/30/03-04	122,889	127,889	0.801	98,448	102,454
6/30/04-05	171,166	234,166	0.831	142,237	194,589
6/30/05-06	234,506	307,506	0.836	196,154	257,216
6/30/06-07	321,909	461,909	0.853	274,545	393,946
6/30/07-08	506,728	679,728	0.870	440,913	591,443
6/30/08-09	1,028,711	1,513,711	0.889	914,534	1,345,704
Total	3,517,425	4,606,592		2,935,381	3,889,311
			(7) Total Discount Factor:	0.835	0.844

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	22,563	21,344
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	3,223	3,049
(11) Discounted Value at 4%:	19,733	18,667

NOTES:
(2), (3) From Section 2, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 2, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

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Department of Mental Retardation - Cluster 1
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	22,563	21,344		18,533	17,532
6/30/82-83	0	9,658	0.971	0	9,381
6/30/83-84	0	67,168	0.922	0	61,941
6/30/84-85	0	37,561	0.880	0	33,044
6/30/85-86	36,277	37,277	0.842	30,558	31,400
6/30/86-87	46,647	49,647	0.809	37,733	40,160
6/30/87-88	66,578	71,578	0.779	51,838	55,731
6/30/88-89	110,132	113,132	0.751	82,698	84,951
6/30/89-90	111,736	120,736	0.721	80,556	87,045
6/30/90-91	90,030	90,030	0.690	62,148	62,148
6/30/91-92	77,573	78,573	0.666	51,649	52,315
6/30/92-93	61,416	61,416	0.650	39,935	39,935
6/30/93-94	48,052	49,052	0.641	30,818	31,459
6/30/94-95	38,221	39,221	0.629	24,048	24,677
6/30/95-96	43,120	44,120	0.610	26,299	26,909
6/30/96-97	40,687	41,687	0.599	24,378	24,978
6/30/97-98	37,007	38,007	0.589	21,780	22,368
6/30/98-99	33,617	35,617	0.586	19,711	20,884
6/30/99-00	41,991	43,991	0.582	24,446	25,610
6/30/00-01	69,554	69,554	0.579	40,240	40,240
6/30/01-02	61,143	64,143	0.632	38,666	40,563
6/30/02-03	95,173	98,173	0.707	67,256	69,376
6/30/03-04	122,889	127,889	0.737	90,525	94,208
6/30/04-05	171,166	234,166	0.775	132,601	181,407
6/30/05-06	234,506	307,506	0.780	183,012	239,983
6/30/06-07	321,909	461,909	0.801	257,852	369,994
6/30/07-08	506,728	679,728	0.823	416,990	559,352
6/30/08-09	1,028,711	1,513,711	0.847	871,573	1,282,489
Total	3,517,425	4,606,592		2,725,845	3,630,080
			(7) Total Discount Factor:	0.775	0.788

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	22,563	21,344
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	3,223	3,049
(11) Discounted Value at 6%:	18,533	17,532

NOTES:
(2), (3) From Section 2, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 2, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		17,889,404			22,178,580	23,554,420	4,289,176	5,665,016		
6/30/82-83		2,330,941	2,448,167		2,386,963	2,509,372	56,022	178,430		
6/30/83-84		2,471,991	2,729,958		2,661,709	2,798,207	189,719	326,217		
6/30/84-85	142,302	3,800,124	4,390,904	4,004,779	4,005,000	4,391,000	204,876	590,876	2.814	3.086
6/30/85-86	153,030	4,634,091	4,978,405	4,955,471	4,955,000	4,978,000	320,909	343,909	3.238	3.253
6/30/86-87	175,859	6,208,413	6,727,291	6,728,078	6,333,000	6,457,000	124,587	248,587	3.601	3.672
6/30/87-88	206,034	11,175,910	12,722,512	12,125,927	12,483,878	12,723,000	1,307,968	1,547,090	6.059	6.175
6/30/88-89	222,510	11,590,546	13,232,966	12,661,815	13,004,506	13,233,000	1,413,959	1,642,454	5.844	5.947
6/30/89-90	223,446	11,050,977	12,703,700	12,174,614	12,175,000	12,704,000	1,124,023	1,653,023	5.449	5.686
6/30/90-91	209,847	7,659,317	8,853,274	8,549,171	8,549,000	8,853,000	889,683	1,193,683	4.074	4.219
6/30/91-92	204,915	4,260,078	4,775,481	4,774,836	4,388,000	4,473,000	127,922	212,922	2.141	2.183
6/30/92-93	176,368	3,388,574	3,842,259	3,842,044	3,842,000	3,842,000	453,426	453,426	2.178	2.178
6/30/93-94	172,727	2,275,004	2,632,401	2,636,527	2,632,000	2,637,000	356,996	361,996	1.524	1.527
6/30/94-95	177,958	2,812,068	3,422,853	3,306,830	3,307,000	3,423,000	494,932	610,932	1.858	1.923
6/30/95-96	175,626	1,922,253	2,252,932	2,265,989	1,961,000	2,000,000	38,747	77,747	1.117	1.139
6/30/96-97	189,700	1,571,537	1,841,511	1,866,470	1,842,000	1,866,000	270,463	294,463	0.971	0.984
6/30/97-98	176,882	2,712,714	3,245,763	3,253,887	3,246,000	3,254,000	533,286	541,286	1.835	1.840
6/30/98-99	188,672	1,669,520	2,049,395	2,080,596	2,049,000	2,081,000	379,480	411,480	1.086	1.103
6/30/99-00	194,073	2,313,702	2,894,846	2,922,168	2,895,000	2,922,000	581,298	608,298	1.492	1.506
6/30/00-01	201,133	3,191,097	4,074,630	4,080,254	4,075,000	4,080,000	883,903	888,903	2.026	2.029
6/30/01-02	202,655	2,521,640	3,387,016	3,404,032	3,387,000	3,404,000	865,360	882,360	1.671	1.680
6/30/02-03	202,050	1,815,440	2,480,384	2,524,037	2,480,000	2,524,000	664,560	708,560	1.227	1.249
6/30/03-04	189,108	3,088,905	4,544,731	4,526,198	4,526,000	4,545,000	1,437,095	1,456,095	2.393	2.403
6/30/04-05	186,494	2,430,257	3,755,132	3,800,595	3,755,000	3,801,000	1,324,743	1,370,743	2.013	2.038
6/30/05-06	192,742	1,746,209	2,873,559	3,316,474	2,874,000	3,316,000	1,127,791	1,569,791	1.491	1.720
6/30/06-07	202,830	1,415,657	2,920,104	3,406,546	2,920,000	3,407,000	1,504,343	1,991,343	1.440	1.680
6/30/07-08	211,536	1,147,042	2,924,400	3,692,212	2,924,000	3,692,000	1,776,958	2,544,958	1.382	1.745
6/30/08-09	204,114	668,064	3,689,958	4,317,476	3,690,000	4,317,000	3,021,936	3,648,936	1.808	2.115
Total	4,782,611	119,761,474	126,394,533	121,217,027	145,525,636	151,784,999	25,764,162	32,023,525		
Tot 6/30/84-09	4,782,611	97,069,138	121,216,407	121,217,027	118,298,384	122,923,000	21,229,246	25,853,862	2.474	2.570

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) Sum of Section 3, Exhibit 1, Page 2, Column 3 and Section 3, Exhibit 1, Page 9, Column 8
(4) From Section 3, Exhibit 1, Page 2, Column 8
(5) From Section 3, Exhibit 1, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		17,223,724							12	11		81
6/30/82-83		2,236,941	1.052	1.000	2,353,462	94,705	2,448,167		1	1	116,521	83
6/30/83-84		2,211,990	1.063	1.050	2,468,007	261,951	2,729,958		1	1	256,018	67
6/30/84-85	142,302	3,249,041	1.073	1.100	3,835,688	555,216	4,390,904	3.086	2	2	293,324	65
6/30/85-86	153,030	4,048,163	1.084	1.000	4,388,082	590,322	4,978,405	3.253	1	1	339,919	58
6/30/86-87	175,859	5,376,022	1.095	1.000	5,885,715	841,577	6,727,291	3.825	0	0		
6/30/87-88	206,034	9,490,888	1.106	1.050	11,019,342	1,703,169	12,722,512	6.175	4	3	509,485	68
6/30/88-89	222,510	9,614,904	1.113	1.050	11,236,889	1,996,078	13,232,966	5.947	4	4	405,496	75
6/30/89-90	223,446	9,013,337	1.125	1.050	10,645,455	2,058,245	12,703,700	5.685	4	2	816,059	69
6/30/90-91	209,847	5,993,853	1.139	1.050	7,171,238	1,682,036	8,853,274	4.219	1	1	1,177,385	81
6/30/91-92	204,915	3,230,938	1.153	1.000	3,726,437	1,049,045	4,775,481	2.330	2	2	247,749	57
6/30/92-93	176,368	2,612,495	1.167	1.000	3,048,420	793,840	3,842,259	2.179	1	1	435,925	58
6/30/93-94	172,727	1,916,420	1.181	1.000	2,263,217	369,185	2,632,401	1.524	1	1	346,797	59
6/30/94-95	177,958	2,335,644	1.196	1.050	2,932,456	490,397	3,422,853	1.923	3	4	149,203	68
6/30/95-96	175,626	1,438,193	1.212	1.000	1,743,776	509,156	2,252,932	1.283	0	0		
6/30/96-97	189,700	1,057,037	1.227	1.000	1,296,867	544,644	1,841,511	0.971	0	0		
6/30/97-98	176,882	2,001,913	1.240	1.000	2,481,871	763,892	3,245,763	1.835	1	2	239,979	44
6/30/98-99	188,672	1,249,270	1.273	1.000	1,590,117	459,278	2,049,395	1.086	1	0		
6/30/99-00	194,073	1,634,502	1.307	1.000	2,136,626	758,219	2,894,846	1.492	1	0		
6/30/00-01	201,133	2,394,597	1.334	1.000	3,194,698	879,931	4,074,630	2.026	3	2	400,050	67
6/30/01-02	202,655	2,051,869	1.375	1.000	2,821,004	566,011	3,387,016	1.671	6	5	153,827	61
6/30/02-03	202,050	1,378,440	1.419	1.000	1,955,404	524,981	2,480,384	1.228	3	2	288,482	51
6/30/03-04	189,108	2,553,905	1.482	1.000	3,784,732	759,999	4,544,731	2.403	9	7	175,833	53
6/30/04-05	186,494	1,949,257	1.562	1.000	3,043,985	711,146	3,755,132	2.014	13	7	156,390	57
6/30/05-06	192,742	1,295,959	1.694	1.000	2,195,808	677,751	2,873,559	1.491	12	7	128,550	53
6/30/06-07	202,830	1,280,907	1.881	1.000	2,409,646	510,458	2,920,104	1.440	41	13	86,826	54
6/30/07-08	211,536	959,312	2.360	1.000	2,263,537	660,863	2,924,400	1.382	186	54	24,152	45
6/30/08-09	204,114	633,064	4.178	1.000	2,644,958	1,045,000	3,689,958	1.808		177	11,367	47
Total	4,782,611	100,432,584			104,537,436	21,857,097	126,394,533		313	310		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 3, Exhibit 1, Page 7
(5) Based on information from the MA WCRIB
(6) = (3) x (4) x (5)
(7) From Section 3, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	142,302	2.065	3,249,041	1.073	3,449,563	555,216	4,004,779	2.814	2.424
6/30/85-86	153,030	2.674	4,048,163	1.084	4,365,149	590,322	4,955,471	3.238	2.852
6/30/86-87	175,859	3.352	5,376,022	1.095	5,886,501	841,577	6,728,078	3.826	3.347
6/30/87-88	206,034	4.729	9,490,888	1.106	10,422,758	1,703,169	12,125,927	5.885	5.059
6/30/88-89	222,510	4.650	9,614,904	1.113	10,665,737	1,996,078	12,661,815	5.690	4.793
6/30/89-90	223,446	4.448	9,013,337	1.125	10,116,369	2,058,245	12,174,614	5.449	4.527
6/30/90-91	209,847	3.400	5,993,853	1.139	6,867,134	1,682,036	8,549,171	4.074	3.272
6/30/91-92	204,915	1.816	3,230,938	1.153	3,725,791	1,049,045	4,774,836	2.330	1.818
6/30/92-93	176,368	1.728	2,612,495	1.167	3,048,204	793,840	3,842,044	2.178	1.728
6/30/93-94	172,727	1.326	1,916,420	1.181	2,267,343	369,185	2,636,527	1.526	1.313
6/30/94-95	177,958	1.650	2,335,644	1.196	2,816,434	490,397	3,306,830	1.858	1.583
6/30/95-96	175,626	1.035	1,438,193	1.212	1,756,834	509,156	2,265,989	1.290	1.000
6/30/96-97	189,700	0.755	1,057,037	1.227	1,321,825	544,644	1,866,470	0.984	0.697
6/30/97-98	176,882	1.427	2,001,913	1.240	2,489,995	763,892	3,253,887	1.840	1.408
6/30/98-99	188,672	0.920	1,249,270	1.273	1,621,318	459,278	2,080,596	1.103	0.859
6/30/99-00	194,073	1.161	1,634,502	1.307	2,163,948	758,219	2,922,168	1.506	1.115
6/30/00-01	201,133	1.600	2,394,597	1.334	3,200,322	879,931	4,080,254	2.029	1.591
6/30/01-02	202,655	1.423	2,051,869	1.375	2,838,021	566,011	3,404,032	1.680	1.400
6/30/02-03	202,050	1.041	1,378,440	1.419	1,999,057	524,981	2,524,037	1.249	0.989
6/30/03-04	189,108	1.971	2,553,905	1.482	3,766,199	759,999	4,526,198	2.393	1.992
6/30/04-05	186,494	1.700	1,949,257	1.562	3,089,448	711,146	3,800,595	2.038	1.657
6/30/05-06	192,742	1.700	1,295,959	1.694	2,638,723	677,751	3,316,474	1.721	1.369
6/30/06-07	202,830	1.700	1,280,907	1.881	2,896,088	510,458	3,406,546	1.680	1.428
6/30/07-08	211,536	1.700	959,312	2.360	3,031,350	660,863	3,692,212	1.745	1.433
6/30/08-09	204,114	1.700	633,064	4.178	3,272,476	1,045,000	4,317,476	2.115	1.603
Total	4,782,611		78,759,929		99,716,586	21,500,441	121,217,027		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 3, Exhibit 1, Page 4, Column 11
(4) From Section 3, Exhibit 1, Page 2, Column 3
(5) From Section 3, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 3, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									2.065	2.065
6/30/85-86									2.674	2.674
6/30/86-87									3.352	3.352
6/30/87-88									4.729	4.729
6/30/88-89									4.650	4.650
6/30/89-90									4.448	4.448
6/30/90-91	209,847	7,171,238	3.417	0.937	3.201	1.457	4.663	3.417	3.230	3.400
6/30/91-92	204,915	3,726,437	1.819	1.028	1.869	1.428	2.669	1.819	1.892	1.816
6/30/92-93	176,368	3,048,420	1.728	1.198	2.071	1.400	2.900	1.728	2.023	1.728
6/30/93-94	172,727	2,263,217	1.310	1.183	1.550	1.373	2.128	1.310	1.458	1.326
6/30/94-95	177,958	2,932,456	1.648	1.172	1.931	1.346	2.599	1.648	1.812	1.650
6/30/95-96	175,626	1,743,776	0.993	1.163	1.154	1.319	1.523	0.993	1.207	1.035
6/30/96-97	189,700	1,296,867	0.684	1.151	0.787	1.294	1.018	0.684	0.918	0.755
6/30/97-98	176,882	2,481,871	1.403	1.136	1.595	1.268	2.022	1.403	1.598	1.427
6/30/98-99	188,672	1,590,117	0.843	1.121	0.945	1.243	1.175	0.843	1.138	0.920
6/30/99-00	194,073	2,136,626	1.101	1.103	1.215	1.219	1.481	1.101	1.345	1.161
6/30/00-01	201,133	3,194,698	1.588	1.075	1.708	1.195	2.041	1.588	1.702	1.600
6/30/01-02	202,655	2,821,004	1.392	1.054	1.468	1.172	1.720	1.392	1.513	1.423
6/30/02-03	202,050	1,955,404	0.968	1.051	1.017	1.149	1.168	0.968	1.800	1.041
6/30/03-04	189,108	3,784,732	2.001	1.051	2.103	1.126	2.368	2.001	1.800	1.971
6/30/04-05	186,494	3,043,985	1.632	1.044	1.704	1.104	1.881	1.632	1.800	1.700
6/30/05-06	192,742	2,195,808	1.139	1.033	1.177	1.082	1.274	1.139	1.800	1.700
6/30/06-07	202,830	2,409,646	1.188	1.022	1.214	1.061	1.289	1.188	1.800	1.700
6/30/07-08	211,536	2,263,537	1.070	1.011	1.082	1.040	1.126	1.070	1.700	1.700
6/30/08-09	204,114	2,644,958	1.296	1.000	1.296	1.020	1.322	1.296		1.700
Total	3,659,430	52,704,796								

Trend Last 4 (ex 08-09):	-12.5%	Avg 3 (x08-09):	1.229
Trend Last 8 (ex 08-09):	-4.6%	Avg 5 (x08-09):	1.588
Trend Last 12 (ex 08-09):	1.6%	Avg 10 (x08-09):	1.552
Prior Selected Trend:	2.0%	Prior Sel Avg:	1.700
Selected Trend:	2.0%	Sel. Loss Cost:	1.700

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 3, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.950	
(2)	Credibility		45%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.956	
		(Low)		(High)
(5)	Selected Range	0.930		0.960
(6)	Incremental Paid for 2009	394,388		394,388
(7)	Estimated Reserve	5,239,729		9,465,317
(8)	Paid to Date (82 & Prior)	17,223,724		17,223,724
(9)	Est Ult Paid for 1982 & Prior	22,463,453		26,689,041

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	416,080	439,694
(11)	Projected Number of Years	8	8
(12)	Estimated Reserve	3,328,638	3,517,549
(13)	Paid to Date (82 & Prior)	17,223,724	16,829,336
(14)	Est Ult Paid for 1982 & Prior	20,552,362	20,346,885
(14a)	Paid Counts During Fiscal Year	11	12
		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	21,507,908	22,883,748
(16)	Lump Sum Ultimates	670,673	670,673
(17)	Ult Loss Including Lump Sums	**22,178,580**	**23,554,420**
(18)	Implied Tail	1.249	1.329
(19)	Ult Loss Inc Lump Sums @ 6/08	21,853,876	23,330,122

NOTES:

(1) From Section 3, Exhibit 1, Page 6
(2) = (Average of Section 3, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 3, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 3, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 3, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	750,775	13.529			
1993	2	716,997	13.483	0.955		
1994	3	790,631	13.581	1.103		
1995	4	675,209	13.423	0.854		
1996	5	721,864	13.490	1.069		
1997	6	762,764	13.545	1.057		
1998	7	718,856	13.485	0.942		
1999	8	630,481	13.354	0.877		
2000	9	625,893	13.347	0.993	n =	18
2001	10	614,002	13.328	0.981	S(x) =	36,009
2002	11	594,569	13.296	0.968	S(x-sq) =	72,036,489
2003	12	551,328	13.220	0.927	S(xy) =	478,675
2004	13	536,825	13.193	0.974	S(y) =	239
2005	14	518,060	13.158	0.965	D =	8,721
2006	15	465,230	13.050	0.898	slope =	-0.039
2007	16	463,442	13.046	0.996	Avg Trend =	0.961
2008	17	390,409	12.875	0.842		
2009	18	394,388	12.885	1.010		
					Selected Trend:	**0.950**

NOTES:
(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008
(4) LN [(3)]
(5) Eg. 2009: 1.01 = 12.9 / 12.9

Commonwealth of Massachusetts Workers Compensation
Department of Mental Health - Cluster 2
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	79,308	192,487	287,043	366,841	453,896	544,549	640,359	749,442	914,819	1,077,281	1,197,004	1,318,238	1,411,761	1,487,347	1,551,200	1,663,300	1,725,578	1,794,915	1,844,320	1,889,378	1,935,146	1,980,854	2,027,803	2,076,694	2,127,762	2,181,186	2,236,941
June-84	140,777	341,678	509,522	651,169	805,697	966,187	1,136,616	1,274,005	1,376,021	1,469,295	1,531,586	1,571,197	1,574,113	1,632,297	1,648,271	1,715,119	1,788,667	1,866,433	1,948,603	2,027,969	2,039,380	2,061,132	2,116,425	2,146,711	2,178,653	2,211,990	
June-85	229,548	557,132	830,815	1,036,782	1,282,444	1,536,673	1,759,380	1,967,113	2,201,587	2,336,765	2,327,938	2,488,898	2,562,953	2,635,303	2,683,281	2,681,236	2,703,322	2,765,472	2,829,392	2,893,225	2,958,066	3,025,906	3,097,014	3,171,404	3,249,041		
June-86	424,946	1,031,378	1,515,527	1,911,756	2,265,456	2,545,075	2,747,857	2,913,298	3,035,997	3,203,939	3,246,126	3,354,664	3,430,712	3,506,894	3,646,690	3,769,482	3,845,436	3,884,426	3,884,426	3,901,838	3,936,022	3,971,963	4,009,622	4,048,163			
June-87	556,509	1,350,692	1,993,369	2,579,183	3,116,291	3,554,448	3,811,881	4,007,455	4,213,271	4,383,210	4,532,492	4,672,974	4,887,827	5,019,452	5,138,398	5,229,397	5,303,153	5,343,074	5,369,509	5,376,022	5,376,022	5,376,022	5,376,022				
June-88	996,188	2,332,317	3,514,867	4,556,262	5,500,101	6,017,634	6,366,291	6,722,900	7,030,156	7,360,513	7,651,811	7,905,775	8,097,655	8,296,173	8,504,343	8,714,431	8,884,786	9,012,909	9,145,701	9,284,112	9,391,001	9,490,888					
June-89	974,368	2,808,156	4,300,397	5,491,438	6,395,798	6,912,277	7,273,583	7,577,849	7,816,082	8,040,709	8,232,999	8,388,997	8,540,736	8,681,850	8,813,773	8,957,148	9,087,424	9,215,619	9,374,489	9,492,897	9,614,904						
June-90	1,353,410	3,008,842	4,338,167	5,277,757	5,970,429	6,408,269	6,735,493	6,970,610	7,237,879	7,548,184	7,808,304	7,989,794	8,127,173	8,265,835	8,400,915	8,532,029	8,676,814	8,783,514	8,912,207	9,013,337							
June-91	1,118,653	2,593,016	3,552,946	4,081,060	4,371,249	4,603,681	4,879,272	5,042,637	5,246,506	5,361,660	5,458,410	5,545,863	5,634,530	5,719,796	5,801,980	5,891,283	5,939,454	5,965,760	5,993,853								
June-92	779,443	1,600,490	2,051,414	2,363,890	2,560,991	2,732,954	2,816,302	2,946,286	2,972,351	3,048,807	3,074,042	3,100,183	3,111,601	3,122,928	3,137,949	3,150,571	3,201,317	3,230,938									
June-93	508,042	1,139,423	1,618,359	1,905,411	2,126,599	2,257,595	2,393,075	2,425,099	2,385,748	2,412,183	2,438,986	2,465,788	2,494,233	2,522,478	2,551,473	2,581,602	2,612,495										
June-94	377,925	709,441	935,174	1,117,965	1,249,550	1,323,162	1,417,563	1,481,985	1,569,098	1,629,814	1,690,715	1,751,099	1,818,321	1,857,805	1,886,745	1,916,420											
June-95	574,439	1,025,079	1,426,023	1,674,484	1,757,816	1,829,216	1,892,841	1,966,438	2,053,313	2,075,609	2,139,480	2,201,203	2,270,427	2,322,083	2,335,644												
June-96	465,550	766,030	964,996	1,197,748	1,382,594	1,418,297	1,422,506	1,435,178	1,435,753	1,438,193	1,438,193	1,438,193	1,438,193	1,438,193													
June-97	368,317	714,320	867,272	851,009	922,681	963,841	1,008,538	1,037,840	1,056,559	1,056,947	1,057,037	1,057,037	1,057,037														
June-98	492,131	922,570	1,176,288	1,346,558	1,538,911	1,686,620	1,733,801	1,756,573	1,858,553	1,897,738	1,938,454	2,001,913															
June-99	519,180	827,646	1,011,258	1,112,460	1,171,394	1,215,503	1,243,288	1,247,060	1,247,060	1,249,270	1,249,270																
June-00	421,812	853,733	1,204,737	1,330,009	1,450,814	1,536,528	1,585,725	1,622,250	1,634,502	1,634,502																	
June-01	729,752	1,342,599	1,726,067	1,967,587	2,098,934	2,195,511	2,276,106	2,353,436	2,394,597																		
June-02	623,060	1,199,282	1,469,081	1,634,403	1,755,795	1,921,999	2,013,718	2,051,869																			
June-03	598,151	1,030,113	1,208,133	1,287,181	1,329,302	1,354,993	1,378,440																				
June-04	770,179	1,494,135	1,959,406	2,261,994	2,448,308	2,553,905																					
June-05	665,795	1,274,934	1,639,401	1,834,908	1,949,257																						
June-06	602,391	1,043,862	1,212,582	1,295,959																							
June-07	589,461	977,401	1,280,907																								
June-08	619,287	959,312																									
June-09	633,064																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.427	1.491	1.278	1.237	1.200	1.176	1.170	1.221	1.178	1.111	1.101	1.071	1.054	1.043	1.072	1.037	1.040	1.028	1.024	1.024	1.024	1.024	1.024	1.025	1.025	1.026
June-84	2.427	1.491	1.278	1.237	1.199	1.176	1.121	1.080	1.068	1.042	1.026	1.002	1.037	1.010	1.041	1.043	1.043	1.044	1.041	1.006	1.011	1.027	1.014	1.015	1.015	
June-85	2.427	1.491	1.248	1.237	1.198	1.145	1.118	1.119	1.061	0.996	1.069	1.030	1.028	1.018	0.999	1.008	1.023	1.023	1.023	1.022	1.023	1.023	1.024	1.024		
June-86	2.427	1.469	1.261	1.185	1.123	1.080	1.060	1.042	1.055	1.013	1.033	1.023	1.022	1.040	1.034	1.020	1.010	1.000	1.004	1.009	1.009	1.009	1.010			
June-87	2.427	1.476	1.294	1.208	1.141	1.072	1.051	1.051	1.040	1.034	1.031	1.046	1.027	1.024	1.018	1.014	1.008	1.005	1.001	1.000	1.000	1.000				
June-88	2.341	1.507	1.296	1.207	1.094	1.058	1.056	1.046	1.047	1.040	1.033	1.024	1.025	1.025	1.025	1.020	1.014	1.015	1.015	1.012	1.011					
June-89	2.882	1.531	1.277	1.165	1.081	1.052	1.042	1.031	1.029	1.024	1.019	1.018	1.017	1.015	1.016	1.015	1.014	1.017	1.013	1.013						
June-90	2.223	1.442	1.217	1.131	1.073	1.051	1.035	1.038	1.043	1.034	1.023	1.017	1.017	1.016	1.016	1.017	1.012	1.015	1.011							
June-91	2.318	1.370	1.149	1.071	1.053	1.060	1.033	1.040	1.022	1.018	1.016	1.016	1.015	1.014	1.015	1.008	1.004	1.005								
June-92	2.053	1.282	1.152	1.083	1.067	1.030	1.046	1.009	1.026	1.008	1.009	1.004	1.004	1.005	1.004	1.016	1.009									
June-93	2.243	1.420	1.177	1.116	1.062	1.060	1.013	0.984	1.011	1.011	1.011	1.012	1.011	1.011	1.012	1.012										
June-94	1.877	1.318	1.195	1.118	1.059	1.071	1.045	1.059	1.039	1.037	1.036	1.038	1.022	1.016	1.016											
June-95	1.784	1.391	1.174	1.050	1.041	1.035	1.039	1.044	1.011	1.031	1.029	1.031	1.023	1.006												
June-96	1.645	1.260	1.241	1.154	1.026	1.003	1.009	1.000	1.002	1.000	1.000	1.000	1.000													
June-97	1.939	1.214	0.981	1.084	1.045	1.046	1.029	1.018	1.000	1.000	1.000	1.000														
June-98	1.875	1.275	1.145	1.143	1.096	1.028	1.013	1.058	1.021	1.021	1.033															
June-99	1.594	1.222	1.100	1.053	1.038	1.023	1.003	1.000	1.002	1.000																
June-00	2.024	1.411	1.104	1.091	1.059	1.032	1.023	1.008	1.000																	
June-01	1.840	1.286	1.140	1.067	1.046	1.037	1.034	1.017																		
June-02	1.925	1.225	1.113	1.074	1.095	1.048	1.019																			
June-03	1.722	1.173	1.065	1.033	1.019	1.017																				
June-04	1.940	1.311	1.154	1.082	1.043																					
June-05	1.915	1.286	1.119	1.062																						
June-06	1.733	1.162	1.069																							
June-07	1.658	1.311																								
June-08	1.549																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.047	1.353	1.176	1.126	1.084	1.062	1.048	1.046	1.036	1.025	1.029	1.022	1.021	1.019	1.022	1.019	1.018	1.017	1.017	1.012	1.013	1.017	1.018	1.021	1.020	1.026	
Latest 5	1.759	1.248	1.104	1.064	1.052	1.031	1.018	1.020	1.005	1.010	1.019	1.016	1.012	1.010	1.013	1.014	1.011	1.011	1.009	1.011	1.011	1.017					
Latest 3	1.647	1.253	1.114	1.059	1.052	1.034	1.025	1.008	1.008	1.007	1.011	1.010	1.015	1.011	1.011	1.012	1.009	1.012	1.013	1.008	1.007	1.011	1.016	1.021			
Volume Wtd																											
All Yrs	2.060	1.368	1.189	1.127	1.079	1.056	1.043	1.039	1.035	1.026	1.027	1.022	1.020	1.019	1.019	1.017	1.014	1.014	1.013	1.011	1.011	1.013	1.017	1.022	1.020		
Latest 5	1.771	1.254	1.110	1.066	1.053	1.033	1.020	1.022	1.006	1.014	1.022	1.018	1.012	1.011	1.013	1.014	1.012	1.012	1.010	1.011	1.010						
Latest 3	1.646	1.254	1.121	1.064	1.054	1.036	1.026	1.010	1.009	1.010	1.014	1.015	1.016	1.011	1.010	1.011	1.009	1.013	1.013	1.009	1.007	1.009	1.016				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	1.774	1.239	1.123	1.085	1.056	1.033	1.030	1.025	1.022	1.027	1.026	1.023	1.015	1.014	1.013	1.014	1.011	1.016	1.013	1.009	1.011	1.010	1.010	1.010	1.010	1.065	
Selected	1.771	1.254	1.110	1.085	1.054	1.045	1.032	1.031	1.021	1.027	1.027	1.010	1.012	1.014	1.013	1.012	1.012	1.012	1.013	1.011	1.007	1.010	1.010	1.010	1.010	1.010	1.052
FacToUlt	4.178	2.360	1.881	1.694	1.562	1.482	1.419	1.375	1.334	1.307	1.273	1.240	1.227	1.212	1.196	1.181	1.167	1.153	1.139	1.125	1.113	1.106	1.095	1.084	1.073	1.063	1.052
Percent of Ult	23.9%	42.4%	53.2%	59.0%	64.0%	67.5%	70.5%	72.7%	75.0%	76.5%	78.6%	80.7%	81.5%	82.5%	83.6%	84.7%	85.7%	86.7%	87.8%	88.9%	89.8%	90.4%	91.3%	92.3%	93.2%	94.1%	95.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	21,853,876	23,330,122	22,178,580	23,554,420	324,704	1.5%	224,298	1.0%
6/30/82-83	2,402,498	2,525,703	2,386,963	2,509,372	(15,535)	-0.6%	(16,331)	-0.6%
6/30/83-84	2,703,842	2,842,501	2,661,709	2,798,207	(42,133)	-1.6%	(44,294)	-1.6%
6/30/84-85	3,962,000	4,425,000	4,005,000	4,391,000	43,000	1.1%	(34,000)	-0.8%
6/30/85-86	4,815,000	4,935,000	4,955,000	4,978,000	140,000	2.9%	43,000	0.9%
6/30/86-87	6,333,000	6,457,000	6,333,000	6,457,000	0	0.0%	0	0.0%
6/30/87-88	12,358,018	12,602,000	12,483,878	12,723,000	125,860	1.0%	121,000	1.0%
6/30/88-89	13,037,602	13,270,000	13,004,506	13,233,000	(33,096)	-0.3%	(37,000)	-0.3%
6/30/89-90	12,237,000	12,781,000	12,175,000	12,704,000	(62,000)	-0.5%	(77,000)	-0.6%
6/30/90-91	8,621,000	8,991,000	8,549,000	8,853,000	(72,000)	-0.8%	(138,000)	-1.5%
6/30/91-92	4,319,000	4,403,000	4,388,000	4,473,000	69,000	1.6%	70,000	1.6%
6/30/92-93	3,878,000	3,957,000	3,842,000	3,842,000	(36,000)	-0.9%	(115,000)	-2.9%
6/30/93-94	2,649,000	2,691,000	2,632,000	2,637,000	(17,000)	-0.6%	(54,000)	-2.0%
6/30/94-95	3,368,000	3,441,000	3,307,000	3,423,000	(61,000)	-1.8%	(18,000)	-0.5%
6/30/95-96	1,961,000	2,000,000	1,961,000	2,000,000	0	0.0%	0	0.0%
6/30/96-97	1,888,000	1,973,000	1,842,000	1,866,000	(46,000)	-2.4%	(107,000)	-5.4%
6/30/97-98	3,297,000	3,367,000	3,246,000	3,254,000	(51,000)	-1.5%	(113,000)	-3.4%
6/30/98-99	2,143,000	2,263,000	2,049,000	2,081,000	(94,000)	-4.4%	(182,000)	-8.0%
6/30/99-00	3,010,000	3,110,000	2,895,000	2,922,000	(115,000)	-3.8%	(188,000)	-6.0%
6/30/00-01	4,169,000	4,203,000	4,075,000	4,080,000	(94,000)	-2.3%	(123,000)	-2.9%
6/30/01-02	3,481,000	3,528,000	3,387,000	3,404,000	(94,000)	-2.7%	(124,000)	-3.5%
6/30/02-03	2,610,000	3,143,000	2,480,000	2,524,000	(130,000)	-5.0%	(619,000)	-19.7%
6/30/03-04	4,332,000	4,500,000	4,526,000	4,545,000	194,000	4.5%	45,000	1.0%
6/30/04-05	3,861,000	3,951,000	3,755,000	3,801,000	(106,000)	-2.7%	(150,000)	-3.8%
6/30/05-06	2,965,000	3,511,000	2,874,000	3,316,000	(91,000)	-3.1%	(195,000)	-5.6%
6/30/06-07	2,868,000	3,635,000	2,920,000	3,407,000	52,000	1.8%	(228,000)	-6.3%
6/30/07-08	3,509,000	4,189,000	2,924,000	3,692,000	(585,000)	-16.7%	(497,000)	-11.9%
6/30/08-09								
Total	142,631,835	150,024,325	141,835,636	147,467,999	(796,199)	-0.6%	(2,556,327)	-1.7%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 3, Exhibit 1, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	17,223,724	1.289	22,195,828	0.0%	0.0%	0	665,680	665,680	3.0%	1.015	675,665	670,673	672,337
6/30/82-83	2,236,941	1.052	2,353,462	0.0%	0.0%	0	94,000	94,000	4.0%	1.015	95,410	94,705	94,940
6/30/83-84	2,211,990	1.116	2,468,007	0.0%	0.0%	0	260,001	260,001	10.5%	1.015	263,901	261,951	262,601
6/30/84-85	3,249,041	1.181	3,835,688	0.0%	0.0%	0	551,083	551,083	14.4%	1.015	559,349	555,216	556,594
6/30/85-86	4,048,163	1.084	4,388,082	0.0%	0.0%	0	585,928	585,928	13.4%	1.015	594,717	590,322	442,534
6/30/86-87	5,376,022	1.095	5,885,715	0.1%	0.1%	5,886	832,391	838,277	14.2%	1.015	844,877	841,577	843,710
6/30/87-88	9,490,888	1.161	11,019,342	0.0%	0.1%	11,019	1,685,022	1,696,041	15.4%	1.015	1,710,297	1,703,169	1,555,895
6/30/88-89	9,614,904	1.169	11,236,889	0.0%	0.1%	11,237	1,975,642	1,986,879	17.7%	1.015	2,005,277	1,996,078	2,001,033
6/30/89-90	9,013,337	1.181	10,645,455	0.0%	0.1%	10,645	2,037,640	2,048,285	19.2%	1.015	2,068,205	2,058,245	2,064,097
6/30/90-91	5,993,853	1.196	7,171,238	0.0%	0.1%	7,171	1,665,464	1,672,635	23.3%	1.016	1,691,437	1,682,036	1,705,147
6/30/91-92	3,230,938	1.153	3,726,437	0.2%	0.3%	11,179	1,029,140	1,040,319	27.9%	1.028	1,057,770	1,049,045	1,017,997
6/30/92-93	2,612,495	1.167	3,048,420	0.0%	0.3%	9,145	776,079	785,224	25.8%	1.034	802,455	793,840	799,949
6/30/93-94	1,916,420	1.181	2,263,217	0.0%	0.3%	6,790	358,584	365,374	16.1%	1.040	372,996	369,185	371,181
6/30/94-95	2,335,644	1.256	2,932,456	0.0%	0.3%	8,797	476,424	485,221	16.5%	1.040	495,572	490,397	455,273
6/30/95-96	1,438,193	1.212	1,743,776	0.2%	0.5%	8,719	484,060	492,779	28.3%	1.086	525,533	509,156	508,653
6/30/96-97	1,057,037	1.227	1,296,867	0.2%	0.7%	9,504	514,500	524,004	40.4%	1.099	565,284	544,644	544,276
6/30/97-98	2,001,913	1.240	2,481,871	0.3%	1.0%	25,635	710,801	736,436	29.7%	1.113	791,349	763,892	767,288
6/30/98-99	1,249,270	1.273	1,590,117	0.2%	1.3%	20,140	420,250	440,390	27.7%	1.138	478,166	459,278	468,183
6/30/99-00	1,634,502	1.307	2,136,626	0.8%	2.1%	45,116	679,200	724,316	33.9%	1.166	792,123	758,219	770,187
6/30/00-01	2,394,597	1.334	3,194,698	0.5%	2.6%	83,431	796,500	879,931	27.5%	1.206	960,508	879,931	863,585
6/30/01-02	2,051,869	1.375	2,821,004	0.8%	3.4%	96,240	469,771	566,011	20.1%	1.266	594,827	566,011	567,740
6/30/02-03	1,378,440	1.419	1,955,404	1.1%	4.5%	87,981	437,000	524,981	26.8%	1.341	586,023	524,981	584,253
6/30/03-04	2,553,905	1.482	3,784,732	1.4%	5.9%	224,999	535,000	759,999	20.1%	1.572	840,952	759,999	636,568
6/30/04-05	1,949,257	1.562	3,043,985	1.6%	7.6%	230,146	481,000	711,146	23.4%	1.823	877,029	711,146	719,390
6/30/05-06	1,295,959	1.694	2,195,808	2.8%	10.4%	227,501	450,250	677,751	30.9%	2.377	1,070,396	677,751	633,505
6/30/06-07	1,280,907	1.881	2,409,646	5.2%	15.6%	375,708	134,750	510,458	21.2%	3.739	503,812	510,458	538,679
6/30/07-08	959,312	2.360	2,263,537	5.3%	20.9%	473,133	187,730	660,863	29.2%	12.008	2,254,181	660,863	890,000
6/30/08-09	633,064	4.178	2,644,958	2.6%	23.5%	622,084	35,000	657,084	24.8%	56.135	1,964,739	1,045,000	
Total	100,432,584		126,733,263			2,612,208	19,328,890	21,941,098	17.3%		26,042,850	22,527,769	21,335,596

NOTES:
(2) From Section 3, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 3, Exhibit 1, Page 2, Column 6
(5) From Section 3, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 3, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 3, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensatio
Department of Mental Health - Cluster 2
INDEMNITY
Lump Sum Developmen
Incremental Lump Sum Payments

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0	0	0	0	0	0	0	0	0	20,000	46,500	35,000	0	73,500	50,000	69,180	0	0	97,000	198,000	0	0	0	26,500	25,000	25,000	0	0
Jun-83	0	0	0	0	0	0	0	15,000	0	20,000	24,000	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	0	42,000	0	70,000	40,000	10,001	48,000	0	50,000	0	0	0	0	0	0	0	0	0	0	0		
Jun-85	0	0	0	25,000	0	28,000	0	31,500	45,000	116,583	190,000	25,000	0	0	0	54,500	35,500	0	0	0	0	0	0	0	0			
Jun-86	0	0	22,500	27,000	52,500	10,000	24,428	133,500	166,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000				
Jun-87	0	0	14,910	16,000	12,500	60,000	255,275	85,000	106,206	0	27,500	25,000	30,000	90,000	70,000	0	0	40,000	0	0	0	0	0					
Jun-88	0	17,171	21,420	31,841	231,000	272,884	239,000	113,000	90,000	20,000	53,826	87,507	227,463	0	19,910	0	36,667	25,000	48,333	0	0	150,000						
Jun-89	0	79,840	44,000	108,000	417,491	668,500	334,500	165,000	6,500	16,500	57,811	0	0	52,500	0	0	0	0	20,550	4,450	0							
Jun-90	0	39,218	184,450	480,000	338,500	235,500	155,000	60,000	65,793	0	128,678	106,000	7,500	31,000	31,000	0	0	50,125	124,876	0								
Jun-91	0	23,609	651,500	370,355	182,000	135,000	97,000	6,000	0	75,000	90,000	0	0	0	35,000	0	0	0	0									
Jun-92	0	341,000	83,230	201,910	88,000	23,000	125,000	55,000	75,000	0	0	0	0	0	0	0	0	37,000										
Jun-93	23,000	109,000	142,400	120,500	84,000	161,300	42,879	0	93,000	0	0	0	0	0	0	0	0											
Jun-94	5,000	85,000	44,300	28,284	37,000	0	46,000	63,000	0	0	0	0	0	25,000	25,000	0												
Jun-95	12,000	35,000	45,000	142,024	68,400	16,500	40,000	0	50,000	25,000	0	0	0	0	42,500													
Jun-96	0	90,000	144,500	10,000	77,560	27,000	0	100,000	0	15,000	20,000	0	0	0														
Jun-97	0	76,500	124,000	215,000	0	0	0	15,000	0	0	84,000	0	0															
Jun-98	53,300	122,501	318,000	16,000	33,091	127,909	20,000	20,000	0	0	0	0																
Jun-99	48,000	52,250	115,000	130,000	0	7,459	37,541	30,000	0	0	0																	
Jun-00	20,500	255,500	125,500	82,000	65,200	27,500	62,000	26,000	15,000	0																		
Jun-01	45,000	221,500	170,000	132,500	67,500	77,500	12,500	20,000	50,000																			
Jun-02	0	75,000	68,000	62,100	52,950	32,000	144,721	35,000																				
Jun-03	20,000	30,000	107,000	142,500	137,500	0	0																					
Jun-04	0	28,000	54,000	106,000	132,000	215,000																						
Jun-05	0	50,787	151,713	171,500	107,000																							
Jun-06	0	18,000	261,750	170,500																								
Jun-07	10,000	58,500	66,250																									
Jun-08	17,730	170,000																										
Jun-09	35,000																											

Cumulative Lump Sum Payment

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	0	20,000	66,500	101,500	101,500	175,000	225,000	294,180	294,180	294,180	391,180	589,180	589,180	589,180	589,180	615,680	640,680	665,680	665,680	665,680
Jun-83	0	0	0	0	0	0	0	15,000	15,000	35,000	59,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	
Jun-84	0	0	0	0	0	0	0	42,000	42,000	112,000	152,000	162,001	210,001	210,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001		
Jun-85	0	0	0	25,000	25,000	53,000	53,000	84,500	129,500	246,083	436,083	461,083	461,083	461,083	461,083	515,583	551,083	551,083	551,083	551,083	551,083	551,083	551,083	551,083	551,083			
Jun-86	0	0	22,500	49,500	102,000	112,000	136,428	269,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	585,928				
Jun-87	0	0	14,910	30,910	43,410	103,410	358,685	443,685	549,891	549,891	577,391	602,391	632,391	722,391	792,391	792,391	792,391	832,391	832,391	832,391	832,391	832,391	832,391					
Jun-88	0	17,171	38,591	70,432	301,432	574,316	813,316	926,316	1,016,316	1,036,316	1,090,142	1,177,649	1,405,112	1,405,112	1,425,022	1,425,022	1,461,689	1,486,689	1,535,022	1,535,022	1,535,022	1,685,022						
Jun-89	0	79,840	123,840	231,840	649,331	1,317,831	1,652,331	1,817,331	1,823,831	1,840,331	1,898,142	1,898,142	1,898,142	1,950,642	1,950,642	1,950,642	1,950,642	1,950,642	1,971,192	1,975,642	1,975,642							
Jun-90	0	39,218	223,668	703,668	1,042,168	1,277,668	1,432,668	1,492,668	1,558,461	1,558,461	1,687,139	1,793,139	1,800,639	1,831,639	1,862,639	1,862,639	1,862,639	1,912,764	2,037,640	2,037,640								
Jun-91	0	23,609	675,109	1,045,464	1,227,464	1,362,464	1,459,464	1,465,464	1,465,464	1,540,464	1,630,464	1,630,464	1,630,464	1,630,464	1,665,464	1,665,464	1,665,464	1,665,464	1,665,464									
Jun-92	0	341,000	424,230	626,140	714,140	737,140	862,140	917,140	992,140	992,140	992,140	992,140	992,140	992,140	992,140	992,140	992,140	1,029,140										
Jun-93	23,000	132,000	274,400	394,900	478,900	640,200	683,079	683,079	776,079	776,079	776,079	776,079	776,079	776,079	776,079	776,079	776,079											
Jun-94	5,000	90,000	134,300	162,584	199,584	199,584	245,584	308,584	308,584	308,584	308,584	308,584	308,584	333,584	358,584	358,584												
Jun-95	12,000	47,000	92,000	234,024	302,424	318,924	358,924	358,924	408,924	433,924	433,924	433,924	433,924	433,924	476,424													
Jun-96	0	90,000	234,500	244,500	322,060	349,060	349,060	449,060	449,060	464,060	484,060	484,060	484,060	484,060														
Jun-97	0	76,500	200,500	415,500	415,500	415,500	415,500	430,500	430,500	430,500	514,500	514,500	514,500															
Jun-98	53,300	175,801	493,801	509,801	542,892	670,801	690,801	710,801	710,801	710,801	710,801	710,801																
Jun-99	48,000	100,250	215,250	345,250	345,250	352,709	390,250	420,250	420,250	420,250	420,250																	
Jun-00	20,500	276,000	401,500	483,500	548,700	576,200	638,200	664,200	679,200	679,200																		
Jun-01	45,000	266,500	436,500	569,000	636,500	714,000	726,500	746,500	796,500																			
Jun-02	0	75,000	143,000	205,100	258,050	290,050	434,771	469,771																				
Jun-03	20,000	50,000	157,000	299,500	437,000	437,000	437,000																					
Jun-04	0	28,000	82,000	188,000	320,000	535,000																						
Jun-05	0	50,787	202,500	374,000	481,000																							
Jun-06	0	18,000	279,750	450,250																								
Jun-07	10,000	68,500	134,750																									
Jun-08	17,730	187,730																										
Jun-09	35,000																											

Commonwealth of Massachusetts Workers Compensatio
Department of Mental Health - Cluster 2
INDEMNITY
Lump Sum Developmen
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sum

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.002	0.000	0.003	0.002	0.003	0.000	0.000	0.004	0.009	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.008	0.010	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.028	0.016	0.004	0.019	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.007	0.000	0.007	0.000	0.008	0.012	0.030	0.050	0.007	0.000	0.000	0.000	0.014	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.005	0.006	0.012	0.002	0.006	0.030	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.034				
Jun-87	0.000	0.000	0.003	0.003	0.002	0.010	0.043	0.014	0.018	0.000	0.005	0.004	0.005	0.015	0.012	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.002	0.002	0.003	0.021	0.025	0.022	0.010	0.008	0.002	0.005	0.008	0.021	0.000	0.002	0.000	0.003	0.002	0.004	0.000	0.000	0.014						
Jun-89	0.000	0.007	0.004	0.010	0.037	0.059	0.030	0.015	0.001	0.001	0.005	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.002	0.000	0.000							
Jun-90	0.000	0.004	0.017	0.045	0.032	0.022	0.015	0.006	0.006	0.000	0.012	0.010	0.001	0.003	0.003	0.000	0.000	0.005	0.012	0.000								
Jun-91	0.000	0.003	0.091	0.052	0.025	0.019	0.014	0.001	0.000	0.010	0.013	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000									
Jun-92	0.000	0.092	0.022	0.054	0.024	0.006	0.034	0.015	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010										
Jun-93	0.008	0.036	0.047	0.040	0.028	0.053	0.014	0.000	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000											
Jun-94	0.002	0.038	0.020	0.012	0.016	0.000	0.020	0.028	0.000	0.000	0.000	0.000	0.000	0.011	0.011	0.000												
Jun-95	0.004	0.012	0.015	0.048	0.023	0.006	0.014	0.000	0.017	0.009	0.000	0.000	0.000	0.000	0.014													
Jun-96	0.000	0.052	0.083	0.006	0.044	0.015	0.000	0.057	0.000	0.009	0.011	0.000	0.000	0.000														
Jun-97	0.000	0.059	0.096	0.166	0.000	0.000	0.000	0.012	0.000	0.000	0.065	0.000	0.000															
Jun-98	0.021	0.049	0.128	0.006	0.013	0.052	0.008	0.008	0.000	0.000	0.000	0.000																
Jun-99	0.030	0.033	0.072	0.082	0.000	0.005	0.024	0.019	0.000	0.000	0.000																	
Jun-00	0.010	0.120	0.059	0.038	0.031	0.013	0.029	0.012	0.007	0.000																		
Jun-01	0.014	0.069	0.053	0.041	0.021	0.024	0.004	0.006	0.016																			
Jun-02	0.000	0.027	0.024	0.022	0.019	0.011	0.051	0.012																				
Jun-03	0.010	0.015	0.055	0.073	0.070	0.000	0.000																					
Jun-04	0.000	0.007	0.014	0.028	0.035	0.057																						
Jun-05	0.000	0.017	0.050	0.056	0.035																							
Jun-06	0.000	0.008	0.119	0.078																								
Jun-07	0.004	0.024	0.027																									
Jun-08	0.008	0.075																										
Jun-09	0.013																											

Averages		12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
Simple Avg																												
All Yrs (ex P)	0.005	0.029	0.040	0.036	0.021	0.018	0.016	0.014	0.009	0.005	0.011	0.003	0.003	0.002	0.005	0.001	0.001	0.002	0.002	0.000	0.000	0.002	0.000	0.009	0.000	0.000	0.000	
Latest 5	0.005	0.026	0.053	0.051	0.036	0.021	0.022	0.012	0.005	0.002	0.015	0.000	0.000	0.002	0.006	0.000	0.000	0.003	0.004	0.000	0.000	0.003	0.000					
Latest 3	0.008	0.036	0.066	0.054	0.047	0.023	0.018	0.010	0.008	0.000	0.022	0.000	0.000	0.004	0.009	0.000	0.000	0.005	0.005	0.000	0.000	0.005	0.000	0.011	0.000			
Olympic Avg																												
All Yrs (ex P)	0.004	0.026	0.038	0.032	0.020	0.016	0.014	0.012	0.008	0.004	0.008	0.002	0.002	0.002	0.004	0.000	0.000	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000			
Latest 10	0.006	0.034	0.057	0.052	0.025	0.016	0.012	0.012	0.007	0.002	0.005	0.000	0.000	0.002	0.004	0.000	0.000	0.002										
Latest 5	0.004	0.016	0.044	0.052	0.030	0.016	0.019	0.011	0.002	0.000	0.004	0.000	0.000	0.000	0.005	0.000	0.000	0.002	0.002	0.000	0.000	0.000	0.000					

Dev Factor Selection																												
Prior	NA	0.024	0.050	0.042	0.028	0.009	0.027	0.010	0.008	0.005	0.009	0.002	0.003	0.002	0.002	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	
Selected	NA	0.026	0.053	0.052	0.028	0.016	0.014	0.011	0.008	0.005	0.008	0.002	0.003	0.002	0.002	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	
FacToUlt	NA	0.235	0.209	0.156	0.104	0.076	0.059	0.045	0.034	0.026	0.021	0.013	0.010	0.007	0.005	0.003	0.003	0.003	0.003	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	

Commonwealth of Massachusetts Workers Compensatio
Department of Mental Health - Cluster 2
INDEMNITY
Paid Loss Developmen
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	0	20,000	66,500	101,500	101,500	175,000	225,000	294,180	294,180	294,180	391,180	589,180	589,180	589,180	589,180	615,680	640,680	665,680	665,680	665,680
Jun-83	0	0	0	0	0	0	0	15,000	15,000	35,000	59,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	
Jun-84	0	0	0	0	0	0	0	42,000	42,000	112,000	152,000	162,001	210,001	210,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001	260,001		
Jun-85	0	0	0	25,000	25,000	53,000	53,000	84,500	129,500	246,083	436,083	461,083	461,083	461,083	461,083	515,583	551,083	551,083	551,083	551,083	551,083	551,083	551,083	551,083	551,083			
Jun-86	0	0	22,500	49,500	102,000	112,000	136,428	269,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	435,928	585,928				
Jun-87	0	0	14,910	30,910	43,410	103,410	358,685	443,685	549,891	549,891	577,391	602,391	632,391	722,391	792,391	792,391	792,391	832,391	832,391	832,391	832,391	832,391	832,391					
Jun-88	0	17,171	38,591	70,432	301,432	574,316	813,316	926,316	1,016,316	1,036,316	1,090,142	1,177,649	1,405,112	1,405,112	1,425,022	1,425,022	1,461,689	1,486,689	1,535,022	1,535,022	1,535,022	1,685,022						
Jun-89	0	79,840	123,840	231,840	649,331	1,317,831	1,652,331	1,817,331	1,823,831	1,840,331	1,898,142	1,898,142	1,898,142	1,950,642	1,950,642	1,950,642	1,950,642	1,950,642	1,971,192	1,975,642	1,975,642							
Jun-90	0	39,218	223,668	703,668	1,042,168	1,277,668	1,432,668	1,492,668	1,558,461	1,558,461	1,687,139	1,793,139	1,800,639	1,831,639	1,862,639	1,862,639	1,862,639	1,912,764	2,037,640	2,037,640								
Jun-91	0	23,609	675,109	1,045,464	1,227,464	1,362,464	1,459,464	1,465,464	1,465,464	1,540,464	1,630,464	1,630,464	1,630,464	1,630,464	1,665,464	1,665,464	1,665,464	1,665,464	1,665,464									
Jun-92	0	341,000	424,230	626,140	714,140	737,140	862,140	917,140	992,140	992,140	992,140	992,140	992,140	992,140	992,140	992,140	992,140	1,029,140										
Jun-93	23,000	132,000	274,400	394,900	478,900	640,200	683,079	683,079	776,079	776,079	776,079	776,079	776,079	776,079	776,079	776,079	776,079											
Jun-94	5,000	90,000	134,300	162,584	199,584	199,584	245,584	308,584	308,584	308,584	308,584	308,584	308,584	333,584	358,584	358,584												
Jun-95	12,000	47,000	92,000	234,024	302,424	318,924	358,924	358,924	408,924	433,924	433,924	433,924	433,924	433,924	476,424													
Jun-96	0	90,000	234,500	244,500	322,060	349,060	349,060	449,060	449,060	464,060	484,060	484,060	484,060	484,060														
Jun-97	0	76,500	200,500	415,500	415,500	415,500	415,500	430,500	430,500	430,500	514,500	514,500	514,500															
Jun-98	53,300	175,801	493,801	509,801	542,892	670,801	690,801	710,801	710,801	710,801	710,801	710,801																
Jun-99	48,000	100,250	215,250	345,250	345,250	352,709	390,250	420,250	420,250	420,250	420,250																	
Jun-00	20,500	276,000	401,500	483,500	548,700	576,200	638,200	664,200	679,200	679,200																		
Jun-01	45,000	266,500	436,500	569,000	636,500	714,000	726,500	746,500	796,500																			
Jun-02	0	75,000	143,000	205,100	258,050	290,050	434,771	469,771																				
Jun-03	20,000	50,000	157,000	299,500	437,000	437,000	437,000																					
Jun-04	0	28,000	82,000	188,000	320,000	535,000																						
Jun-05	0	50,787	202,500	374,000	481,000																							
Jun-06	0	18,000	279,750	450,250																								
Jun-07	10,000	68,500	134,750																									
Jun-08	17,730	187,730																										
Jun-09	35,000																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs										3.325	1.526	1.000	1.724	1.286	1.307	1.000	1.000	1.330	1.506	1.000	1.000	1.000	1.045	1.041	1.039	1.000	1.000	
Jun-83								1.000	2.333	1.686	1.593	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84								1.000	2.667	1.357	1.066	1.296	1.000	1.238	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Jun-85				1.000	2.120	1.000	1.594	1.533	1.900	1.772	1.057	1.000	1.000	1.000	1.118	1.069	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Jun-86			2.200	2.061	1.098	1.218	1.979	1.615	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.344					
Jun-87			2.073	1.404	2.382	3.469	1.237	1.239	1.000	1.050	1.043	1.050	1.142	1.097	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.000						
Jun-88		2.247	1.825	4.280	1.905	1.416	1.139	1.097	1.020	1.052	1.080	1.193	1.000	1.014	1.000	1.026	1.017	1.033	1.000	1.000	1.098							
Jun-89		1.551	1.872	2.801	2.030	1.254	1.100	1.004	1.009	1.031	1.000	1.000	1.028	1.000	1.000	1.000	1.000	1.011	1.002	1.000								
Jun-90		5.703	3.146	1.481	1.226	1.121	1.042	1.044	1.000	1.083	1.063	1.004	1.017	1.017	1.000	1.000	1.027	1.065	1.000									
Jun-91		28.595	1.549	1.174	1.110	1.071	1.004	1.000	1.051	1.058	1.000	1.000	1.000	1.021	1.000	1.000	1.000	1.000										
Jun-92		1.244	1.476	1.141	1.032	1.170	1.064	1.082	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.037											
Jun-93	5.739	2.079	1.439	1.213	1.337	1.067	1.000	1.136	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
Jun-94	18.000	1.492	1.211	1.228	1.000	1.230	1.257	1.000	1.000	1.000	1.000	1.000	1.081	1.075	1.000													
Jun-95	3.917	1.957	2.544	1.292	1.055	1.125	1.000	1.139	1.061	1.000	1.000	1.000	1.000	1.098														
Jun-96		2.606	1.043	1.317	1.084	1.000	1.286	1.000	1.033	1.043	1.000	1.000	1.000															
Jun-97		2.621	2.072	1.000	1.000	1.000	1.036	1.000	1.000	1.195	1.000	1.000																
Jun-98	3.298	2.809	1.032	1.065	1.236	1.030	1.029	1.000	1.000	1.000	1.000																	
Jun-99	2.089	2.147	1.604	1.000	1.022	1.106	1.077	1.000	1.000	1.000																		
Jun-00	13.463	1.455	1.204	1.135	1.050	1.108	1.041	1.023	1.000																			
Jun-01	5.922	1.638	1.304	1.119	1.122	1.018	1.028	1.067																				
Jun-02		1.907	1.434	1.258	1.124	1.499	1.081																					
Jun-03	2.500	3.140	1.908	1.459	1.000	1.000																						
Jun-04		2.929	2.293	1.702	1.672																							
Jun-05		3.987	1.847	1.286																								
Jun-06		15.542	1.609																									
Jun-07	6.850	1.967																										
Jun-08	10.588																											

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	7.237	4.381	1.747	1.496	1.330	1.258	1.166	1.104	1.226	1.137	1.056	1.036	1.019	1.043	1.010	1.009	1.013	1.012	1.000	1.000	1.016	1.000	1.086	1.000	1.000	1.000		
Latest 5	8.719	5.513	1.818	1.365	1.194	1.146	1.051	1.018	1.007	1.048	1.000	1.000	1.016	1.039	1.000	1.000	1.016	1.022	1.000	1.000	1.020	1.000	1.078					
Latest 3	8.719	7.165	1.916	1.482	1.265	1.172	1.050	1.030	1.000	1.065	1.000	1.000	1.027	1.058	1.000	1.000	1.021	1.025	1.001	1.000	1.033	1.000	1.115	1.000				
Volume Wtd																												
All Yrs (ex P)	8.773	2.447	1.573	1.303	1.238	1.156	1.087	1.062	1.029	1.060	1.024	1.027	1.017	1.024	1.005	1.007	1.015	1.021	1.001	1.000	1.040	1.000	1.112	1.000	1.000			
Latest 5		3.976	1.755	1.304	1.160	1.108	1.045	1.022	1.006	1.042	1.000	1.000	1.008	1.025	1.000	1.000	1.014	1.025	1.001	1.000	1.042							
Latest 3		4.494	1.794	1.437	1.243	1.109	1.045	1.036	1.000	1.054	1.000	1.000	1.020	1.044	1.000	1.000	1.019	1.026	1.001	1.000	1.054	1.000	1.120					

Dev Factor Selection	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Prior	4.675	3.180	1.602	1.261	1.065	1.208	1.056	1.050	1.034	1.025	1.022	1.014	1.012	1.012	1.000	1.006	1.006	1.014	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.020	
Selected	4.675	3.212	1.573	1.304	1.160	1.172	1.059	1.050	1.034	1.025	1.022	1.013	1.012	1.044	1.000	1.006	1.006	1.012	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.015
FacToUlt	56.135	12.008	3.739	2.377	1.823	1.572	1.341	1.266	1.206	1.166	1.138	1.113	1.099	1.086	1.040	1.040	1.034	1.028	1.016	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
Percent of Ult	1.8%	8.3%	26.7%	42.1%	54.8%	63.6%	74.6%	79.0%	82.9%	85.7%	87.9%	89.8%	91.0%	92.1%	96.1%	96.1%	96.7%	97.3%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	5.0%	0.0%	1.7%	1.0%	1.000	1.000
324	95.0%	0.9%	5.0%	0.3%	0.2%	0.981	0.971
312	94.1%	0.9%	5.9%	0.3%	0.2%	0.949	0.925
300	93.2%	0.9%	6.8%	0.4%	0.2%	0.922	0.886
288	92.3%	0.9%	7.7%	0.4%	0.2%	0.897	0.852
276	91.3%	0.9%	8.7%	0.4%	0.2%	0.875	0.822
264	90.4%	0.6%	9.6%	0.3%	0.2%	0.855	0.794
252	89.8%	0.9%	10.2%	0.4%	0.3%	0.831	0.762
240	88.9%	1.1%	11.1%	0.5%	0.4%	0.815	0.740
228	87.8%	1.1%	12.2%	0.5%	0.4%	0.802	0.724
216	86.7%	1.0%	13.3%	0.5%	0.4%	0.788	0.706
204	85.7%	1.0%	14.3%	0.5%	0.4%	0.773	0.687
192	84.7%	1.0%	15.3%	0.6%	0.4%	0.759	0.670
180	83.6%	1.2%	16.4%	0.7%	0.5%	0.746	0.654
168	82.5%	1.0%	17.5%	0.6%	0.4%	0.735	0.640
156	81.5%	0.8%	18.5%	0.5%	0.4%	0.721	0.623
144	80.7%	2.1%	19.3%	1.3%	1.1%	0.706	0.604
132	78.6%	2.1%	21.4%	1.4%	1.1%	0.708	0.609
120	76.5%	1.5%	23.5%	1.1%	0.9%	0.707	0.610
108	75.0%	2.2%	25.0%	1.6%	1.4%	0.698	0.600
96	72.7%	2.2%	27.3%	1.7%	1.4%	0.697	0.599
84	70.5%	3.0%	29.5%	2.3%	2.1%	0.694	0.596
72	67.5%	3.4%	32.5%	2.8%	2.5%	0.696	0.600
60	64.0%	5.0%	36.0%	4.2%	3.9%	0.699	0.605
48	59.0%	5.9%	41.0%	5.1%	4.8%	0.710	0.620
36	53.2%	10.8%	46.8%	9.8%	9.3%	0.720	0.633
24	42.4%	18.4%	57.6%	17.4%	16.9%	0.746	0.667
12	23.9%	23.9%	76.1%	23.5%	23.2%	0.781	0.712
Total		100.0%					

NOTES:

(2) = 1 / Section 3, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	4,289,176	5,665,016		3,681,936	4,862,991
6/30/82-83	56,022	178,430	0.981	54,934	174,965
6/30/83-84	189,719	326,217	0.949	180,022	309,544
6/30/84-85	204,876	590,876	0.922	188,835	544,613
6/30/85-86	320,909	343,909	0.897	288,012	308,654
6/30/86-87	124,587	248,587	0.875	109,060	217,607
6/30/87-88	1,307,968	1,547,090	0.855	1,118,100	1,322,511
6/30/88-89	1,413,959	1,642,454	0.831	1,175,290	1,365,216
6/30/89-90	1,124,023	1,653,023	0.815	915,661	1,346,599
6/30/90-91	889,683	1,193,683	0.802	713,247	956,960
6/30/91-92	127,922	212,922	0.788	100,743	167,684
6/30/92-93	453,426	453,426	0.773	350,459	350,459
6/30/93-94	356,996	361,996	0.759	270,974	274,769
6/30/94-95	494,932	610,932	0.746	369,156	455,677
6/30/95-96	38,747	77,747	0.735	28,461	57,108
6/30/96-97	270,463	294,463	0.721	194,911	212,207
6/30/97-98	533,286	541,286	0.706	376,242	381,886
6/30/98-99	379,480	411,480	0.708	268,649	291,304
6/30/99-00	581,298	608,298	0.707	411,017	430,108
6/30/00-01	883,903	888,903	0.698	617,327	620,819
6/30/01-02	865,360	882,360	0.697	602,905	614,750
6/30/02-03	664,560	708,560	0.694	460,882	491,397
6/30/03-04	1,437,095	1,456,095	0.696	1,000,111	1,013,334
6/30/04-05	1,324,743	1,370,743	0.699	925,957	958,109
6/30/05-06	1,127,791	1,569,791	0.710	800,565	1,114,320
6/30/06-07	1,504,343	1,991,343	0.720	1,082,898	1,433,464
6/30/07-08	1,776,958	2,544,958	0.746	1,325,796	1,898,804
6/30/08-09	3,021,936	3,648,936	0.781	2,360,824	2,850,655
Total	25,764,162	32,023,525		19,972,975	25,026,511
			(7) Total Discount Factor:	0.775	0.782

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	4,289,176	5,665,016
(9) Projected Number of Years:	8	8
(10) Projected Paid Loss per Year:	536,147	708,127
(11) Discounted Value at 4%:	3,681,936	4,862,991

NOTES:
(2), (3) From Section 3, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 3, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	4,289,176	5,665,016		3,429,243	4,529,242
6/30/82-83	56,022	178,430	0.971	54,413	173,307
6/30/83-84	189,719	326,217	0.925	175,507	301,779
6/30/84-85	204,876	590,876	0.886	181,558	523,624
6/30/85-86	320,909	343,909	0.852	273,457	293,056
6/30/86-87	124,587	248,587	0.822	102,355	204,227
6/30/87-88	1,307,968	1,547,090	0.794	1,038,010	1,227,778
6/30/88-89	1,413,959	1,642,454	0.762	1,076,955	1,250,990
6/30/89-90	1,124,023	1,653,023	0.740	831,775	1,223,234
6/30/90-91	889,683	1,193,683	0.724	643,754	863,721
6/30/91-92	127,922	212,922	0.706	90,259	150,234
6/30/92-93	453,426	453,426	0.687	311,543	311,543
6/30/93-94	356,996	361,996	0.670	239,105	242,454
6/30/94-95	494,932	610,932	0.654	323,464	399,276
6/30/95-96	38,747	77,747	0.640	24,795	49,753
6/30/96-97	270,463	294,463	0.623	168,489	183,440
6/30/97-98	533,286	541,286	0.604	322,358	327,194
6/30/98-99	379,480	411,480	0.609	231,288	250,792
6/30/99-00	581,298	608,298	0.610	354,486	370,951
6/30/00-01	883,903	888,903	0.600	530,086	533,084
6/30/01-02	865,360	882,360	0.599	518,163	528,342
6/30/02-03	664,560	708,560	0.596	395,920	422,134
6/30/03-04	1,437,095	1,456,095	0.600	862,226	873,626
6/30/04-05	1,324,743	1,370,743	0.605	801,222	829,043
6/30/05-06	1,127,791	1,569,791	0.620	698,815	972,692
6/30/06-07	1,504,343	1,991,343	0.633	952,183	1,260,433
6/30/07-08	1,776,958	2,544,958	0.667	1,185,421	1,697,758
6/30/08-09	3,021,936	3,648,936	0.712	2,152,431	2,599,023
Total	25,764,162	32,023,525		17,969,280	22,592,731
			(7) Total Discount Factor:	0.697	0.706

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	4,289,176	5,665,016
(9) Projected Number of Years:	8	8
(10) Projected Paid Loss per Year:	536,147	708,127
(11) Discounted Value at 6%:	3,429,243	4,529,242

NOTES:
(2), (3) From Section 3, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 3, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	23,101,174	24,525,006	18,676,505	4,424,669	5,848,501				389,680	428,648	8.8%	7.3%
6/30/82-83	2,522,503	2,650,602	2,466,481	56,022	184,122	95.4%	1.0%	21.5%	12,068	39,663	21.5%	21.5%
6/30/83-84	2,870,749	3,009,971	2,681,031	189,719	328,940	91.2%	1.0%	11.3%	21,511	37,296	11.3%	11.3%
6/30/84-85	4,497,000	4,883,000	4,290,796	206,204	592,204	91.5%	1.0%	11.7%	24,226	69,574	11.7%	11.7%
6/30/85-86	5,214,000	5,237,000	4,891,866	322,134	345,134	93.6%	1.0%	15.7%	50,454	54,056	15.7%	15.7%
6/30/86-87	7,037,000	7,161,000	6,910,391	126,609	250,609	97.3%	1.0%	37.6%	47,654	94,326	37.6%	37.6%
6/30/87-88	14,120,878	14,361,000	12,808,783	1,312,095	1,552,217	89.9%	1.0%	9.9%	130,471	154,348	9.9%	9.9%
6/30/88-89	15,053,506	15,282,000	13,631,466	1,422,040	1,650,534	89.9%	1.0%	9.9%	140,398	162,957	9.9%	9.9%
6/30/89-90	14,123,000	14,652,000	12,989,055	1,133,945	1,662,945	90.3%	2.0%	20.6%	233,325	342,175	20.6%	20.6%
6/30/90-91	10,292,000	10,596,000	9,395,593	896,407	1,200,407	90.0%	2.0%	19.9%	178,596	239,164	19.9%	19.9%
6/30/91-92	5,651,000	5,736,000	5,516,815	134,185	219,185	96.9%	2.0%	64.4%	86,480	141,260	64.4%	64.4%
6/30/92-93	4,848,000	4,848,000	4,391,843	456,157	456,157	90.6%	2.0%	21.3%	96,960	96,960	21.3%	21.3%
6/30/93-94	3,259,000	3,265,000	2,899,230	359,770	365,770	88.9%	2.0%	18.0%	64,700	65,780	18.0%	18.0%
6/30/94-95	4,113,000	4,229,000	3,612,590	500,410	616,410	86.6%	3.0%	22.4%	112,133	138,127	22.4%	22.4%
6/30/95-96	2,757,000	2,796,000	2,712,477	44,523	83,523	97.7%	3.0%	130.1%	57,925	108,665	130.1%	130.1%
6/30/96-97	2,351,000	2,376,000	2,076,645	274,355	299,355	87.9%	3.0%	24.7%	67,815	73,995	24.7%	24.7%
6/30/97-98	3,755,000	3,764,000	3,216,612	538,388	547,388	85.6%	3.0%	20.8%	111,850	113,720	20.8%	20.8%
6/30/98-99	2,641,000	2,674,000	2,254,634	386,366	419,366	84.8%	3.0%	19.8%	76,460	82,990	19.8%	19.8%
6/30/99-00	3,490,000	3,517,000	2,901,582	588,418	615,418	82.8%	3.0%	17.5%	102,748	107,462	17.5%	17.5%
6/30/00-01	4,817,000	4,822,000	3,921,199	895,801	900,801	81.4%	3.0%	16.1%	144,183	144,987	16.1%	16.1%
6/30/01-02	3,976,000	3,994,000	3,093,186	882,814	900,814	77.6%	3.7%	16.7%	147,550	150,559	16.7%	16.7%
6/30/02-03	3,096,000	3,142,000	2,401,032	694,968	740,968	77.0%	0.6%	2.8%	19,319	20,598	2.8%	2.8%
6/30/03-04	5,694,000	5,714,000	4,202,394	1,491,606	1,511,606	73.7%	3.3%	12.6%	187,336	189,848	12.6%	12.6%
6/30/04-05	4,594,000	4,652,000	3,227,845	1,366,155	1,424,155	69.8%	3.9%	12.8%	174,425	181,830	12.8%	12.8%
6/30/05-06	3,553,000	4,089,000	2,461,495	1,091,505	1,627,505	64.4%	5.4%	15.2%	165,698	247,066	15.2%	15.2%
6/30/06-07	3,638,000	4,175,000	2,054,256	1,583,744	2,120,744	52.6%	11.8%	25.0%	395,301	529,335	25.0%	25.0%
6/30/07-08	3,611,000	4,484,000	1,697,583	1,913,417	2,786,417	41.9%	10.6%	18.3%	350,794	510,845	18.3%	18.3%
6/30/08-09	4,391,000	5,287,000	970,364	3,420,636	4,316,636	20.1%	21.9%	27.4%	936,529	1,181,843	27.4%	27.4%
Total	169,066,810	175,921,579	142,353,748	26,713,061	33,567,831				4,526,589	5,708,078	16.9%	17.0%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		787,101			922,594	970,586	135,493	183,485		
6/30/82-83		135,539	139,832		135,539	141,231	0	5,691		
6/30/83-84		209,040	209,667		209,040	211,764	0	2,724		
6/30/84-85	142,302	490,672	492,144	492,205	492,000	492,000	1,328	1,328	0.346	0.346
6/30/85-86	153,030	257,775	258,548	258,567	259,000	259,000	1,225	1,225	0.169	0.169
6/30/86-87	175,859	701,978	704,084	704,171	704,000	704,000	2,022	2,022	0.400	0.400
6/30/87-88	206,034	1,632,873	1,637,771	1,637,415	1,637,000	1,638,000	4,127	5,127	0.795	0.795
6/30/88-89	222,510	2,040,920	2,049,083	2,049,324	2,049,000	2,049,000	8,080	8,080	0.921	0.921
6/30/89-90	223,446	1,938,078	1,947,769	1,948,117	1,948,000	1,948,000	9,922	9,922	0.872	0.872
6/30/90-91	209,847	1,736,277	1,743,222	1,743,200	1,743,000	1,743,000	6,723	6,723	0.831	0.831
6/30/91-92	204,915	1,256,737	1,263,021	1,263,012	1,263,000	1,263,000	6,263	6,263	0.616	0.616
6/30/92-93	176,368	1,003,269	1,006,279	1,006,280	1,006,000	1,006,000	2,731	2,731	0.570	0.570
6/30/93-94	172,727	624,226	627,429	627,503	627,000	628,000	2,774	3,774	0.363	0.364
6/30/94-95	177,958	800,522	806,031	806,105	806,000	806,000	5,478	5,478	0.453	0.453
6/30/95-96	175,626	790,224	795,650	795,737	796,000	796,000	5,776	5,776	0.453	0.453
6/30/96-97	189,700	505,108	509,255	509,587	509,000	510,000	3,892	4,892	0.268	0.269
6/30/97-98	176,882	503,898	509,247	509,674	509,000	510,000	5,102	6,102	0.288	0.288
6/30/98-99	188,672	585,114	592,336	592,876	592,000	593,000	6,886	7,886	0.314	0.314
6/30/99-00	194,073	587,880	594,745	595,347	595,000	595,000	7,120	7,120	0.307	0.307
6/30/00-01	201,133	730,102	741,745	742,396	742,000	742,000	11,898	11,898	0.369	0.369
6/30/01-02	202,655	571,546	588,523	590,187	589,000	590,000	17,454	18,454	0.291	0.291
6/30/02-03	202,050	585,592	615,736	618,409	616,000	618,000	30,408	32,408	0.305	0.306
6/30/03-04	189,108	1,113,490	1,168,711	1,168,327	1,168,000	1,169,000	54,510	55,510	0.618	0.618
6/30/04-05	186,494	797,587	839,050	850,578	839,000	851,000	41,413	53,413	0.450	0.456
6/30/05-06	192,742	715,286	754,699	773,163	679,000	773,000	-36,286	57,714	0.352	0.401
6/30/06-07	202,830	638,599	718,439	768,206	718,000	768,000	79,401	129,401	0.354	0.379
6/30/07-08	211,536	550,541	686,650	791,644	687,000	792,000	136,459	241,459	0.325	0.374
6/30/08-09	204,114	302,300	700,770	969,660	701,000	970,000	398,700	667,700	0.343	0.475
Total	4,782,611	22,592,274	22,700,435	22,811,689	23,541,173	24,136,580	948,899	1,544,306		
Tot 6/30/84-09	4,782,611	21,460,594	22,350,936	22,811,689	22,274,000	22,813,000	813,406	1,352,406	0.466	0.477

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 3, Exhibit 2, Page 2, Column 3
(4) From Section 3, Exhibit 2, Page 2, Column 8
(5) From Section 3, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		787,101							2	2	
6/30/82-83		135,539	1.032	1.000	139,832	N/A	139,832		1	1	4,293
6/30/83-84		209,040	1.003	1.000	209,667	N/A	209,667		0	1	627
6/30/84-85	142,302	490,672	1.003	1.000	492,144	N/A	492,144	0.346	2	1	1,472
6/30/85-86	153,030	257,775	1.003	1.000	258,548	N/A	258,548	0.169	0	1	773
6/30/86-87	175,859	701,978	1.003	1.000	704,084	N/A	704,084	0.400	2	2	1,053
6/30/87-88	206,034	1,632,873	1.003	1.000	1,637,771	N/A	1,637,771	0.795	3	3	1,633
6/30/88-89	222,510	2,040,920	1.004	1.000	2,049,083	N/A	2,049,083	0.921	4	5	1,633
6/30/89-90	223,446	1,938,078	1.005	1.000	1,947,769	N/A	1,947,769	0.872	2	2	4,845
6/30/90-91	209,847	1,736,277	1.004	1.000	1,743,222	N/A	1,743,222	0.831	3	4	1,736
6/30/91-92	204,915	1,256,737	1.005	1.000	1,263,021	N/A	1,263,021	0.616	2	2	3,142
6/30/92-93	176,368	1,003,269	1.003	1.000	1,006,279	N/A	1,006,279	0.571	5	4	752
6/30/93-94	172,727	624,226	1.005	1.000	627,429	N/A	627,429	0.363	4	5	641
6/30/94-95	177,958	800,522	1.007	1.000	806,031	N/A	806,031	0.453	2	2	2,754
6/30/95-96	175,626	790,224	1.007	1.000	795,650	N/A	795,650	0.453	2	2	2,713
6/30/96-97	189,700	505,108	1.008	1.000	509,255	N/A	509,255	0.268	3	3	1,382
6/30/97-98	176,882	503,898	1.011	1.000	509,247	N/A	509,247	0.288	1	3	1,783
6/30/98-99	188,672	585,114	1.012	1.000	592,336	N/A	592,336	0.314	2	2	3,611
6/30/99-00	194,073	587,880	1.012	1.000	594,745	N/A	594,745	0.306	3	3	2,289
6/30/00-01	201,133	730,102	1.016	1.000	741,745	N/A	741,745	0.369	5	6	1,940
6/30/01-02	202,655	571,546	1.030	1.000	588,523	N/A	588,523	0.290	3	3	5,659
6/30/02-03	202,050	585,592	1.051	1.000	615,736	N/A	615,736	0.305	6	4	7,536
6/30/03-04	189,108	1,113,490	1.050	1.000	1,168,711	N/A	1,168,711	0.618	20	13	4,248
6/30/04-05	186,494	797,587	1.052	1.000	839,050	N/A	839,050	0.450	18	13	3,189
6/30/05-06	192,742	715,286	1.055	1.000	754,699	N/A	754,699	0.392	31	17	2,318
6/30/06-07	202,830	638,599	1.125	1.000	718,439	N/A	718,439	0.354	123	38	2,101
6/30/07-08	211,536	550,541	1.247	1.000	686,650	N/A	686,650	0.325	247	148	920
6/30/08-09	204,114	302,300	2.318	1.000	700,770	N/A	700,770	0.343		245	1,626
Total	4,782,611	22,592,274			22,700,435		22,700,435		496	535	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 3, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	142,302	0.360	490,672	1.003	492,205	N/A	492,205	0.346	0.346
6/30/85-86	153,030	0.173	257,775	1.003	258,567	N/A	258,567	0.169	0.169
6/30/86-87	175,859	0.417	701,978	1.003	704,171	N/A	704,171	0.400	0.400
6/30/87-88	206,034	0.737	1,632,873	1.003	1,637,415	N/A	1,637,415	0.795	0.795
6/30/88-89	222,510	0.948	2,040,920	1.004	2,049,324	N/A	2,049,324	0.921	0.921
6/30/89-90	223,446	0.903	1,938,078	1.005	1,948,117	N/A	1,948,117	0.872	0.872
6/30/90-91	209,847	0.828	1,736,277	1.004	1,743,200	N/A	1,743,200	0.831	0.831
6/30/91-92	204,915	0.616	1,256,737	1.005	1,263,012	N/A	1,263,012	0.616	0.616
6/30/92-93	176,368	0.571	1,003,269	1.003	1,006,280	N/A	1,006,280	0.571	0.571
6/30/93-94	172,727	0.372	624,226	1.005	627,503	N/A	627,503	0.363	0.363
6/30/94-95	177,958	0.459	800,522	1.007	806,105	N/A	806,105	0.453	0.453
6/30/95-96	175,626	0.460	790,224	1.007	795,737	N/A	795,737	0.453	0.453
6/30/96-97	189,700	0.290	505,108	1.008	509,587	N/A	509,587	0.269	0.269
6/30/97-98	176,882	0.311	503,898	1.011	509,674	N/A	509,674	0.288	0.288
6/30/98-99	188,672	0.337	585,114	1.012	592,876	N/A	592,876	0.314	0.314
6/30/99-00	194,073	0.333	587,880	1.012	595,347	N/A	595,347	0.307	0.307
6/30/00-01	201,133	0.389	730,102	1.016	742,396	N/A	742,396	0.369	0.369
6/30/01-02	202,655	0.319	571,546	1.030	590,187	N/A	590,187	0.291	0.291
6/30/02-03	202,050	0.332	585,592	1.051	618,409	N/A	618,409	0.306	0.306
6/30/03-04	189,108	0.614	1,113,490	1.050	1,168,327	N/A	1,168,327	0.618	0.618
6/30/04-05	186,494	0.575	797,587	1.052	850,578	N/A	850,578	0.456	0.456
6/30/05-06	192,742	0.575	715,286	1.055	773,163	N/A	773,163	0.401	0.401
6/30/06-07	202,830	0.575	638,599	1.125	768,206	N/A	768,206	0.379	0.379
6/30/07-08	211,536	0.575	550,541	1.247	791,644	N/A	791,644	0.374	0.374
6/30/08-09	204,114	0.575	302,300	2.318	969,660	N/A	969,660	0.475	0.475
Total	4,782,611		21,460,594		22,811,689		22,811,689		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 3, Exhibit 2, Page 4, Column 11
(4) From Section 3, Exhibit 2, Page 2, Column 3
(5) From Section 3, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.360	0.360
6/30/85-86									0.173	0.173
6/30/86-87									0.417	0.417
6/30/87-88									0.737	0.737
6/30/88-89									0.948	0.948
6/30/89-90									0.903	0.903
6/30/90-91	209,847	1,743,222	0.831	1.157	0.961	1.208	1.161	0.831	0.961	0.828
6/30/91-92	204,915	1,263,021	0.616	1.152	0.710	1.196	0.849	0.616	0.734	0.616
6/30/92-93	176,368	1,006,279	0.571	1.152	0.657	1.184	0.779	0.571	0.670	0.571
6/30/93-94	172,727	627,429	0.363	1.142	0.415	1.173	0.486	0.363	0.418	0.372
6/30/94-95	177,958	806,031	0.453	1.134	0.513	1.161	0.596	0.453	0.519	0.459
6/30/95-96	175,626	795,650	0.453	1.120	0.507	1.149	0.583	0.453	0.534	0.460
6/30/96-97	189,700	509,255	0.268	1.101	0.296	1.138	0.337	0.268	0.355	0.290
6/30/97-98	176,882	509,247	0.288	1.100	0.317	1.127	0.357	0.288	0.376	0.311
6/30/98-99	188,672	592,336	0.314	1.100	0.345	1.116	0.385	0.314	0.401	0.337
6/30/99-00	194,073	594,745	0.306	1.100	0.337	1.105	0.372	0.306	0.403	0.333
6/30/00-01	201,133	741,745	0.369	1.075	0.396	1.094	0.434	0.369	0.458	0.389
6/30/01-02	202,655	588,523	0.290	1.067	0.310	1.083	0.335	0.290	0.375	0.319
6/30/02-03	202,050	615,736	0.305	1.040	0.317	1.072	0.340	0.305	0.406	0.332
6/30/03-04	189,108	1,168,711	0.618	1.014	0.627	1.062	0.665	0.618	0.550	0.614
6/30/04-05	186,494	839,050	0.450	1.003	0.451	1.051	0.474	0.450	0.550	0.575
6/30/05-06	192,742	754,699	0.392	1.000	0.392	1.041	0.407	0.392	0.575	0.575
6/30/06-07	202,830	718,439	0.354	1.000	0.354	1.030	0.365	0.354	0.575	0.575
6/30/07-08	211,536	686,650	0.325	1.000	0.325	1.020	0.331	0.325	0.575	0.575
6/30/08-09	204,114	700,770	0.343	1.000	0.343	1.010	0.347	0.343		0.575
Total	3,659,430	15,261,536								

Trend Last 4 (ex 08-09):	-10.3%	Avg 3 (x08-09):	0.368
Trend Last 8 (ex 08-09):	-0.5%	Avg 5 (x08-09):	0.449
Trend Last 12 (ex 08-09):	2.0%	Avg 10 (x08-09):	0.411
Prior Selected Trend:	1.0%	Prior Sel Avg:	0.575
Selected Trend:	1.0%	Sel. Loss Cost:	0.575

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 3, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.950	
(2)	Credibility		36%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.912	
		(Low)		(High)
(5)	Selected Range	0.902		0.921
(6)	Incremental Paid for 2009	15,802		15,802
(7)	Estimated Reserve	146,228		183,485
(8)	Paid to Date (82 & Prior)	787,101		787,101
(9)	Est Ult Paid for 1982 & Prior	933,329		970,586

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	15,595	15,838
(11)	Projected Number of Years	8	8
(12)	Estimated Reserve	124,757	126,708
(13)	Paid to Date (82 & Prior)	787,101	771,299
(14)	Est Ult Paid for 1982 & Prior	911,858	898,007
(14a)	Paid Counts During Fiscal Year	2	2

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	922,594	970,586
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**922,594**	**970,586**
(18)	Implied Tail	1.172	1.233
(19)	Ult Loss Inc Lump Sums @ 6/08	908,366	956,286

NOTES:

(1) From Section 3, Exhibit 2, Page 6
(2) = (Average of Section 3, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 3, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 3, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	51,889	10.857			
1993	2	26,449	10.183	0.510		
1994	3	19,386	9.872	0.733		
1995	4	14,214	9.562	0.733		
1996	5	30,374	10.321	2.137		
1997	6	29,871	10.305	0.983		
1998	7	19,565	9.881	0.655		
1999	8	34,912	10.461	1.784		
2000	9	33,563	10.421	0.961	n =	18
2001	10	21,898	9.994	0.652	S(x) =	36,009
2002	11	10,530	9.262	0.481	S(x-sq) =	72,036,489
2003	12	13,888	9.539	1.319	S(xy) =	357,357
2004	13	14,770	9.600	1.064	S(y) =	179
2005	14	16,486	9.710	1.116	D =	8,721
2006	15	16,533	9.713	1.003	slope =	-0.047
2007	16	15,051	9.619	0.910	Avg Trend =	0.953
2008	17	15,931	9.676	1.058		
2009	18	15,802	9.668	0.992		
					Selected Trend:	**0.950**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 0.992 = 15802 / 15931

Commonwealth of Massachusetts Workers Compensation
Department of Mental Health - Cluster 2
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	6,910	16,771	25,010	31,963	39,548	47,447	55,206	65,979	79,676	97,881	109,437	118,040	122,472	123,657	124,261	124,960	125,364	127,246	128,435	128,594	128,869	130,242	130,978	131,631	133,115	134,239	135,539
June-84	15,115	36,685	54,706	69,914	86,505	104,208	114,043	135,514	154,763	169,780	196,611	201,984	204,351	205,488	205,929	206,289	207,062	207,303	207,590	207,590	207,590	207,590	207,590	207,590	207,590	209,040	
June-85	45,034	109,301	162,993	208,305	264,045	295,679	375,978	436,398	457,324	469,156	478,993	481,392	482,690	484,957	486,098	486,337	486,602	486,918	487,378	488,092	488,848	489,022	489,458	490,407	490,672		
June-86	31,328	76,036	113,387	149,251	177,640	201,245	224,645	234,675	242,982	244,710	248,077	248,146	248,146	248,464	249,109	249,459	249,459	249,734	249,759	250,509	253,317	253,317	253,317	257,775			
June-87	76,748	186,273	283,696	389,472	457,883	509,794	575,159	621,158	638,516	650,997	655,971	660,694	667,637	681,728	687,346	690,455	693,082	696,366	698,158	699,573	700,478	701,229	701,978				
June-88	178,894	502,531	738,028	895,402	1,063,080	1,183,773	1,248,121	1,279,736	1,298,796	1,310,333	1,339,541	1,367,561	1,385,075	1,399,869	1,424,718	1,427,592	1,445,010	1,498,101	1,524,412	1,550,835	1,609,155	1,632,873					
June-89	179,890	786,968	1,088,315	1,330,240	1,584,004	1,681,826	1,741,013	1,807,955	1,845,172	1,876,501	1,906,158	1,945,202	1,962,565	1,969,371	1,973,430	1,978,126	1,981,710	1,986,429	2,002,120	2,035,745	2,040,920						
June-90	298,701	961,341	1,346,536	1,509,954	1,639,655	1,697,547	1,735,975	1,749,267	1,768,436	1,790,051	1,817,206	1,838,401	1,863,987	1,878,469	1,905,280	1,915,675	1,921,866	1,934,997	1,937,028	1,938,078							
June-91	336,650	1,034,501	1,248,801	1,338,322	1,397,546	1,497,111	1,506,640	1,518,859	1,530,350	1,582,638	1,604,133	1,610,563	1,618,558	1,622,507	1,624,821	1,627,667	1,633,766	1,732,296	1,736,277								
June-92	391,215	804,359	985,930	1,100,607	1,131,087	1,152,839	1,156,897	1,204,770	1,207,427	1,217,326	1,239,794	1,242,292	1,245,829	1,245,829	1,247,305	1,249,031	1,251,673	1,256,737									
June-93	258,020	628,980	745,922	854,118	902,554	912,950	924,291	930,378	935,510	938,871	941,935	946,379	956,312	969,261	977,539	988,688	1,003,269										
June-94	182,635	373,628	418,730	436,391	447,015	469,585	491,352	516,384	534,463	550,753	585,007	594,302	601,406	609,303	615,358	624,226											
June-95	212,717	409,284	509,019	570,032	608,100	631,875	651,359	673,340	687,056	708,855	725,773	748,542	771,912	790,063	800,522												
June-96	161,311	580,474	655,522	690,974	709,369	717,233	722,565	739,256	747,885	753,899	765,449	771,693	782,222	790,224													
June-97	135,202	301,857	352,150	378,182	408,711	433,559	446,704	473,023	486,546	493,154	499,117	502,144	505,108														
June-98	160,545	332,451	383,627	422,681	445,088	461,616	487,824	498,965	499,061	499,770	500,001	503,898															
June-99	177,752	299,718	340,747	360,722	405,072	439,482	477,272	520,347	561,026	584,273	585,114																
June-00	185,350	429,256	483,565	521,929	539,722	558,001	575,939	582,579	584,965	587,880																	
June-01	241,669	433,098	500,398	575,365	598,840	628,934	693,180	725,143	730,102																		
June-02	174,410	368,134	462,671	501,999	514,827	521,795	525,972	571,546																			
June-03	106,077	382,205	468,554	496,191	560,019	574,291	585,592																				
June-04	258,429	665,381	856,411	1,022,737	1,071,500	1,113,490																					
June-05	223,896	627,798	728,574	772,233	797,587																						
June-06	251,300	520,856	684,007	715,286																							
June-07	266,977	578,217	638,599																								
June-08	278,965	550,541																									
June-09	302,300																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.427	1.491	1.278	1.237	1.200	1.164	1.195	1.208	1.228	1.118	1.079	1.038	1.010	1.005	1.006	1.003	1.015	1.009	1.001	1.002	1.011	1.006	1.005	1.011	1.008	1.010
June-84	2.427	1.491	1.278	1.237	1.205	1.094	1.188	1.142	1.097	1.158	1.027	1.012	1.006	1.002	1.002	1.004	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.007	
June-85	2.427	1.491	1.278	1.268	1.120	1.272	1.161	1.048	1.026	1.021	1.005	1.003	1.005	1.002	1.000	1.001	1.001	1.001	1.001	1.002	1.000	1.001	1.002	1.001		
June-86	2.427	1.491	1.316	1.190	1.133	1.116	1.045	1.035	1.007	1.014	1.000	1.000	1.001	1.003	1.001	1.000	1.001	1.000	1.003	1.011	1.000	1.000	1.018			
June-87	2.427	1.523	1.373	1.176	1.113	1.128	1.080	1.028	1.020	1.008	1.007	1.011	1.021	1.008	1.005	1.004	1.005	1.003	1.002	1.001	1.001	1.001				
June-88	2.809	1.469	1.213	1.187	1.114	1.054	1.025	1.015	1.009	1.022	1.021	1.013	1.011	1.018	1.002	1.012	1.037	1.018	1.017	1.038	1.015					
June-89	4.375	1.383	1.222	1.191	1.062	1.035	1.038	1.021	1.017	1.016	1.020	1.009	1.003	1.002	1.002	1.002	1.002	1.008	1.017	1.003						
June-90	3.218	1.401	1.121	1.086	1.035	1.023	1.008	1.011	1.012	1.015	1.012	1.014	1.008	1.014	1.005	1.003	1.007	1.001	1.001							
June-91	3.073	1.207	1.072	1.044	1.071	1.006	1.008	1.008	1.034	1.014	1.004	1.005	1.002	1.001	1.002	1.004	1.060	1.002								
June-92	2.056	1.226	1.116	1.028	1.019	1.004	1.041	1.002	1.008	1.018	1.002	1.003	1.000	1.001	1.001	1.002	1.004									
June-93	2.438	1.186	1.145	1.057	1.012	1.012	1.007	1.006	1.004	1.003	1.005	1.010	1.014	1.009	1.011	1.015										
June-94	2.046	1.121	1.042	1.024	1.050	1.046	1.051	1.035	1.030	1.062	1.016	1.012	1.013	1.010	1.014											
June-95	1.924	1.244	1.120	1.067	1.039	1.031	1.034	1.020	1.032	1.024	1.031	1.031	1.024	1.013												
June-96	3.598	1.129	1.054	1.027	1.011	1.007	1.023	1.012	1.008	1.015	1.008	1.014	1.010													
June-97	2.233	1.167	1.074	1.081	1.061	1.030	1.059	1.029	1.014	1.012	1.006	1.006														
June-98	2.071	1.154	1.102	1.053	1.037	1.057	1.023	1.000	1.001	1.000	1.008															
June-99	1.686	1.137	1.059	1.123	1.085	1.086	1.090	1.078	1.041	1.001																
June-00	2.316	1.127	1.079	1.034	1.034	1.032	1.012	1.004	1.005																	
June-01	1.792	1.155	1.150	1.041	1.050	1.102	1.046	1.007																		
June-02	2.111	1.257	1.085	1.026	1.014	1.008	1.087																			
June-03	3.603	1.226	1.059	1.129	1.025	1.020																				
June-04	2.575	1.287	1.194	1.048	1.039																					
June-05	2.804	1.161	1.060	1.033																						
June-06	2.073	1.313	1.046																							
June-07	2.166	1.104																								
June-08	1.974																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.503	1.278	1.147	1.104	1.069	1.063	1.061	1.037	1.033	1.031	1.016	1.012	1.009	1.007	1.004	1.004	1.013	1.005	1.005	1.008	1.004	1.002	1.006	1.004	1.008	1.010	
Latest 5	2.318	1.218	1.089	1.055	1.032	1.050	1.051	1.024	1.014	1.011	1.014	1.015	1.012	1.007	1.007	1.005	1.022	1.006	1.008	1.011	1.003	1.002					
Latest 3	2.071	1.193	1.100	1.070	1.026	1.043	1.048	1.030	1.016	1.005	1.007	1.017	1.016	1.011	1.009	1.007	1.024	1.004	1.012	1.014	1.005	1.001	1.007	1.004			
Volume Wtd																											
All Yrs	2.481	1.247	1.125	1.084	1.052	1.040	1.038	1.019	1.019	1.019	1.012	1.011	1.008	1.008	1.004	1.005	1.018	1.006	1.009	1.013	1.008	1.001	1.006	1.002	1.008		
Latest 5	2.300	1.217	1.096	1.052	1.034	1.050	1.050	1.022	1.014	1.012	1.015	1.015	1.011	1.005	1.005	1.004	1.021	1.006	1.010	1.014	1.008						
Latest 3	2.069	1.188	1.106	1.060	1.029	1.046	1.047	1.026	1.016	1.004	1.007	1.018	1.016	1.010	1.008	1.006	1.024	1.004	1.011	1.015	1.010	1.001	1.006				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.644*	*1.255*	*1.110*	*1.055*	*1.042*	*1.057*	*1.046*	*1.027*	*1.020*	*1.010*	*1.013*	*1.011*	*1.008*	*1.007*	*1.004*	*1.005*	*1.003*	*1.005*	*1.004*	*1.005*	*1.004*	*1.003*	*1.003*	*1.003*	*1.003*	*1.037*	
Selected	2.318	1.247	1.125	1.055	1.052	1.050	1.051	1.030	1.016	1.012	1.012	1.011	1.008	1.007	1.007	1.005	1.003	1.005	1.004	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.032
FacToUlt	4.740	2.045	1.639	1.457	1.381	1.313	1.251	1.190	1.155	1.137	1.124	1.110	1.099	1.090	1.082	1.075	1.069	1.066	1.061	1.057	1.051	1.047	1.044	1.041	1.038	1.035	1.032
Percent of Ult	21.1%	48.9%	61.0%	68.6%	72.4%	76.2%	79.9%	84.1%	86.6%	87.9%	89.0%	90.1%	91.0%	91.8%	92.4%	93.0%	93.5%	93.8%	94.3%	94.6%	95.1%	95.5%	95.8%	96.1%	96.4%	96.6%	96.9%

Commonwealth of Massachusetts
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Department of Mental Health - Cluster 2
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/08		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	908,366	956,286	922,594	970,586	14,228	1.6%	14,299	1.5%
6/30/82-83	134,239	140,579	135,539	141,231	1,301	1.0%	651	0.5%
6/30/83-84	207,590	218,047	209,040	211,764	1,450	0.7%	(6,284)	-2.9%
6/30/84-85	512,000	512,000	492,000	492,000	(20,000)	-3.9%	(20,000)	-3.9%
6/30/85-86	265,000	265,000	259,000	259,000	(6,000)	-2.3%	(6,000)	-2.3%
6/30/86-87	736,000	736,000	704,000	704,000	(32,000)	-4.3%	(32,000)	-4.3%
6/30/87-88	1,686,000	1,695,000	1,637,000	1,638,000	(49,000)	-2.9%	(57,000)	-3.4%
6/30/88-89	2,153,000	2,156,000	2,049,000	2,049,000	(104,000)	-4.8%	(107,000)	-5.0%
6/30/89-90	2,057,000	2,059,000	1,948,000	1,948,000	(109,000)	-5.3%	(111,000)	-5.4%
6/30/90-91	1,851,000	1,861,000	1,743,000	1,743,000	(108,000)	-5.8%	(118,000)	-6.3%
6/30/91-92	1,341,000	1,352,000	1,263,000	1,263,000	(78,000)	-5.8%	(89,000)	-6.6%
6/30/92-93	1,064,000	1,073,000	1,006,000	1,006,000	(58,000)	-5.5%	(67,000)	-6.2%
6/30/93-94	665,000	670,000	627,000	628,000	(38,000)	-5.7%	(42,000)	-6.3%
6/30/94-95	860,000	866,000	806,000	806,000	(54,000)	-6.3%	(60,000)	-6.9%
6/30/95-96	859,000	866,000	796,000	796,000	(63,000)	-7.3%	(70,000)	-8.1%
6/30/96-97	557,000	569,000	509,000	510,000	(48,000)	-8.6%	(59,000)	-10.4%
6/30/97-98	562,000	573,000	509,000	510,000	(53,000)	-9.4%	(63,000)	-11.0%
6/30/98-99	663,000	674,000	592,000	593,000	(71,000)	-10.7%	(81,000)	-12.0%
6/30/99-00	677,000	692,000	595,000	595,000	(82,000)	-12.1%	(97,000)	-14.0%
6/30/00-01	863,000	872,000	742,000	742,000	(121,000)	-14.0%	(130,000)	-14.9%
6/30/01-02	655,000	675,000	589,000	590,000	(66,000)	-10.1%	(85,000)	-12.6%
6/30/02-03	755,000	771,000	616,000	618,000	(139,000)	-18.4%	(153,000)	-19.8%
6/30/03-04	1,352,000	1,468,000	1,168,000	1,169,000	(184,000)	-13.6%	(299,000)	-20.4%
6/30/04-05	1,089,000	1,117,000	839,000	851,000	(250,000)	-23.0%	(266,000)	-23.8%
6/30/05-06	988,000	1,102,000	679,000	773,000	(309,000)	-31.3%	(329,000)	-29.9%
6/30/06-07	1,164,000	1,165,000	718,000	768,000	(446,000)	-38.3%	(397,000)	-34.1%
6/30/07-08	1,243,000	1,485,000	687,000	792,000	(556,000)	-44.7%	(693,000)	-46.7%
6/30/08-09								
Total	25,867,195	26,588,913	22,840,173	23,166,580	(3,027,021)	-11.7%	(3,422,333)	-12.9%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 3, Exhibit 2, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Mental Health - Cluster 2
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	3.1%	0.0%	1.0%	0.6%	1.000	1.000
324	96.9%	-2.8%	3.1%	-1.0%	-0.6%	0.981	0.971
312	99.7%	0.0%	0.3%	0.0%	0.0%	0.593	0.407
300	99.7%	0.0%	0.3%	0.0%	0.0%	0.571	0.384
288	99.7%	0.0%	0.3%	0.0%	0.0%	0.549	0.362
276	99.7%	0.0%	0.3%	0.0%	0.0%	0.528	0.342
264	99.7%	0.1%	0.3%	0.0%	0.0%	0.507	0.322
252	99.6%	0.1%	0.4%	0.0%	0.0%	0.611	0.470
240	99.5%	-0.1%	0.5%	0.0%	0.0%	0.666	0.549
228	99.6%	0.1%	0.4%	0.0%	0.0%	0.555	0.405
216	99.5%	-0.2%	0.5%	-0.1%	-0.1%	0.623	0.499
204	99.7%	0.2%	0.3%	0.1%	0.1%	0.346	0.139
192	99.5%	0.2%	0.5%	0.1%	0.1%	0.601	0.479
180	99.3%	0.0%	0.7%	0.0%	0.0%	0.680	0.584
168	99.3%	0.1%	0.7%	0.1%	0.1%	0.653	0.550
156	99.2%	0.2%	0.8%	0.1%	0.1%	0.685	0.592
144	98.9%	0.2%	1.1%	0.1%	0.1%	0.731	0.651
132	98.8%	-0.1%	1.2%	0.0%	0.0%	0.741	0.664
120	98.8%	0.4%	1.2%	0.3%	0.2%	0.698	0.607
108	98.4%	1.3%	1.6%	0.9%	0.8%	0.753	0.678
96	97.1%	2.0%	2.9%	1.5%	1.3%	0.841	0.791
84	95.1%	-0.2%	4.9%	-0.1%	-0.1%	0.879	0.839
72	95.3%	0.2%	4.7%	0.2%	0.2%	0.841	0.785
60	95.1%	0.3%	4.9%	0.2%	0.2%	0.816	0.750
48	94.8%	5.9%	5.2%	5.1%	4.8%	0.795	0.722
36	88.9%	8.7%	11.1%	7.9%	7.5%	0.879	0.835
24	80.2%	37.0%	19.8%	34.9%	33.9%	0.905	0.868
12	43.1%	43.1%	56.9%	42.3%	41.9%	0.942	0.918
Total		100.0%					

NOTES:

(2) = 1 / Section 3, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
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Department of Mental Health - Cluster 2
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	135,493	183,485		116,310	157,508
6/30/82-83	0	5,691	0.981	0	5,581
6/30/83-84	0	2,724	0.593	0	1,616
6/30/84-85	1,328	1,328	0.571	758	758
6/30/85-86	1,225	1,225	0.549	672	672
6/30/86-87	2,022	2,022	0.528	1,067	1,067
6/30/87-88	4,127	5,127	0.507	2,094	2,601
6/30/88-89	8,080	8,080	0.611	4,934	4,934
6/30/89-90	9,922	9,922	0.666	6,603	6,603
6/30/90-91	6,723	6,723	0.555	3,732	3,732
6/30/91-92	6,263	6,263	0.623	3,901	3,901
6/30/92-93	2,731	2,731	0.346	944	944
6/30/93-94	2,774	3,774	0.601	1,666	2,267
6/30/94-95	5,478	5,478	0.680	3,723	3,723
6/30/95-96	5,776	5,776	0.653	3,770	3,770
6/30/96-97	3,892	4,892	0.685	2,666	3,351
6/30/97-98	5,102	6,102	0.731	3,730	4,461
6/30/98-99	6,886	7,886	0.741	5,105	5,847
6/30/99-00	7,120	7,120	0.698	4,969	4,969
6/30/00-01	11,898	11,898	0.753	8,958	8,958
6/30/01-02	17,454	18,454	0.841	14,677	15,518
6/30/02-03	30,408	32,408	0.879	26,736	28,494
6/30/03-04	54,510	55,510	0.841	45,818	46,659
6/30/04-05	41,413	53,413	0.816	33,783	43,572
6/30/05-06	-36,286	57,714	0.795	-28,845	45,879
6/30/06-07	79,401	129,401	0.879	69,791	113,740
6/30/07-08	136,459	241,459	0.905	123,449	218,439
6/30/08-09	398,700	667,700	0.942	375,570	628,964
Total	948,899	1,544,306		836,581	1,368,526
			(7) Total Discount Factor:	0.882	0.886

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	135,493	183,485
(9) Projected Number of Years:	8	8
(10) Projected Paid Loss per Year:	16,937	22,936
(11) Discounted Value at 4%:	116,310	157,508

NOTES:
(2), (3) From Section 3, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 3, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
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Department of Mental Health - Cluster 2
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	135,493	183,485		108,328	146,698
6/30/82-83	0	5,691	0.971	0	5,528
6/30/83-84	0	2,724	0.407	0	1,108
6/30/84-85	1,328	1,328	0.384	510	510
6/30/85-86	1,225	1,225	0.362	444	444
6/30/86-87	2,022	2,022	0.342	691	691
6/30/87-88	4,127	5,127	0.322	1,330	1,653
6/30/88-89	8,080	8,080	0.470	3,801	3,801
6/30/89-90	9,922	9,922	0.549	5,446	5,446
6/30/90-91	6,723	6,723	0.405	2,723	2,723
6/30/91-92	6,263	6,263	0.499	3,128	3,128
6/30/92-93	2,731	2,731	0.139	381	381
6/30/93-94	2,774	3,774	0.479	1,329	1,809
6/30/94-95	5,478	5,478	0.584	3,196	3,196
6/30/95-96	5,776	5,776	0.550	3,174	3,174
6/30/96-97	3,892	4,892	0.592	2,305	2,897
6/30/97-98	5,102	6,102	0.651	3,323	3,974
6/30/98-99	6,886	7,886	0.664	4,572	5,235
6/30/99-00	7,120	7,120	0.607	4,321	4,321
6/30/00-01	11,898	11,898	0.678	8,067	8,067
6/30/01-02	17,454	18,454	0.791	13,803	14,594
6/30/02-03	30,408	32,408	0.839	25,500	27,177
6/30/03-04	54,510	55,510	0.785	42,769	43,554
6/30/04-05	41,413	53,413	0.750	31,073	40,077
6/30/05-06	-36,286	57,714	0.722	-26,199	41,670
6/30/06-07	79,401	129,401	0.835	66,295	108,042
6/30/07-08	136,459	241,459	0.868	118,494	209,671
6/30/08-09	398,700	667,700	0.918	366,114	613,128
Total	948,899	1,544,306		794,917	1,302,696
			(7) Total Discount Factor:	0.838	0.844

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	135,493	183,485
(9) Projected Number of Years:	8	8
(10) Projected Paid Loss per Year:	16,937	22,936
(11) Discounted Value at 6%:	108,328	146,698

NOTES:
(2), (3) From Section 3, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 3, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
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Department of Corrections - Cluster 3
Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		3,395,388			4,185,180	4,817,117	789,792	1,421,729		
6/30/82-83		2,747,816	3,651,680		3,560,388	3,834,264	812,572	1,086,448		
6/30/83-84		1,405,260	1,466,655		1,429,989	1,495,988	24,729	90,728		
6/30/84-85	115,008	3,691,606	4,965,955	3,827,925	4,211,000	4,397,000	519,394	705,394	3.661	3.823
6/30/85-86	123,679	6,192,767	9,033,158	6,471,796	7,364,853	7,752,000	1,172,087	1,559,233	5.955	6.268
6/30/86-87	142,129	3,884,640	4,146,697	4,152,267	3,924,000	3,963,000	39,360	78,360	2.761	2.788
6/30/87-88	166,516	6,079,874	6,864,729	6,593,791	6,594,000	6,865,000	514,126	785,126	3.960	4.123
6/30/88-89	179,833	6,753,443	8,118,343	7,353,234	7,353,000	8,118,000	599,557	1,364,557	4.089	4.514
6/30/89-90	180,589	8,917,656	9,929,954	9,884,496	9,884,000	9,930,000	966,344	1,012,344	5.473	5.499
6/30/90-91	169,598	9,107,769	14,933,884	10,813,056	10,813,000	14,934,000	1,705,231	5,826,231	6.376	8.806
6/30/91-92	165,612	4,044,987	4,602,317	4,610,859	4,602,000	4,611,000	557,013	566,013	2.779	2.784
6/30/92-93	173,874	3,155,590	3,589,277	3,610,752	3,589,000	3,611,000	433,410	455,410	2.064	2.077
6/30/93-94	185,611	4,751,301	5,509,036	5,532,908	5,509,000	5,533,000	757,699	781,699	2.968	2.981
6/30/94-95	193,706	6,146,311	7,313,042	7,331,976	7,313,000	7,332,000	1,166,689	1,185,689	3.775	3.785
6/30/95-96	204,905	4,965,668	6,040,715	6,082,554	6,041,000	6,083,000	1,075,332	1,117,332	2.948	2.969
6/30/96-97	233,704	5,997,062	7,363,845	7,420,526	7,364,000	7,421,000	1,366,938	1,423,938	3.151	3.175
6/30/97-98	221,484	7,642,278	9,684,748	9,697,624	9,685,000	9,698,000	2,042,722	2,055,722	4.373	4.379
6/30/98-99	255,677	7,384,000	9,564,069	9,608,271	9,564,000	9,608,000	2,180,000	2,224,000	3.741	3.758
6/30/99-00	268,079	8,069,062	10,630,162	10,672,452	10,630,000	10,672,000	2,560,938	2,602,938	3.965	3.981
6/30/00-01	278,762	10,490,989	14,165,979	14,138,221	14,138,000	14,874,000	3,647,011	4,383,011	5.072	5.336
6/30/01-02	282,635	8,716,121	12,074,153	12,103,632	12,074,000	12,104,000	3,357,879	3,387,879	4.272	4.283
6/30/02-03	289,398	8,630,418	12,365,992	12,401,906	12,366,000	12,402,000	3,735,582	3,771,582	4.273	4.285
6/30/03-04	293,308	7,651,981	11,546,877	11,617,745	11,547,000	11,618,000	3,895,019	3,966,019	3.937	3.961
6/30/04-05	290,903	7,601,865	12,184,705	12,704,150	12,185,000	13,339,000	4,583,135	5,737,135	4.189	4.585
6/30/05-06	294,215	5,099,300	8,958,633	10,945,853	9,952,000	10,946,000	4,852,700	5,846,700	3.383	3.720
6/30/06-07	289,092	3,662,399	7,670,785	10,596,092	9,316,000	11,126,000	5,653,601	7,463,601	3.223	3.849
6/30/07-08	354,141	2,660,404	7,560,303	13,107,209	10,540,000	13,763,000	7,879,596	11,102,596	2.976	3.886
6/30/08-09	331,868	1,050,261	6,569,608	13,788,725	10,383,000	14,478,000	9,332,739	13,427,739	3.129	4.363
Total	5,684,326	159,896,215	220,505,300	225,068,020	226,117,409	245,325,369	66,221,194	85,429,154		
Tot 6/30/84-09	5,684,326	152,347,751	215,386,965	225,068,020	216,941,853	235,178,000	64,594,102	82,830,249	3.816	4.137

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) Sum of Section 4, Exhibit 1, Page 2, Column 3 and Section 4, Exhibit 1, Page 9, Column 8
(4) From Section 4, Exhibit 1, Page 2, Column 8
(5) From Section 4, Exhibit 1, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
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Department of Corrections - Cluster 3
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		3,235,388							3	3		80
6/30/82-83		2,566,735	1.040	1.300	3,470,599	181,081	3,651,680		1	0		
6/30/83-84		1,386,759	1.044	1.000	1,448,154	18,501	1,466,655		0	0		
6/30/84-85	115,008	3,510,756	1.048	1.300	4,785,105	180,850	4,965,955	4.318	2	2	637,174	71
6/30/85-86	123,679	5,922,767	1.057	1.400	8,763,158	270,000	9,033,158	7.304	3	2	1,420,196	71
6/30/86-87	142,129	3,544,280	1.074	1.000	3,806,337	340,360	4,146,697	2.918	0	0		
6/30/87-88	166,516	5,362,873	1.092	1.050	6,147,728	717,001	6,864,729	4.123	1	0		
6/30/88-89	179,833	6,137,243	1.111	1.100	7,502,143	616,200	8,118,343	4.514	3	3	454,967	56
6/30/89-90	180,589	7,972,756	1.127	1.000	8,985,054	944,900	9,929,954	5.499	3	2	506,149	60
6/30/90-91	169,598	8,226,001	1.139	1.500	14,052,116	881,768	14,933,884	8.805	7	6	971,019	62
6/30/91-92	165,612	3,661,736	1.152	1.000	4,219,066	383,251	4,602,317	2.779	2	1	557,330	74
6/30/92-93	173,874	2,518,289	1.172	1.000	2,951,976	637,301	3,589,277	2.064	0	0		
6/30/93-94	185,611	3,914,626	1.194	1.000	4,672,361	836,675	5,509,036	2.968	3	3	252,578	49
6/30/94-95	193,706	5,413,698	1.215	1.000	6,579,476	733,566	7,313,042	3.775	3	0		
6/30/95-96	204,905	4,513,668	1.237	1.000	5,584,745	455,969	6,040,715	2.948	2	2	535,539	58
6/30/96-97	233,704	5,229,461	1.259	1.000	6,586,401	777,444	7,363,845	3.151	1	0		
6/30/97-98	221,484	7,210,560	1.280	1.000	9,231,613	453,135	9,684,748	4.373	3	5	404,210	49
6/30/98-99	255,677	7,215,948	1.298	1.000	9,366,122	197,947	9,564,069	3.741	6	7	307,168	49
6/30/99-00	268,079	7,812,460	1.322	1.000	10,326,392	303,770	10,630,162	3.965	5	7	359,133	48
6/30/00-01	278,762	10,093,706	1.349	1.000	13,617,103	548,876	14,165,979	5.082	15	4	880,849	57
6/30/01-02	282,635	8,442,240	1.380	1.000	11,647,313	426,840	12,074,153	4.272	11	8	400,634	45
6/30/02-03	289,398	8,271,915	1.430	1.000	11,828,494	537,498	12,365,992	4.273	12	11	323,325	53
6/30/03-04	293,308	7,374,551	1.502	1.000	11,079,625	467,252	11,546,877	3.937	26	17	217,946	46
6/30/04-05	290,903	7,354,316	1.590	1.000	11,690,114	494,591	12,184,705	4.189	38	27	160,585	48
6/30/05-06	294,215	4,926,296	1.736	1.000	8,553,550	405,084	8,958,633	3.045	52	36	100,757	45
6/30/06-07	289,092	3,556,899	2.057	1.000	7,315,585	355,200	7,670,785	2.653	100	38	98,913	45
6/30/07-08	354,141	2,624,403	2.753	1.000	7,225,640	334,664	7,560,303	2.135	193	100	46,012	42
6/30/08-09	331,868	1,050,261	5.960	1.000	6,259,422	310,186	6,569,608	1.980	0	138	37,748	42
Total	5,684,326	149,050,590			207,695,390	12,809,910	220,505,300		495	422		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 4, Exhibit 1, Page 7
(5) Based on information from the MA WCRIB
(6) = (3) x (4) x (5)
(7) From Section 4, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
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Department of Corrections - Cluster 3
Indemnity

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	115,008	2.565	3,510,756	1.048	3,647,075	180,850	3,827,925	3.328	3.171
6/30/85-86	123,679	4.195	5,922,767	1.057	6,201,796	270,000	6,471,796	5.233	5.014
6/30/86-87	142,129	2.735	3,544,280	1.074	3,811,907	340,360	4,152,267	2.921	2.682
6/30/87-88	166,516	3.672	5,362,873	1.092	5,876,790	717,001	6,593,791	3.960	3.529
6/30/88-89	179,833	3.331	6,137,243	1.111	6,737,034	616,200	7,353,234	4.089	3.746
6/30/89-90	180,589	4.752	7,972,756	1.127	8,939,596	944,900	9,884,496	5.473	4.950
6/30/90-91	169,598	8.248	8,226,001	1.139	9,931,288	881,768	10,813,056	6.376	5.856
6/30/91-92	165,612	2.587	3,661,736	1.152	4,227,608	383,251	4,610,859	2.784	2.553
6/30/92-93	173,874	1.782	2,518,289	1.172	2,973,451	637,301	3,610,752	2.077	1.710
6/30/93-94	185,611	2.597	3,914,626	1.194	4,696,233	836,675	5,532,908	2.981	2.530
6/30/94-95	193,706	3.452	5,413,698	1.215	6,598,410	733,566	7,331,976	3.785	3.406
6/30/95-96	204,905	2.832	4,513,668	1.237	5,626,585	455,969	6,082,554	2.968	2.746
6/30/96-97	233,704	2.936	5,229,461	1.259	6,643,082	777,444	7,420,526	3.175	2.843
6/30/97-98	221,484	4.195	7,210,560	1.280	9,244,489	453,135	9,697,624	4.378	4.174
6/30/98-99	255,677	3.739	7,215,948	1.298	9,410,323	197,947	9,608,271	3.758	3.681
6/30/99-00	268,079	3.917	7,812,460	1.322	10,368,682	303,770	10,672,452	3.981	3.868
6/30/00-01	278,762	4.846	10,093,706	1.349	13,589,345	548,876	14,138,221	5.072	4.875
6/30/01-02	282,635	4.159	8,442,240	1.380	11,676,792	426,840	12,103,632	4.282	4.131
6/30/02-03	289,398	4.129	8,271,915	1.430	11,864,407	537,498	12,401,906	4.285	4.100
6/30/03-04	293,308	3.850	7,374,551	1.502	11,150,493	467,252	11,617,745	3.961	3.802
6/30/04-05	290,903	4.500	7,354,316	1.590	12,209,559	494,591	12,704,150	4.367	4.197
6/30/05-06	294,215	4.500	4,926,296	1.736	10,540,769	405,084	10,945,853	3.720	3.583
6/30/06-07	289,092	4.500	3,556,899	2.057	10,240,893	355,200	10,596,092	3.665	3.542
6/30/07-08	354,141	4.500	2,624,403	2.753	12,772,545	334,664	13,107,209	3.701	3.607
6/30/08-09	331,868	4.500	1,050,261	5.960	13,478,539	310,186	13,788,725	4.155	4.061
Total	5,684,326		141,861,708		212,457,692	12,610,328	225,068,020		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 4, Exhibit 1, Page 4, Column 11
(4) From Section 4, Exhibit 1, Page 2, Column 3
(5) From Section 4, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 4, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
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Department of Corrections - Cluster 3
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									2.565	2.565
6/30/85-86									4.195	4.195
6/30/86-87									2.735	2.735
6/30/87-88									3.672	3.672
6/30/88-89									3.331	3.331
6/30/89-90									4.752	4.752
6/30/90-91	169,598	14,052,116	8.286	0.937	7.761	1.208	9.377	8.286	6.785	8.248
6/30/91-92	165,612	4,219,066	2.548	1.028	2.618	1.196	3.132	2.548	3.078	2.587
6/30/92-93	173,874	2,951,976	1.698	1.198	2.034	1.184	2.409	1.698	2.670	1.782
6/30/93-94	185,611	4,672,361	2.517	1.183	2.978	1.173	3.492	2.517	3.360	2.597
6/30/94-95	193,706	6,579,476	3.397	1.172	3.981	1.161	4.622	3.397	4.148	3.452
6/30/95-96	204,905	5,584,745	2.726	1.163	3.169	1.149	3.643	2.726	3.506	2.832
6/30/96-97	233,704	6,586,401	2.818	1.151	3.244	1.138	3.692	2.818	3.584	2.936
6/30/97-98	221,484	9,231,613	4.168	1.136	4.737	1.127	5.337	4.168	4.900	4.195
6/30/98-99	255,677	9,366,122	3.663	1.121	4.108	1.116	4.584	3.663	4.433	3.739
6/30/99-00	268,079	10,326,392	3.852	1.103	4.250	1.105	4.695	3.852	4.589	3.917
6/30/00-01	278,762	13,617,103	4.885	1.075	5.253	1.094	5.746	4.885	5.418	4.846
6/30/01-02	282,635	11,647,313	4.121	1.054	4.345	1.083	4.705	4.121	4.745	4.159
6/30/02-03	289,398	11,828,494	4.087	1.051	4.294	1.072	4.604	4.087	4.762	4.129
6/30/03-04	293,308	11,079,625	3.777	1.051	3.969	1.062	4.213	3.777	4.800	3.850
6/30/04-05	290,903	11,690,114	4.019	1.044	4.196	1.051	4.410	4.019	4.800	4.500
6/30/05-06	294,215	8,553,550	2.907	1.033	3.004	1.041	3.126	2.907	4.800	4.500
6/30/06-07	289,092	7,315,585	2.531	1.022	2.587	1.030	2.665	2.531	4.500	4.500
6/30/07-08	354,141	7,225,640	2.040	1.011	2.063	1.020	2.104	2.040	4.500	4.500
6/30/08-09	331,868	6,259,422	1.886	1.000	1.886	1.010	1.905	1.886		4.500
Total	4,776,572	162,787,113								

Trend Last 4 (ex 08-09):	-20.4%	Avg 3 (x08-09):	2.632
Trend Last 8 (ex 08-09):	-11.4%	Avg 5 (x08-09):	3.304
Trend Last 12 (ex 08-09):	-4.6%	Avg 10 (x08-09):	4.085
Prior Selected Trend:	1.0%	Prior Sel Avg:	4.500
Selected Trend:	1.0%	Sel. Loss Cost:	4.500

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 4, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
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Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		1.000	
(2)	Credibility		19%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.968	
		(Low)		(High)
(5)	Selected Range	0.948		0.977
(6)	Incremental Paid for 2009	118,086		118,086
(7)	Estimated Reserve	2,168,723		5,105,474
(8)	Paid to Date (82 & Prior)	3,235,388		3,235,388
(9)	Est Ult Paid for 1982 & Prior	5,404,111		8,340,861

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	110,050	103,967
(11)	Projected Number of Years	3	3
(12)	Estimated Reserve	330,149	311,901
(13)	Paid to Date (82 & Prior)	3,235,388	3,117,302
(14)	Est Ult Paid for 1982 & Prior	3,565,536	3,429,202
(14a)	Paid Counts During Fiscal Year	3	3
		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	4,025,180	4,657,117
(16)	Lump Sum Ultimates	160,000	160,000
(17)	Ult Loss Including Lump Sums	**4,185,180**	**4,817,117**
(18)	Implied Tail	1.244	1.439
(19)	Ult Loss Inc Lump Sums @ 6/08	4,017,108	4,749,125

NOTES:

(1) From Section 4, Exhibit 1, Page 6
(2) = (Average of Section 4, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 4, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 4, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 4, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	188,569	12.147			
1993	2	151,483	11.928	0.803		
1994	3	104,509	11.557	0.690		
1995	4	93,428	11.445	0.894		
1996	5	94,858	11.460	1.015		
1997	6	35,075	10.465	0.370		
1998	7	103,538	11.548	2.952		
1999	8	96,697	11.479	0.934		
2000	9	73,478	11.205	0.760	n =	18
2001	10	66,717	11.108	0.908	S(x) =	36,009
2002	11	70,033	11.157	1.050	S(x-sq) =	72,036,489
2003	12	124,671	11.733	1.780	S(xy) =	415,225
2004	13	92,927	11.440	0.745	S(y) =	208
2005	14	283,599	12.555	3.052	D =	8,721
2006	15	99,838	11.511	0.352	slope =	0.004
2007	16	101,854	11.531	1.020	Avg Trend =	1.004
2008	17	110,209	11.610	1.082		
2009	18	118,086	11.679	1.071		
					Selected Trend:	**1.000**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 1.071 = 11.7 / 11.6

Commonwealth of Massachusetts Workers Compensation
Department of Corrections - Cluster 3
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	160,888	374,220	534,542	675,661	811,997	954,058	1,116,909	1,304,184	1,471,217	1,635,013	1,757,490	1,859,844	1,949,141	2,029,453	2,148,093	2,178,681	2,205,456	2,235,374	2,318,345	2,353,359	2,388,924	2,424,404	2,461,295	2,499,289	2,538,974	2,566,735	2,566,735
June-84	149,256	331,713	467,188	590,124	701,300	845,012	973,143	1,100,933	1,224,966	1,294,374	1,350,379	1,377,980	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	1,386,759	
June-85	278,562	647,928	925,510	1,158,844	1,390,342	1,636,071	1,810,725	1,948,970	2,082,835	2,178,082	2,319,274	2,402,755	2,445,792	2,537,445	2,628,105	2,728,723	2,834,546	2,914,527	2,998,669	3,082,607	3,169,057	3,258,902	3,352,791	3,451,011	3,510,756		
June-86	597,558	1,389,906	1,985,364	2,475,336	2,928,617	3,253,763	3,464,240	3,764,813	3,935,847	4,097,154	4,211,904	4,374,071	4,479,419	4,611,691	4,746,846	4,891,689	5,026,555	5,162,645	5,288,465	5,417,172	5,551,316	5,691,506	5,810,912	5,922,767			
June-87	463,134	1,057,238	1,522,773	1,934,421	2,261,898	2,491,874	2,659,729	2,799,050	2,901,503	3,021,876	3,103,922	3,271,697	3,314,455	3,410,332	3,452,632	3,495,733	3,527,775	3,544,280	3,544,280	3,544,280	3,544,280	3,544,280	3,544,280				
June-88	759,128	1,737,832	2,686,963	3,506,695	4,220,441	4,682,677	4,893,879	5,026,539	5,141,074	5,203,833	5,239,349	5,242,532	5,243,019	5,243,019	5,260,048	5,288,978	5,318,482	5,326,859	5,355,106	5,361,539	5,362,873	5,362,873					
June-89	680,636	1,738,554	2,435,784	3,057,497	3,492,498	3,784,686	4,070,002	4,251,487	4,490,766	4,687,032	4,846,109	4,998,762	5,152,745	5,318,978	5,453,186	5,596,167	5,742,890	5,832,925	5,929,581	6,031,181	6,137,243						
June-90	1,246,443	2,758,107	3,953,901	4,833,484	5,310,648	5,694,385	6,073,411	6,354,690	6,596,629	6,831,981	7,007,542	7,150,038	7,296,131	7,414,103	7,526,903	7,637,465	7,757,732	7,827,571	7,914,306	7,972,756							
June-91	1,000,517	2,462,230	3,477,661	4,227,150	4,729,807	5,106,814	5,363,266	5,600,518	5,854,394	6,102,795	6,340,515	6,600,177	6,839,938	7,070,212	7,325,430	7,572,623	7,805,418	8,019,651	8,226,001								
June-92	963,115	1,684,344	2,020,505	2,282,563	2,488,454	2,659,321	2,775,749	2,916,157	3,056,759	3,187,754	3,331,193	3,457,174	3,499,791	3,525,037	3,564,269	3,587,669	3,612,762	3,661,736									
June-93	801,947	1,527,666	1,907,058	2,209,630	2,348,676	2,429,818	2,460,521	2,483,853	2,505,893	2,512,506	2,512,506	2,515,387	2,517,666	2,518,289	2,518,289	2,518,289	2,518,289										
June-94	875,165	1,819,302	2,384,278	2,739,772	2,916,720	3,056,071	3,202,146	3,363,364	3,490,849	3,617,239	3,691,543	3,766,820	3,806,934	3,840,602	3,876,771	3,914,626											
June-95	1,066,149	2,306,245	2,941,602	3,493,104	3,941,201	4,297,491	4,665,184	4,944,044	5,062,779	5,143,804	5,226,875	5,309,969	5,385,490	5,413,698	5,413,698												
June-96	1,138,070	2,104,418	2,766,267	3,096,876	3,400,508	3,669,768	3,910,958	4,114,697	4,277,458	4,365,040	4,414,632	4,445,368	4,479,763	4,513,668													
June-97	1,262,694	2,691,990	3,329,480	3,919,297	4,322,162	4,636,666	4,943,217	5,112,087	5,158,225	5,193,663	5,222,438	5,229,461	5,229,461														
June-98	1,638,670	3,196,042	4,206,538	4,955,846	5,569,408	6,119,997	6,488,625	6,735,243	6,883,928	7,016,935	7,118,193	7,210,560															
June-99	1,336,118	2,975,082	4,075,622	4,979,874	5,739,985	6,193,457	6,542,142	6,776,193	6,959,053	7,099,219	7,215,948																
June-00	1,879,439	3,995,519	5,337,812	6,367,281	6,972,119	7,368,789	7,595,232	7,618,785	7,768,614	7,812,460																	
June-01	2,226,443	4,927,848	6,754,618	8,128,201	8,912,524	9,501,364	9,916,815	10,090,085	10,093,706																		
June-02	2,224,570	4,640,913	6,255,872	7,251,577	7,851,163	8,205,089	8,352,527	8,442,240																			
June-03	2,532,484	5,029,957	6,520,088	7,358,736	7,963,011	8,162,267	8,271,915																				
June-04	2,147,040	4,500,943	5,865,460	6,696,306	7,139,497	7,374,551																					
June-05	2,241,999	4,614,395	5,992,285	6,941,629	7,354,316																						
June-06	1,249,906	3,009,799	4,221,387	4,926,296																							
June-07	1,380,680	2,815,182	3,556,899																								
June-08	1,238,290	2,624,403																									
June-09	1,050,261																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.326	1.428	1.264	1.202	1.175	1.171	1.168	1.128	1.111	1.075	1.058	1.048	1.041	1.058	1.014	1.012	1.014	1.037	1.015	1.015	1.015	1.015	1.015	1.016	1.011	1.000
June-84	2.222	1.408	1.263	1.188	1.205	1.152	1.131	1.113	1.057	1.043	1.020	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
June-85	2.326	1.428	1.252	1.200	1.177	1.107	1.076	1.069	1.046	1.065	1.036	1.018	1.037	1.036	1.038	1.039	1.028	1.029	1.028	1.028	1.028	1.029	1.029	1.017		
June-86	2.326	1.428	1.247	1.183	1.111	1.065	1.087	1.045	1.041	1.028	1.039	1.024	1.030	1.029	1.031	1.028	1.027	1.024	1.024	1.025	1.025	1.021	1.019			
June-87	2.283	1.440	1.270	1.169	1.102	1.067	1.052	1.037	1.041	1.027	1.054	1.013	1.029	1.012	1.012	1.009	1.005	1.000	1.000	1.000	1.000	1.000				
June-88	2.289	1.546	1.305	1.204	1.110	1.045	1.027	1.023	1.012	1.007	1.001	1.000	1.000	1.003	1.005	1.006	1.002	1.005	1.001	1.000	1.000					
June-89	2.554	1.401	1.255	1.142	1.084	1.075	1.045	1.056	1.044	1.034	1.032	1.031	1.032	1.025	1.026	1.026	1.016	1.017	1.017	1.018						
June-90	2.213	1.434	1.222	1.099	1.072	1.067	1.046	1.038	1.036	1.026	1.020	1.020	1.016	1.015	1.015	1.016	1.009	1.011	1.007							
June-91	2.461	1.412	1.216	1.119	1.080	1.050	1.044	1.045	1.042	1.039	1.041	1.036	1.034	1.036	1.034	1.031	1.027	1.026								
June-92	1.749	1.200	1.130	1.090	1.069	1.044	1.051	1.048	1.043	1.045	1.038	1.012	1.007	1.011	1.007	1.007	1.014									
June-93	1.905	1.248	1.159	1.063	1.035	1.013	1.009	1.009	1.003	1.000	1.001	1.001	1.000	1.000	1.000	1.000										
June-94	2.079	1.311	1.149	1.065	1.048	1.048	1.050	1.038	1.036	1.021	1.020	1.011	1.009	1.009	1.010											
June-95	2.163	1.275	1.187	1.128	1.090	1.086	1.060	1.024	1.016	1.016	1.016	1.014	1.005	1.000												
June-96	1.849	1.315	1.120	1.098	1.079	1.066	1.052	1.040	1.020	1.011	1.007	1.008	1.008													
June-97	2.132	1.237	1.177	1.103	1.073	1.066	1.034	1.009	1.007	1.006	1.001	1.000														
June-98	1.950	1.316	1.178	1.124	1.099	1.060	1.038	1.022	1.019	1.014	1.013															
June-99	2.227	1.370	1.222	1.153	1.079	1.056	1.036	1.027	1.020	1.016																
June-00	2.126	1.336	1.193	1.095	1.057	1.031	1.003	1.020	1.006																	
June-01	2.213	1.371	1.203	1.096	1.066	1.044	1.017	1.000																		
June-02	2.086	1.348	1.159	1.083	1.045	1.018	1.011																			
June-03	1.986	1.296	1.129	1.082	1.025	1.013																				
June-04	2.096	1.303	1.142	1.066	1.033																					
June-05	2.058	1.299	1.158	1.059																						
June-06	2.408	1.403	1.167																							
June-07	2.039	1.263																								
June-08	2.119																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.161	1.353	1.199	1.122	1.087	1.064	1.052	1.042	1.033	1.028	1.025	1.016	1.018	1.018	1.016	1.016	1.014	1.017	1.012	1.012	1.011	1.013	1.016	1.011	1.005	1.000	
Latest 5	2.144	1.313	1.151	1.077	1.045	1.032	1.021	1.016	1.014	1.013	1.012	1.007	1.006	1.011	1.013	1.016	1.013	1.012	1.010	1.014	1.011	1.013					
Latest 3	2.189	1.322	1.156	1.069	1.034	1.025	1.010	1.016	1.015	1.012	1.007	1.007	1.007	1.003	1.005	1.013	1.017	1.018	1.009	1.006	1.008	1.017	1.016	1.011			
Volume Wtd																											
All Yrs	2.123	1.339	1.185	1.106	1.070	1.051	1.038	1.031	1.027	1.024	1.022	1.017	1.018	1.018	1.018	1.018	1.015	1.017	1.012	1.013	1.012	1.015	1.019	1.014	1.007		
Latest 5	2.127	1.310	1.150	1.078	1.046	1.032	1.020	1.015	1.014	1.013	1.011	1.007	1.006	1.015	1.017	1.020	1.014	1.014	1.011	1.014	1.012						
Latest 3	2.184	1.319	1.155	1.070	1.034	1.026	1.011	1.014	1.015	1.013	1.008	1.007	1.007	1.003	1.006	1.019	1.017	1.018	1.009	1.007	1.010	1.017	1.020				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	*2.168*	*1.342*	*1.185*	*1.085*	*1.054*	*1.054*	*1.033*	*1.030*	*1.020*	*1.019*	*1.014*	*1.017*	*1.014*	*1.020*	*1.019*	*1.019*	*1.018*	*1.011*	*1.014*	*1.011*	*1.018*	*1.017*	*1.019*	*1.008*	*1.004*	*1.046*	
Selected	2.165	1.339	1.185	1.092	1.058	1.051	1.036	1.023	1.021	1.018	1.014	1.017	1.018	1.018	1.018	1.018	1.017	1.012	1.011	1.014	1.018	1.017	1.016	1.008	1.004	1.004	1.040
FacToUlt	5.960	2.753	2.057	1.736	1.590	1.502	1.430	1.380	1.349	1.322	1.298	1.280	1.259	1.237	1.215	1.194	1.172	1.152	1.139	1.127	1.111	1.092	1.074	1.057	1.048	1.044	1.040
Percent of Ult	16.8%	36.3%	48.6%	57.6%	62.9%	66.6%	69.9%	72.5%	74.1%	75.7%	77.0%	78.1%	79.4%	80.8%	82.3%	83.8%	85.3%	86.8%	87.8%	88.7%	90.0%	91.6%	93.1%	94.6%	95.4%	95.8%	96.1%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	4,017,108	4,749,125	4,185,180	4,817,117	168,072	4.2%	67,992	1.4%
6/30/82-83	3,648,149	3,928,776	3,560,388	3,834,264	(87,761)	-2.4%	(94,512)	-2.4%
6/30/83-84	1,467,182	1,534,898	1,429,989	1,495,988	(37,193)	-2.5%	(38,910)	-2.5%
6/30/84-85	4,176,000	4,413,000	4,211,000	4,397,000	35,000	0.8%	(16,000)	-0.4%
6/30/85-86	7,454,354	7,847,000	7,364,853	7,752,000	(89,501)	-1.2%	(95,000)	-1.2%
6/30/86-87	3,924,000	3,963,000	3,924,000	3,963,000	0	0.0%	0	0.0%
6/30/87-88	6,718,000	7,004,000	6,594,000	6,865,000	(124,000)	-1.8%	(139,000)	-2.0%
6/30/88-89	7,329,000	8,102,000	7,353,000	8,118,000	24,000	0.3%	16,000	0.2%
6/30/89-90	9,927,000	9,987,000	9,884,000	9,930,000	(43,000)	-0.4%	(57,000)	-0.6%
6/30/90-91	10,454,000	14,792,000	10,813,000	14,934,000	359,000	3.4%	142,000	1.0%
6/30/91-92	4,637,000	4,764,000	4,602,000	4,611,000	(35,000)	-0.8%	(153,000)	-3.2%
6/30/92-93	3,660,000	3,930,000	3,589,000	3,611,000	(71,000)	-1.9%	(319,000)	-8.1%
6/30/93-94	5,580,000	5,852,000	5,509,000	5,533,000	(71,000)	-1.3%	(319,000)	-5.5%
6/30/94-95	7,490,000	7,745,000	7,313,000	7,332,000	(177,000)	-2.4%	(413,000)	-5.3%
6/30/95-96	6,128,000	6,445,000	6,041,000	6,083,000	(87,000)	-1.4%	(362,000)	-5.6%
6/30/96-97	7,517,000	7,884,000	7,364,000	7,421,000	(153,000)	-2.0%	(463,000)	-5.9%
6/30/97-98	9,752,000	10,117,000	9,685,000	9,698,000	(67,000)	-0.7%	(419,000)	-4.1%
6/30/98-99	9,650,000	10,120,000	9,564,000	9,608,000	(86,000)	-0.9%	(512,000)	-5.1%
6/30/99-00	10,860,000	11,324,000	10,630,000	10,672,000	(230,000)	-2.1%	(652,000)	-5.8%
6/30/00-01	14,678,000	15,714,000	14,138,000	14,874,000	(540,000)	-3.7%	(840,000)	-5.3%
6/30/01-02	12,512,000	12,930,000	12,074,000	12,104,000	(438,000)	-3.5%	(826,000)	-6.4%
6/30/02-03	12,980,000	13,449,000	12,366,000	12,402,000	(614,000)	-4.7%	(1,047,000)	-7.8%
6/30/03-04	11,908,000	12,899,000	11,547,000	11,618,000	(361,000)	-3.0%	(1,281,000)	-9.9%
6/30/04-05	12,619,000	14,093,000	12,185,000	13,339,000	(434,000)	-3.4%	(754,000)	-5.4%
6/30/05-06	10,461,000	11,857,000	9,952,000	10,946,000	(509,000)	-4.9%	(911,000)	-7.7%
6/30/06-07	10,054,000	12,100,000	9,316,000	11,126,000	(738,000)	-7.3%	(974,000)	-8.0%
6/30/07-08	11,997,000	14,708,000	10,540,000	13,763,000	(1,457,000)	-12.1%	(945,000)	-6.4%
6/30/08-09								
Total	221,597,792	242,251,799	215,734,409	230,847,369	(5,863,383)	-2.6%	(11,404,430)	-4.7%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 4, Exhibit 1, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	3,235,388	1.342	4,341,148	0.0%	0.0%	0	160,000	160,000	3.7%	1.000	160,000	160,000	160,000
6/30/82-83	2,566,735	1.352	3,470,599	0.0%	0.0%	0	181,081	181,081	5.2%	1.000	181,081	181,081	181,081
6/30/83-84	1,386,759	1.044	1,448,154	0.0%	0.0%	0	18,501	18,501	1.3%	1.000	18,501	18,501	18,501
6/30/84-85	3,510,756	1.363	4,785,105	0.0%	0.0%	0	180,850	180,850	3.8%	1.000	180,850	180,850	180,850
6/30/85-86	5,922,767	1.480	8,763,158	0.0%	0.0%	0	270,000	270,000	3.1%	1.000	270,000	270,000	270,000
6/30/86-87	3,544,280	1.074	3,806,337	0.0%	0.0%	0	340,360	340,360	8.9%	1.000	340,360	340,360	340,360
6/30/87-88	5,362,873	1.146	6,147,728	0.0%	0.0%	0	717,001	717,001	11.7%	1.000	717,001	717,001	717,001
6/30/88-89	6,137,243	1.222	7,502,143	0.0%	0.0%	0	616,200	616,200	8.2%	1.000	616,200	616,200	616,200
6/30/89-90	7,972,756	1.127	8,985,054	0.0%	0.0%	0	944,900	944,900	10.5%	1.000	944,900	944,900	932,400
6/30/90-91	8,226,001	1.708	14,052,116	0.0%	0.0%	0	881,768	881,768	6.3%	1.000	881,768	881,768	871,768
6/30/91-92	3,661,736	1.152	4,219,066	0.0%	0.0%	0	383,251	383,251	9.1%	1.000	383,251	383,251	383,251
6/30/92-93	2,518,289	1.172	2,951,976	0.0%	0.0%	0	637,301	637,301	21.6%	1.000	637,301	637,301	637,301
6/30/93-94	3,914,626	1.194	4,672,361	0.0%	0.0%	0	836,675	836,675	17.9%	1.000	836,675	836,675	839,031
6/30/94-95	5,413,698	1.215	6,579,476	0.0%	0.0%	9	732,613	732,622	11.1%	1.003	734,510	733,566	739,798
6/30/95-96	4,513,668	1.237	5,584,745	0.1%	0.1%	5,593	452,000	457,593	8.2%	1.005	454,346	455,969	461,071
6/30/96-97	5,229,461	1.259	6,586,401	0.1%	0.2%	13,182	767,601	780,783	11.9%	1.008	774,105	777,444	787,296
6/30/97-98	7,210,560	1.280	9,231,613	0.2%	0.4%	36,940	431,718	468,658	5.1%	1.014	437,613	453,135	465,736
6/30/98-99	7,215,948	1.298	9,366,122	0.2%	0.6%	56,210	168,052	224,262	2.4%	1.021	171,633	197,947	212,743
6/30/99-00	7,812,460	1.322	10,326,392	0.2%	0.8%	83,980	256,602	340,582	3.3%	1.040	266,958	303,770	326,854
6/30/00-01	10,093,706	1.349	13,617,103	0.3%	1.1%	151,593	397,283	548,876	4.0%	1.071	425,349	548,876	586,845
6/30/01-02	8,442,240	1.380	11,647,313	0.2%	1.3%	152,959	273,881	426,840	3.7%	1.105	302,539	426,840	463,472
6/30/02-03	8,271,915	1.430	11,828,494	0.2%	1.5%	178,995	358,503	537,498	4.5%	1.145	410,358	537,498	568,635
6/30/03-04	7,374,551	1.502	11,079,625	0.2%	1.7%	189,822	277,430	467,252	4.2%	1.240	344,061	467,252	461,245
6/30/04-05	7,354,316	1.590	11,690,114	0.4%	2.1%	247,042	247,549	494,591	4.2%	1.493	369,564	494,591	544,880
6/30/05-06	4,926,296	1.736	8,553,550	0.6%	2.7%	232,080	173,004	405,084	4.7%	1.883	325,756	405,084	361,855
6/30/06-07	3,556,899	2.057	7,315,585	0.7%	3.4%	249,700	105,500	355,200	4.9%	3.527	372,105	355,200	400,000
6/30/07-08	2,624,403	2.753	7,225,640	0.7%	4.1%	298,663	36,001	334,664	4.6%	13.012	468,429	334,664	500,000
6/30/08-09	1,050,261	5.960	6,259,422	0.8%	5.0%	310,186	0	310,186	5.0%	64.277	0	310,186	
Total	149,050,590		212,036,539			2,206,953	10,845,625	13,052,578	6.2%		12,025,211	12,969,910	13,028,176

NOTES:
(2) From Section 4, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 4, Exhibit 1, Page 2, Column 6
(5) From Section 4, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 4, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 4, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensation
Department of Corrections - Cluster 3
INDEMNITY
Lump Sum Developmen
Incremental Lump Sum Payments

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0	0	0	0	0	0	0	0	15,000	0	0	0	57,500	26,000	0	60,000	0	0	0	0	0	0	1,500	0	0	0	0	0
Jun-83	0	0	0	0	0	0	0	17,500	0	35,000	41,581	41,000	46,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	0	0	18,500	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-85	0	0	0	11,000	0	0	20,000	0	69,000	0	42,000	0	38,850	0	0	0	0	0	0	0	0	0	0	0	0			
Jun-86	0	0	0	30,000	68,000	10,000	40,000	27,000	50,000	0	45,000	0	0	0	0	0	0	0	0	0	0	0	0	0				
Jun-87	0	20,000	25,000	22,500	22,500	27,000	38,250	25,001	11,250	85,000	0	37,000	14,859	0	0	0	0	12,000	0	0	0	0	0					
Jun-88	0	31,500	17,000	20,000	40,000	191,500	199,000	23,000	102,000	30,000	60,000	0	0	0	0	0	0	3,000	0	1	0	0						
Jun-89	0	5,000	70,500	4,500	125,000	86,200	157,000	70,000	30,000	49,500	0	0	0	0	0	18,500	0	0	0	0	0							
Jun-90	0	16,700	104,500	133,000	151,700	139,500	73,000	98,000	40,000	170,000	1,000	0	0	0	0	0	0	0	5,000	12,500								
Jun-91	0	19,996	27,700	321,471	173,500	181,000	68,000	0	40,000	40,000	1	0	0	0	0	100	0	0	10,000									
Jun-92	0	30,500	94,000	95,000	50,000	90,000	0	0	0	0	0	11,250	0	0	12,501	0	0	0										
Jun-93	0	122,600	116,000	160,700	27,000	80,001	119,000	0	0	0	12,000	0	0	0	0	0	0											
Jun-94	52,000	162,000	181,925	221,000	101,000	77,500	7,500	7,500	0	15,750	0	4,500	6,000	0	0	0												
Jun-95	18,613	172,000	187,000	82,000	135,000	70,000	10,000	0	0	25,000	0	1,000	0	32,000	0													
Jun-96	0	35,000	32,000	335,000	0	0	0	0	12,000	15,000	23,000	0	0	0														
Jun-97	59,500	268,000	190,500	120,000	43,000	24,000	16,000	20,600	0	9,001	0	17,000	0															
Jun-98	56,500	160,501	125,715	0	10,000	29,000	20,800	12,201	9,000	8,001	0	0																
Jun-99	0	0	20,000	1	91,750	12,800	20,500	15,000	8,001	0	0																	
Jun-00	0	27,501	5,000	85,500	78,101	17,500	28,500	4,500	10,000	0																		
Jun-01	8,490	1	74,500	89,900	93,000	73,389	33,503	20,500	4,000																			
Jun-02	0	10,000	43,880	99,500	47,501	66,000	7,000	0																				
Jun-03	0	58,500	110,001	81,000	77,501	21,500	10,001																					
Jun-04	0	21,923	84,502	80,002	26,003	65,000																						
Jun-05	0	12,500	108,002	89,501	37,546																							
Jun-06	0	35,001	24,502	113,501																								
Jun-07	0	36,000	69,500																									
Jun-08	0	36,001																										
Jun-09	0																											

Cumulative Lump Sum Payments

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*	*336*
All Prior Yrs	0	0	0	0	0	0	0	0	15,000	15,000	15,000	15,000	72,500	98,500	98,500	158,500	158,500	158,500	158,500	158,500	158,500	158,500	160,000	160,000	160,000	160,000	160,000	160,000
Jun-83	0	0	0	0	0	0	0	17,500	17,500	52,500	94,081	135,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	
Jun-84	0	0	0	0	0	0	0	0	18,500	18,500	18,500	18,500	18,500	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501		
Jun-85	0	0	0	11,000	11,000	11,000	31,000	31,000	100,000	100,000	142,000	142,000	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850			
Jun-86	0	0	0	30,000	98,000	108,000	148,000	175,000	225,000	225,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000				
Jun-87	0	20,000	45,000	67,500	90,000	117,000	155,250	180,251	191,501	276,501	276,501	313,501	328,360	328,360	328,360	328,360	328,360	340,360	340,360	340,360	340,360	340,360	340,360					
Jun-88	0	31,500	48,500	68,500	108,500	300,000	499,000	522,000	624,000	654,000	714,000	714,000	714,000	714,000	714,000	714,000	714,000	717,000	717,000	717,001	717,001	717,001						
Jun-89	0	5,000	75,500	80,000	205,000	291,200	448,200	518,200	548,200	597,700	597,700	597,700	597,700	597,700	597,700	616,200	616,200	616,200	616,200	616,200	616,200							
Jun-90	0	16,700	121,200	254,200	405,900	545,400	618,400	716,400	756,400	926,400	927,400	927,400	927,400	927,400	927,400	927,400	927,400	927,400	932,400	944,900								
Jun-91	0	19,996	47,696	369,167	542,667	723,667	791,667	791,667	831,667	871,667	871,668	871,668	871,668	871,668	871,668	871,768	871,768	871,768	881,768									
Jun-92	0	30,500	124,500	219,500	269,500	359,500	359,500	359,500	359,500	359,500	359,500	370,750	370,750	370,750	383,251	383,251	383,251	383,251										
Jun-93	0	122,600	238,600	399,300	426,300	506,301	625,301	625,301	625,301	625,301	637,301	637,301	637,301	637,301	637,301	637,301	637,301											
Jun-94	52,000	214,000	395,925	616,925	717,925	795,425	802,925	810,425	810,425	826,175	826,175	830,675	836,675	836,675	836,675	836,675												
Jun-95	18,613	190,613	377,613	459,613	594,613	664,613	674,613	674,613	674,613	699,613	699,613	700,613	700,613	732,613	732,613													
Jun-96	0	35,000	67,000	402,000	402,000	402,000	402,000	402,000	414,000	429,000	452,000	452,000	452,000	452,000														
Jun-97	59,500	327,500	518,000	638,000	681,000	705,000	721,000	741,600	741,600	750,601	750,601	767,601	767,601															
Jun-98	56,500	217,001	342,716	342,716	352,716	381,716	402,516	414,717	423,717	431,718	431,718	431,718																
Jun-99	0	0	20,000	20,001	111,751	124,551	145,051	160,051	168,052	168,052	168,052																	
Jun-00	0	27,501	32,501	118,001	196,102	213,602	242,102	246,602	256,602	256,602																		
Jun-01	8,490	8,491	82,991	172,891	265,891	339,280	372,783	393,283	397,283																			
Jun-02	0	10,000	53,880	153,380	200,881	266,881	273,881	273,881																				
Jun-03	0	58,500	168,501	249,501	327,002	348,502	358,503																					
Jun-04	0	21,923	106,425	186,427	212,430	277,430																						
Jun-05	0	12,500	120,502	210,003	247,549																							
Jun-06	0	35,001	59,503	173,004																								
Jun-07	0	36,000	105,500																									
Jun-08	0	36,001																										
Jun-09	0																											

Commonwealth of Massachusetts Workers Compensation
Department of Corrections - Cluster 3
INDEMNITY
Lump Sum Developmen
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sum

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.013	0.006	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.010	0.012	0.012	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.002	0.000	0.000	0.004	0.000	0.014	0.000	0.009	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.000	0.003	0.008	0.001	0.005	0.003	0.006	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
Jun-87	0.000	0.005	0.007	0.006	0.006	0.007	0.010	0.007	0.003	0.022	0.000	0.010	0.004	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.005	0.003	0.003	0.007	0.031	0.032	0.004	0.017	0.005	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						
Jun-89	0.000	0.001	0.009	0.001	0.017	0.011	0.021	0.009	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000							
Jun-90	0.000	0.002	0.012	0.015	0.017	0.016	0.008	0.011	0.004	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001								
Jun-91	0.000	0.001	0.002	0.023	0.012	0.013	0.005	0.000	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001									
Jun-92	0.000	0.007	0.022	0.023	0.012	0.021	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.003	0.000	0.000	0.000										
Jun-93	0.000	0.042	0.039	0.054	0.009	0.027	0.040	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000											
Jun-94	0.011	0.035	0.039	0.047	0.022	0.017	0.002	0.002	0.000	0.003	0.000	0.001	0.001	0.000	0.000	0.000												
Jun-95	0.003	0.026	0.028	0.012	0.021	0.011	0.002	0.000	0.000	0.004	0.000	0.000	0.000	0.005	0.000													
Jun-96	0.000	0.006	0.006	0.060	0.000	0.000	0.000	0.000	0.002	0.003	0.004	0.000	0.000	0.000														
Jun-97	0.009	0.041	0.029	0.018	0.007	0.004	0.002	0.003	0.000	0.001	0.000	0.003	0.000															
Jun-98	0.006	0.017	0.014	0.000	0.001	0.003	0.002	0.001	0.001	0.001	0.000	0.000																
Jun-99	0.000	0.000	0.002	0.000	0.010	0.001	0.002	0.002	0.001	0.000	0.000																	
Jun-00	0.000	0.003	0.000	0.008	0.008	0.002	0.003	0.000	0.001	0.000																		
Jun-01	0.001	0.000	0.005	0.007	0.007	0.005	0.002	0.002	0.000																			
Jun-02	0.000	0.001	0.004	0.009	0.004	0.006	0.001	0.000																				
Jun-03	0.000	0.005	0.009	0.007	0.007	0.002	0.001																					
Jun-04	0.000	0.002	0.008	0.007	0.002	0.006																						
Jun-05	0.000	0.001	0.009	0.008	0.003																							
Jun-06	0.000	0.004	0.003	0.013																								
Jun-07	0.000	0.005	0.010																									
Jun-08	0.000	0.005																										
Jun-09	0.000																											
Averages		*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
Simple Avg																												
All Yrs (ex P)	0.001	0.008	0.010	0.014	0.008	0.008	0.007	0.002	0.004	0.004	0.003	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Latest 5	0.000	0.003	0.008	0.009	0.005	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Latest 3	0.000	0.005	0.007	0.009	0.004	0.004	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Olympic Avg																												
All Yrs (ex P)	0.001	0.007	0.010	0.012	0.007	0.008	0.005	0.002	0.003	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Latest 10	0.000	0.003	0.006	0.007	0.005	0.004	0.002	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000										
Latest 5	0.000	0.004	0.009	0.008	0.005	0.004	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Dev Factor Selection																												
Prior	*NA*	*0.008*	*0.006*	*0.007*	*0.006*	*0.004*	*0.002*	*0.002*	*0.002*	*0.003*	*0.002*	*0.002*	*0.002*	*0.001*	*0.001*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	
Selected	NA	0.008	0.007	0.007	0.006	0.004	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FacToUlt	NA	0.050	0.041	0.034	0.027	0.021	0.017	0.015	0.013	0.011	0.008	0.006	0.004	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Commonwealth of Massachusetts Workers Compensation
Department of Corrections - Cluster 3
INDEMNITY
Paid Loss Development
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	15,000	15,000	15,000	15,000	72,500	98,500	98,500	158,500	158,500	158,500	158,500	158,500	158,500	158,500	160,000	160,000	160,000	160,000	160,000	160,000
Jun-83	0	0	0	0	0	0	0	17,500	17,500	52,500	94,081	135,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	181,081	
Jun-84	0	0	0	0	0	0	0	0	18,500	18,500	18,500	18,500	18,500	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501	18,501		
Jun-85	0	0	0	11,000	11,000	11,000	31,000	31,000	100,000	100,000	142,000	142,000	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850	180,850			
Jun-86	0	0	0	30,000	98,000	108,000	148,000	175,000	225,000	225,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000				
Jun-87	0	20,000	45,000	67,500	90,000	117,000	155,250	180,251	191,501	276,501	276,501	313,501	328,360	328,360	328,360	328,360	328,360	340,360	340,360	340,360	340,360	340,360	340,360					
Jun-88	0	31,500	48,500	68,500	108,500	300,000	499,000	522,000	624,000	654,000	714,000	714,000	714,000	714,000	714,000	714,000	714,000	717,000	717,000	717,001	717,001	717,001						
Jun-89	0	5,000	75,500	80,000	205,000	291,200	448,200	518,200	548,200	597,700	597,700	597,700	597,700	597,700	597,700	616,200	616,200	616,200	616,200	616,200	616,200							
Jun-90	0	16,700	121,200	254,200	405,900	545,400	618,400	716,400	756,400	926,400	927,400	927,400	927,400	927,400	927,400	927,400	927,400	927,400	932,400	944,900								
Jun-91	0	19,996	47,696	369,167	542,667	723,667	791,667	791,667	831,667	871,667	871,668	871,668	871,668	871,668	871,668	871,768	871,768	871,768	881,768									
Jun-92	0	30,500	124,500	219,500	269,500	359,500	359,500	359,500	359,500	359,500	359,500	370,750	370,750	370,750	383,251	383,251	383,251	383,251										
Jun-93	0	122,600	238,600	399,300	426,300	506,301	625,301	625,301	625,301	625,301	637,301	637,301	637,301	637,301	637,301	637,301	637,301											
Jun-94	52,000	214,000	395,925	616,925	717,925	795,425	802,925	810,425	810,425	826,175	826,175	830,675	836,675	836,675	836,675	836,675												
Jun-95	18,613	190,613	377,613	459,613	594,613	664,613	674,613	674,613	674,613	699,613	699,613	700,613	700,613	732,613	732,613													
Jun-96	0	35,000	67,000	402,000	402,000	402,000	402,000	402,000	414,000	429,000	452,000	452,000	452,000	452,000														
Jun-97	59,500	327,500	518,000	638,000	681,000	705,000	721,000	741,600	741,600	750,601	750,601	767,601	767,601															
Jun-98	56,500	217,001	342,716	342,716	352,716	381,716	402,516	414,717	423,717	431,718	431,718	431,718																
Jun-99	0	0	20,000	20,001	111,751	124,551	145,051	160,051	168,052	168,052	168,052																	
Jun-00	0	27,501	32,501	118,001	196,102	213,602	242,102	246,602	256,602	256,602																		
Jun-01	8,490	8,491	82,991	172,891	265,891	339,280	372,783	393,283	397,283																			
Jun-02	0	10,000	53,880	153,380	200,881	266,881	273,881	273,881																				
Jun-03	0	58,500	168,501	249,501	327,002	348,502	358,503																					
Jun-04	0	21,923	106,425	186,427	212,430	277,430																						
Jun-05	0	12,500	120,502	210,003	247,549																							
Jun-06	0	35,001	59,503	173,004																								
Jun-07	0	36,000	105,500																									
Jun-08	0	36,001																										
Jun-09	0																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs									1.000	1.000	1.000	4.833	1.359	1.000	1.609	1.000	1.000	1.000	1.000	1.000	1.000	1.009	1.000	1.000	1.000	1.000	1.000	
Jun-83								1.000	3.000	1.792	1.436	1.341	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84									1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Jun-85				1.000	1.000	2.818	1.000	3.226	1.000	1.420	1.000	1.274	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Jun-86				3.267	1.102	1.370	1.182	1.286	1.000	1.200	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Jun-87		2.250	1.500	1.333	1.300	1.327	1.161	1.062	1.444	1.000	1.134	1.047	1.000	1.000	1.000	1.000	1.037	1.000	1.000	1.000	1.000	1.000						
Jun-88		1.540	1.412	1.584	2.765	1.663	1.046	1.195	1.048	1.092	1.000	1.000	1.000	1.000	1.000	1.000	1.004	1.000	1.000	1.000	1.000							
Jun-89		15.100	1.060	2.563	1.420	1.539	1.156	1.058	1.090	1.000	1.000	1.000	1.000	1.000	1.031	1.000	1.000	1.000	1.000	1.000								
Jun-90		7.257	2.097	1.597	1.344	1.134	1.158	1.056	1.225	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.005	1.013									
Jun-91		2.385	7.740	1.470	1.334	1.094	1.000	1.051	1.048	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.011										
Jun-92		4.082	1.763	1.228	1.334	1.000	1.000	1.000	1.000	1.000	1.031	1.000	1.000	1.034	1.000	1.000	1.000											
Jun-93		1.946	1.674	1.068	1.188	1.235	1.000	1.000	1.000	1.019	1.000	1.000	1.000	1.000	1.000	1.000												
Jun-94	4.115	1.850	1.558	1.164	1.108	1.009	1.009	1.000	1.019	1.000	1.005	1.007	1.000	1.000	1.000													
Jun-95	10.241	1.981	1.217	1.294	1.118	1.015	1.000	1.000	1.037	1.000	1.001	1.000	1.046	1.000														
Jun-96		1.914	6.000	1.000	1.000	1.000	1.000	1.030	1.036	1.054	1.000	1.000	1.000															
Jun-97	5.504	1.582	1.232	1.067	1.035	1.023	1.029	1.000	1.012	1.000	1.023	1.000																
Jun-98	3.841	1.579	1.000	1.029	1.082	1.054	1.030	1.022	1.019	1.000	1.000																	
Jun-99			1.000	5.587	1.115	1.165	1.103	1.050	1.000	1.000																		
Jun-00		1.182	3.631	1.662	1.089	1.133	1.019	1.041	1.000																			
Jun-01	1.000	9.774	2.083	1.538	1.276	1.099	1.055	1.010																				
Jun-02		5.388	2.847	1.310	1.329	1.026	1.000																					
Jun-03		2.880	1.481	1.311	1.066	1.029																						
Jun-04		4.854	1.752	1.139	1.306																							
Jun-05		9.640	1.743	1.179																								
Jun-06		1.700	2.907																									
Jun-07		2.931																										
Jun-08																												

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	4.940	4.091	2.285	1.638	1.265	1.249	1.053	1.171	1.165	1.093	1.039	1.045	1.003	1.003	1.003	1.000	1.004	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Latest 5		4.401	2.146	1.295	1.213	1.090	1.041	1.024	1.013	1.011	1.006	1.001	1.009	1.007	1.000	1.000	1.001	1.003	1.003	1.000	1.000	1.000	1.000					
Latest 3		4.757	2.134	1.210	1.233	1.051	1.025	1.034	1.006	1.000	1.008	1.000	1.015	1.000	1.000	1.000	1.000	1.006	1.004	1.000	1.000	1.000	1.000	1.000				
Volume Wtd																												
All Yrs (ex P)	7.567	2.188	1.721	1.276	1.203	1.121	1.044	1.052	1.062	1.028	1.014	1.014	1.005	1.002	1.003	1.000	1.003	1.004	1.004	1.000	1.000	1.000	1.000	1.000	1.000			
Latest 5		3.419	1.911	1.290	1.202	1.077	1.036	1.016	1.016	1.009	1.007	1.002	1.011	1.004	1.000	1.000	1.001	1.004	1.004	1.000	1.000							
Latest 3		3.419	1.988	1.218	1.206	1.053	1.028	1.028	1.009	1.000	1.010	1.000	1.016	1.000	1.000	1.000	1.000	1.006	1.006	1.000	1.000	1.000	1.000					

Dev Factor Selection																												
Prior	4.940	3.689	1.658	1.492	1.174	1.084	1.053	1.034	1.024	1.023	1.006	1.003	1.003	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	4.940	3.689	1.873	1.261	1.204	1.083	1.036	1.032	1.029	1.019	1.008	1.005	1.003	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
FacToUlt	64.277	13.012	3.527	1.883	1.493	1.240	1.145	1.105	1.071	1.040	1.021	1.014	1.008	1.005	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent of Ult	1.6%	7.7%	28.4%	53.1%	67.0%	80.6%	87.4%	90.5%	93.4%	96.1%	97.9%	98.7%	99.2%	99.5%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	3.9%	0.0%	1.3%	0.8%	1.000	1.000
324	96.1%	0.4%	3.9%	0.1%	0.1%	0.981	0.971
312	95.8%	0.4%	4.2%	0.1%	0.1%	0.946	0.921
300	95.4%	0.8%	4.6%	0.3%	0.2%	0.916	0.878
288	94.6%	1.5%	5.4%	0.6%	0.4%	0.895	0.848
276	93.1%	1.5%	6.9%	0.6%	0.4%	0.887	0.838
264	91.6%	1.6%	8.4%	0.7%	0.5%	0.876	0.823
252	90.0%	1.3%	10.0%	0.6%	0.4%	0.864	0.808
240	88.7%	0.9%	11.3%	0.4%	0.3%	0.848	0.785
228	87.8%	1.0%	12.2%	0.5%	0.3%	0.828	0.758
216	86.8%	1.5%	13.2%	0.7%	0.5%	0.810	0.735
204	85.3%	1.5%	14.7%	0.8%	0.6%	0.799	0.721
192	83.8%	1.5%	16.2%	0.8%	0.6%	0.788	0.708
180	82.3%	1.5%	17.7%	0.8%	0.6%	0.777	0.694
168	80.8%	1.4%	19.2%	0.8%	0.6%	0.765	0.678
156	79.4%	1.3%	20.6%	0.8%	0.6%	0.752	0.663
144	78.1%	1.1%	21.9%	0.7%	0.5%	0.739	0.646
132	77.0%	1.4%	23.0%	0.9%	0.8%	0.723	0.626
120	75.7%	1.5%	24.3%	1.1%	0.9%	0.711	0.612
108	74.1%	1.6%	25.9%	1.2%	1.0%	0.701	0.601
96	72.5%	2.6%	27.5%	1.9%	1.6%	0.693	0.591
84	69.9%	3.4%	30.1%	2.6%	2.3%	0.693	0.593
72	66.6%	3.6%	33.4%	2.9%	2.6%	0.698	0.601
60	62.9%	5.3%	37.1%	4.5%	4.1%	0.701	0.607
48	57.6%	9.0%	42.4%	7.8%	7.3%	0.713	0.622
36	48.6%	12.3%	51.4%	11.2%	10.6%	0.737	0.654
24	36.3%	19.5%	63.7%	18.4%	17.9%	0.761	0.686
12	16.8%	16.8%	83.2%	16.5%	16.3%	0.790	0.723
Total		100.0%					

NOTES:

(2) = 1 / Section 4, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	789,792	1,421,729		745,193	1,341,446
6/30/82-83	812,572	1,086,448	0.981	796,792	1,065,350
6/30/83-84	24,729	90,728	0.946	23,400	85,854
6/30/84-85	519,394	705,394	0.916	475,617	645,940
6/30/85-86	1,172,087	1,559,233	0.895	1,048,529	1,394,864
6/30/86-87	39,360	78,360	0.887	34,894	69,468
6/30/87-88	514,126	785,126	0.876	450,173	687,462
6/30/88-89	599,557	1,364,557	0.864	518,134	1,179,244
6/30/89-90	966,344	1,012,344	0.848	819,079	858,069
6/30/90-91	1,705,231	5,826,231	0.828	1,411,189	4,821,582
6/30/91-92	557,013	566,013	0.810	451,175	458,465
6/30/92-93	433,410	455,410	0.799	346,373	363,955
6/30/93-94	757,699	781,699	0.788	597,374	616,295
6/30/94-95	1,166,689	1,185,689	0.777	906,437	921,198
6/30/95-96	1,075,332	1,117,332	0.765	822,446	854,569
6/30/96-97	1,366,938	1,423,938	0.752	1,028,420	1,071,304
6/30/97-98	2,042,722	2,055,722	0.739	1,508,706	1,518,307
6/30/98-99	2,180,000	2,224,000	0.723	1,575,496	1,607,295
6/30/99-00	2,560,938	2,602,938	0.711	1,821,322	1,851,192
6/30/00-01	3,647,011	4,383,011	0.701	2,557,966	3,074,187
6/30/01-02	3,357,879	3,387,879	0.693	2,325,970	2,346,751
6/30/02-03	3,735,582	3,771,582	0.693	2,587,731	2,612,669
6/30/03-04	3,895,019	3,966,019	0.698	2,717,943	2,767,486
6/30/04-05	4,583,135	5,737,135	0.701	3,214,716	4,024,158
6/30/05-06	4,852,700	5,846,700	0.713	3,459,144	4,167,696
6/30/06-07	5,653,601	7,463,601	0.737	4,166,477	5,500,374
6/30/07-08	7,879,596	11,102,596	0.761	5,997,534	8,450,712
6/30/08-09	9,332,739	13,427,739	0.790	7,375,418	10,611,588
Total	66,221,194	85,429,154		49,783,646	64,967,481
			(7) Total Discount Factor:	0.752	0.760

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	789,792	1,421,729
(9) Projected Number of Years:	3	3
(10) Projected Paid Loss per Year:	263,264	473,910
(11) Discounted Value at 4%:	745,193	1,341,446

NOTES:
(2), (3) From Section 4, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 4, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	789,792	1,421,729		724,819	1,304,769
6/30/82-83	812,572	1,086,448	0.971	789,240	1,055,251
6/30/83-84	24,729	90,728	0.921	22,782	83,585
6/30/84-85	519,394	705,394	0.878	455,800	619,027
6/30/85-86	1,172,087	1,559,233	0.848	994,014	1,322,342
6/30/86-87	39,360	78,360	0.838	32,966	65,630
6/30/87-88	514,126	785,126	0.823	423,072	646,077
6/30/88-89	599,557	1,364,557	0.808	484,217	1,102,051
6/30/89-90	966,344	1,012,344	0.785	758,782	794,901
6/30/90-91	1,705,231	5,826,231	0.758	1,292,987	4,417,727
6/30/91-92	557,013	566,013	0.735	409,442	416,057
6/30/92-93	433,410	455,410	0.721	312,695	328,568
6/30/93-94	757,699	781,699	0.708	536,441	553,433
6/30/94-95	1,166,689	1,185,689	0.694	809,231	822,409
6/30/95-96	1,075,332	1,117,332	0.678	729,594	758,090
6/30/96-97	1,366,938	1,423,938	0.663	906,229	944,018
6/30/97-98	2,042,722	2,055,722	0.646	1,319,240	1,327,636
6/30/98-99	2,180,000	2,224,000	0.626	1,364,789	1,392,335
6/30/99-00	2,560,938	2,602,938	0.612	1,568,098	1,593,816
6/30/00-01	3,647,011	4,383,011	0.601	2,191,604	2,633,889
6/30/01-02	3,357,879	3,387,879	0.591	1,984,704	2,002,436
6/30/02-03	3,735,582	3,771,582	0.593	2,214,038	2,235,375
6/30/03-04	3,895,019	3,966,019	0.601	2,339,762	2,382,412
6/30/04-05	4,583,135	5,737,135	0.607	2,779,710	3,479,621
6/30/05-06	4,852,700	5,846,700	0.622	3,019,440	3,637,925
6/30/06-07	5,653,601	7,463,601	0.654	3,698,075	4,882,014
6/30/07-08	7,879,596	11,102,596	0.686	5,401,473	7,610,844
6/30/08-09	9,332,739	13,427,739	0.723	6,746,805	9,707,155
Total	66,221,194	85,429,154		44,310,049	58,119,392
			(7) Total Discount Factor:	0.669	0.680

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	789,792	1,421,729
(9) Projected Number of Years:	3	3
(10) Projected Paid Loss per Year:	263,264	473,910
(11) Discounted Value at 6%:	724,819	1,304,769

NOTES:
(2), (3) From Section 4, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 4, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	5,013,201	6,282,759	3,700,609	1,312,592	2,582,150				215,572	237,129	16.4%	9.2%
6/30/82-83	3,725,137	4,008,471	2,912,565	812,572	1,095,906	75.3%	0.5%	2.0%	16,464	22,204	2.0%	2.0%
6/30/83-84	2,160,403	2,271,423	2,135,674	24,729	135,749	96.4%	0.5%	13.8%	3,415	18,745	13.8%	13.8%
6/30/84-85	4,592,000	4,784,000	4,061,479	530,521	722,521	86.6%	1.0%	7.5%	39,697	54,063	7.5%	7.5%
6/30/85-86	7,941,853	8,334,000	6,747,313	1,194,541	1,586,687	82.9%	1.0%	5.9%	69,905	92,854	5.9%	5.9%
6/30/86-87	4,600,000	4,640,000	4,525,389	74,611	114,611	98.0%	2.0%	97.7%	72,867	111,933	97.7%	97.7%
6/30/87-88	7,804,000	8,079,000	7,221,952	582,048	857,048	90.9%	2.0%	22.1%	128,479	189,181	22.1%	22.1%
6/30/88-89	8,623,000	9,389,000	7,947,156	675,844	1,441,844	88.2%	2.0%	17.0%	114,968	245,272	17.0%	17.0%
6/30/89-90	11,871,000	11,922,000	10,769,527	1,101,473	1,152,473	90.5%	2.0%	21.1%	232,546	243,314	21.1%	21.1%
6/30/90-91	13,231,000	17,353,000	11,338,268	1,892,732	6,014,732	74.1%	2.0%	7.7%	146,412	465,268	7.7%	7.7%
6/30/91-92	6,355,000	6,364,000	5,634,936	720,064	729,064	88.6%	2.5%	21.9%	158,000	159,975	21.9%	21.9%
6/30/92-93	5,059,000	5,083,000	4,477,624	581,376	605,376	88.3%	2.5%	21.4%	124,211	129,339	21.4%	21.4%
6/30/93-94	7,116,000	7,142,000	6,174,637	941,363	967,363	86.6%	2.5%	18.7%	175,797	180,653	18.7%	18.7%
6/30/94-95	8,812,000	8,836,000	7,452,230	1,359,770	1,383,770	84.5%	2.5%	16.1%	218,670	222,530	16.1%	16.1%
6/30/95-96	7,687,000	7,735,000	6,383,926	1,303,074	1,351,074	82.8%	2.5%	14.5%	189,289	196,261	14.5%	14.5%
6/30/96-97	9,279,000	9,344,000	7,626,916	1,652,084	1,717,084	81.9%	2.5%	13.8%	228,296	237,279	13.8%	13.8%
6/30/97-98	11,731,000	11,751,000	9,359,034	2,371,966	2,391,966	79.7%	2.5%	12.3%	292,293	294,757	12.3%	12.3%
6/30/98-99	11,624,000	11,682,000	9,067,574	2,556,426	2,614,426	77.8%	1.9%	8.6%	218,830	223,795	8.6%	8.6%
6/30/99-00	13,021,000	13,077,000	9,970,529	3,050,471	3,106,471	76.4%	1.4%	6.0%	181,650	184,985	6.0%	6.0%
6/30/00-01	17,470,000	18,209,000	13,058,704	4,411,296	5,150,296	73.2%	2.5%	9.3%	411,518	480,457	9.3%	9.3%
6/30/01-02	14,448,000	14,500,000	10,485,599	3,962,401	4,014,401	72.4%	0.8%	2.7%	108,809	110,237	2.7%	2.7%
6/30/02-03	15,083,000	15,275,000	10,675,556	4,407,444	4,599,444	70.3%	2.1%	7.1%	313,938	327,614	7.1%	7.1%
6/30/03-04	14,177,000	14,406,000	9,548,405	4,628,595	4,857,595	66.8%	3.5%	10.6%	490,821	515,104	10.6%	10.6%
6/30/04-05	15,566,000	16,740,000	9,795,821	5,770,179	6,944,179	60.6%	6.2%	15.7%	904,292	1,088,279	15.7%	15.7%
6/30/05-06	12,894,000	14,070,000	6,828,398	6,065,602	7,241,602	50.6%	10.0%	20.3%	1,228,529	1,466,716	20.3%	20.3%
6/30/06-07	11,675,000	13,952,000	4,881,220	6,793,780	9,070,780	38.1%	12.6%	20.3%	1,377,717	1,839,471	20.3%	20.3%
6/30/07-08	13,382,000	17,368,000	3,740,883	9,641,117	13,627,117	24.3%	13.8%	18.2%	1,753,619	2,478,631	18.2%	18.2%
6/30/08-09	13,934,000	18,445,000	1,558,842	12,375,158	16,886,158	9.6%	14.7%	16.3%	2,013,276	2,747,157	16.3%	16.3%
Total	278,874,594	301,042,652	198,080,766	80,793,828	102,961,886				11,429,879	14,563,202	14.1%	14.1%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		305,222			828,022	1,465,642	522,800	1,160,420		
6/30/82-83		164,749	170,791		164,749	174,207	0	9,458		
6/30/83-84		730,414	760,230		730,414	775,435	0	45,021		
6/30/84-85	115,008	369,873	386,512	381,310	381,000	387,000	11,127	17,127	0.331	0.336
6/30/85-86	123,679	554,546	581,810	576,570	577,000	582,000	22,454	27,454	0.467	0.471
6/30/86-87	142,129	640,749	675,612	676,540	676,000	677,000	35,251	36,251	0.476	0.476
6/30/87-88	166,516	1,142,078	1,210,239	1,214,197	1,210,000	1,214,000	67,922	71,922	0.727	0.729
6/30/88-89	179,833	1,193,712	1,271,280	1,270,301	1,270,000	1,271,000	76,288	77,288	0.706	0.707
6/30/89-90	180,589	1,851,871	1,991,581	1,986,788	1,987,000	1,992,000	135,129	140,129	1.100	1.103
6/30/90-91	169,598	2,230,499	2,418,568	2,418,204	2,418,000	2,419,000	187,501	188,501	1.426	1.426
6/30/91-92	165,612	1,589,949	1,752,669	1,752,951	1,753,000	1,753,000	163,051	163,051	1.058	1.058
6/30/92-93	173,874	1,322,034	1,470,397	1,471,999	1,470,000	1,472,000	147,966	149,966	0.845	0.847
6/30/93-94	185,611	1,423,336	1,606,900	1,609,311	1,607,000	1,609,000	183,664	185,664	0.866	0.867
6/30/94-95	193,706	1,305,920	1,499,062	1,503,755	1,499,000	1,504,000	193,080	198,080	0.774	0.776
6/30/95-96	204,905	1,418,259	1,646,363	1,652,266	1,646,000	1,652,000	227,741	233,741	0.803	0.806
6/30/96-97	233,704	1,629,854	1,915,439	1,923,497	1,915,000	1,923,000	285,146	293,146	0.819	0.823
6/30/97-98	221,484	1,716,755	2,046,119	2,052,570	2,046,000	2,053,000	329,245	336,245	0.924	0.927
6/30/98-99	255,677	1,683,574	2,059,552	2,074,022	2,060,000	2,074,000	376,426	390,426	0.806	0.811
6/30/99-00	268,079	1,901,468	2,391,203	2,405,370	2,391,000	2,405,000	489,532	503,532	0.892	0.897
6/30/00-01	278,762	2,567,715	3,335,024	3,332,050	3,332,000	3,335,000	764,285	767,285	1.195	1.196
6/30/01-02	282,635	1,769,478	2,374,119	2,396,434	2,374,000	2,396,000	604,522	626,522	0.840	0.848
6/30/02-03	289,398	2,045,138	2,859,857	2,873,195	2,717,000	2,873,000	671,862	827,862	0.939	0.993
6/30/03-04	293,308	1,896,424	2,768,638	2,787,679	2,630,000	2,788,000	733,576	891,576	0.897	0.951
6/30/04-05	290,903	2,193,956	3,400,834	3,381,156	3,381,000	3,401,000	1,187,044	1,207,044	1.162	1.169
6/30/05-06	294,215	1,729,098	2,942,035	3,124,030	2,942,000	3,124,000	1,212,902	1,394,902	1.000	1.062
6/30/06-07	289,092	1,218,822	2,358,865	2,825,588	2,359,000	2,826,000	1,140,178	1,607,178	0.816	0.978
6/30/07-08	354,141	1,080,479	2,842,392	3,604,972	2,842,000	3,605,000	1,761,521	2,524,521	0.803	1.018
6/30/08-09	331,868	508,581	3,551,378	3,778,514	3,551,000	3,967,000	3,042,419	3,458,419	1.070	1.195
Total	5,684,326	38,184,551	52,287,468	53,073,267	52,757,185	55,717,283	14,572,633	17,532,732		
Tot 6/30/84-09	5,684,326	36,984,167	51,356,446	53,073,267	51,034,000	53,302,000	14,049,833	16,317,833	0.898	0.938

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 4, Exhibit 2, Page 2, Column 3
(4) From Section 4, Exhibit 2, Page 2, Column 8
(5) From Section 4, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		305,222							2	3	
6/30/82-83		164,749	1.037	1.000	170,791	N/A	170,791		1	0	
6/30/83-84		730,414	1.041	1.000	760,230	N/A	760,230		0	0	
6/30/84-85	115,008	369,873	1.045	1.000	386,512	N/A	386,512	0.336	1	1	16,638
6/30/85-86	123,679	554,546	1.049	1.000	581,810	N/A	581,810	0.470	3	3	9,088
6/30/86-87	142,129	640,749	1.054	1.000	675,612	N/A	675,612	0.475	1	1	34,863
6/30/87-88	166,516	1,142,078	1.060	1.000	1,210,239	N/A	1,210,239	0.727	1	1	68,161
6/30/88-89	179,833	1,193,712	1.065	1.000	1,271,280	N/A	1,271,280	0.707	2	2	38,784
6/30/89-90	180,589	1,851,871	1.075	1.000	1,991,581	N/A	1,991,581	1.103	7	6	23,285
6/30/90-91	169,598	2,230,499	1.084	1.000	2,418,568	N/A	2,418,568	1.426	11	12	15,672
6/30/91-92	165,612	1,589,949	1.102	1.000	1,752,669	N/A	1,752,669	1.058	5	4	40,680
6/30/92-93	173,874	1,322,034	1.112	1.000	1,470,397	N/A	1,470,397	0.846	2	2	74,181
6/30/93-94	185,611	1,423,336	1.129	1.000	1,606,900	N/A	1,606,900	0.866	7	8	22,945
6/30/94-95	193,706	1,305,920	1.148	1.000	1,499,062	N/A	1,499,062	0.774	10	5	38,628
6/30/95-96	204,905	1,418,259	1.161	1.000	1,646,363	N/A	1,646,363	0.803	6	5	45,621
6/30/96-97	233,704	1,629,854	1.175	1.000	1,915,439	N/A	1,915,439	0.820	8	7	40,798
6/30/97-98	221,484	1,716,755	1.192	1.000	2,046,119	N/A	2,046,119	0.924	11	8	41,170
6/30/98-99	255,677	1,683,574	1.223	1.000	2,059,552	N/A	2,059,552	0.806	14	10	37,598
6/30/99-00	268,079	1,901,468	1.258	1.000	2,391,203	N/A	2,391,203	0.892	18	16	30,608
6/30/00-01	278,762	2,567,715	1.299	1.000	3,335,024	N/A	3,335,024	1.196	31	21	36,539
6/30/01-02	282,635	1,769,478	1.342	1.000	2,374,119	N/A	2,374,119	0.840	28	19	31,823
6/30/02-03	289,398	2,045,138	1.398	1.000	2,859,857	N/A	2,859,857	0.988	30	21	38,796
6/30/03-04	293,308	1,896,424	1.460	1.000	2,768,638	N/A	2,768,638	0.944	41	29	30,076
6/30/04-05	290,903	2,193,956	1.550	1.000	3,400,834	N/A	3,400,834	1.169	66	43	28,067
6/30/05-06	294,215	1,729,098	1.701	1.000	2,942,035	N/A	2,942,035	1.000	87	52	23,326
6/30/06-07	289,092	1,218,822	1.935	1.000	2,358,865	N/A	2,358,865	0.816	201	65	17,539
6/30/07-08	354,141	1,080,479	2.631	1.000	2,842,392	N/A	2,842,392	0.803	367	187	9,422
6/30/08-09	331,868	508,581	6.983	1.000	3,551,378	N/A	3,551,378	1.070		303	10,042
Total	5,684,326	38,184,551			52,287,468		52,287,468		961	834	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 4, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	115,008	0.231	369,873	1.045	381,310	N/A	381,310	0.332	0.332
6/30/85-86	123,679	0.380	554,546	1.049	576,570	N/A	576,570	0.466	0.466
6/30/86-87	142,129	0.488	640,749	1.054	676,540	N/A	676,540	0.476	0.476
6/30/87-88	166,516	0.769	1,142,078	1.060	1,214,197	N/A	1,214,197	0.729	0.729
6/30/88-89	179,833	0.698	1,193,712	1.065	1,270,301	N/A	1,270,301	0.706	0.706
6/30/89-90	180,589	1.065	1,851,871	1.075	1,986,788	N/A	1,986,788	1.100	1.100
6/30/90-91	169,598	1.423	2,230,499	1.084	2,418,204	N/A	2,418,204	1.426	1.426
6/30/91-92	165,612	1.060	1,589,949	1.102	1,752,951	N/A	1,752,951	1.058	1.058
6/30/92-93	173,874	0.855	1,322,034	1.112	1,471,999	N/A	1,471,999	0.847	0.847
6/30/93-94	185,611	0.877	1,423,336	1.129	1,609,311	N/A	1,609,311	0.867	0.867
6/30/94-95	193,706	0.793	1,305,920	1.148	1,503,755	N/A	1,503,755	0.776	0.776
6/30/95-96	204,905	0.824	1,418,259	1.161	1,652,266	N/A	1,652,266	0.806	0.806
6/30/96-97	233,704	0.843	1,629,854	1.175	1,923,497	N/A	1,923,497	0.823	0.823
6/30/97-98	221,484	0.942	1,716,755	1.192	2,052,570	N/A	2,052,570	0.927	0.927
6/30/98-99	255,677	0.837	1,683,574	1.223	2,074,022	N/A	2,074,022	0.811	0.811
6/30/99-00	268,079	0.918	1,901,468	1.258	2,405,370	N/A	2,405,370	0.897	0.897
6/30/00-01	278,762	1.192	2,567,715	1.299	3,332,050	N/A	3,332,050	1.195	1.195
6/30/01-02	282,635	0.871	1,769,478	1.342	2,396,434	N/A	2,396,434	0.848	0.848
6/30/02-03	289,398	1.004	2,045,138	1.398	2,873,195	N/A	2,873,195	0.993	0.993
6/30/03-04	293,308	0.965	1,896,424	1.460	2,787,679	N/A	2,787,679	0.950	0.950
6/30/04-05	290,903	1.150	2,193,956	1.550	3,381,156	N/A	3,381,156	1.162	1.162
6/30/05-06	294,215	1.150	1,729,098	1.701	3,124,030	N/A	3,124,030	1.062	1.062
6/30/06-07	289,092	1.150	1,218,822	1.935	2,825,588	N/A	2,825,588	0.977	0.977
6/30/07-08	354,141	1.150	1,080,479	2.631	3,604,972	N/A	3,604,972	1.018	1.018
6/30/08-09	331,868	1.150	508,581	6.983	3,778,514	N/A	3,778,514	1.139	1.139
Total	5,684,326		36,984,167		53,073,267		53,073,267		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 4, Exhibit 2, Page 4, Column 11
(4) From Section 4, Exhibit 2, Page 2, Column 3
(5) From Section 4, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.231	0.231
6/30/85-86									0.380	0.380
6/30/86-87									0.488	0.488
6/30/87-88									0.769	0.769
6/30/88-89									0.698	0.698
6/30/89-90									1.065	1.065
6/30/90-91	169,598	2,418,568	1.426	1.157	1.650	1.457	2.403	1.426	1.511	1.423
6/30/91-92	165,612	1,752,669	1.058	1.152	1.219	1.428	1.741	1.058	1.173	1.060
6/30/92-93	173,874	1,470,397	0.846	1.152	0.974	1.400	1.364	0.846	0.983	0.855
6/30/93-94	185,611	1,606,900	0.866	1.142	0.989	1.373	1.357	0.866	0.982	0.877
6/30/94-95	193,706	1,499,062	0.774	1.134	0.877	1.346	1.181	0.774	0.873	0.793
6/30/95-96	204,905	1,646,363	0.803	1.120	0.900	1.319	1.187	0.803	0.875	0.824
6/30/96-97	233,704	1,915,439	0.820	1.101	0.903	1.294	1.168	0.820	0.877	0.843
6/30/97-98	221,484	2,046,119	0.924	1.100	1.016	1.268	1.289	0.924	1.012	0.942
6/30/98-99	255,677	2,059,552	0.806	1.100	0.886	1.243	1.102	0.806	0.948	0.837
6/30/99-00	268,079	2,391,203	0.892	1.100	0.981	1.219	1.196	0.892	1.017	0.918
6/30/00-01	278,762	3,335,024	1.196	1.075	1.286	1.195	1.537	1.196	1.248	1.192
6/30/01-02	282,635	2,374,119	0.840	1.067	0.896	1.172	1.050	0.840	0.970	0.871
6/30/02-03	289,398	2,859,857	0.988	1.040	1.027	1.149	1.180	0.988	1.067	1.004
6/30/03-04	293,308	2,768,638	0.944	1.014	0.957	1.126	1.078	0.944	1.100	0.965
6/30/04-05	290,903	3,400,834	1.169	1.003	1.173	1.104	1.295	1.169	1.100	1.150
6/30/05-06	294,215	2,942,035	1.000	1.000	1.000	1.082	1.082	1.000	1.150	1.150
6/30/06-07	289,092	2,358,865	0.816	1.000	0.816	1.061	0.866	0.816	1.150	1.150
6/30/07-08	354,141	2,842,392	0.803	1.000	0.803	1.040	0.835	0.803	1.150	1.150
6/30/08-09	331,868	3,551,378	1.070	1.000	1.070	1.020	1.092	1.070		1.150
Total	4,776,572	45,239,413								

Trend Last 4 (ex 08-09):	-12.6%	Avg 3 (x08-09):	0.928
Trend Last 8 (ex 08-09):	-4.2%	Avg 5 (x08-09):	1.031
Trend Last 12 (ex 08-09):	-0.8%	Avg 10 (x08-09):	1.122
Prior Selected Trend:	2.0%	Prior Sel Avg:	1.150
Selected Trend:	2.0%	Sel. Loss Cost:	1.150

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 4, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.970	
(2)	Credibility		26%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.911	
		(Low)		(High)
(5)	Selected Range	0.902		0.920
(6)	Incremental Paid for 2009	100,501		100,501
(7)	Estimated Reserve	925,773		1,160,420
(8)	Paid to Date (82 & Prior)	305,222		305,222
(9)	Est Ult Paid for 1982 & Prior	1,230,994		1,465,642

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	39,943	7,706
(11)	Projected Number of Years	3	3
(12)	Estimated Reserve	119,828	23,118
(13)	Paid to Date (82 & Prior)	305,222	204,720
(14)	Est Ult Paid for 1982 & Prior	425,049	227,839
(14a)	Paid Counts During Fiscal Year	3	2

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	828,022	1,465,642
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**828,022**	**1,465,642**
(18)	Implied Tail	2.713	4.802
(19)	Ult Loss Inc Lump Sums @ 6/08	255,410	301,615

NOTES:

(1) From Section 4, Exhibit 2, Page 6
(2) = (Average of Section 4, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 4, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 4, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	24,180	10.093			
1993	2	4,649	8.444	0.192		
1994	3	4,226	8.349	0.909		
1995	4	2,463	7.809	0.583		
1996	5	3,867	8.260	1.570		
1997	6	12,692	9.449	3.282		
1998	7	3,736	8.226	0.294		
1999	8	1,455	7.283	0.389		
2000	9	13,993	9.546	9.617	n =	18
2001	10	18,860	9.845	1.348	S(x) =	36,009
2002	11	1,907	7.553	0.101	S(x-sq) =	72,036,489
2003	12	725	6.586	0.380	S(xy) =	309,982
2004	13	1,808	7.500	2.494	S(y) =	155
2005	14	2,687	7.896	1.486	D =	8,721
2006	15	3,792	8.241	1.411	slope =	0.027
2007	16	10,343	9.244	2.728	Avg Trend =	1.027
2008	17	8,983	9.103	0.869		
2009	18	100,501	11.518	11.187		
					Selected Trend:	**0.970**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 11.187 = 100501 / 8983

Commonwealth of Massachusetts Workers Compensation
Department of Corrections - Cluster 3
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	11,197	26,045	37,203	47,025	56,514	66,401	72,814	83,440	107,442	118,641	128,866	135,800	137,783	138,069	140,735	141,596	141,596	141,914	142,318	142,318	142,318	142,748	144,456	154,891	160,448	164,749	164,749
June-84	52,670	137,962	203,703	257,882	317,818	352,402	422,888	501,855	591,716	647,521	689,358	721,711	724,550	728,685	728,693	728,709	728,709	728,709	729,143	729,143	729,143	730,066	730,414	730,414	730,414	730,414	
June-85	24,581	57,175	81,670	103,231	128,616	150,557	165,276	184,340	192,621	201,787	208,269	211,465	217,592	220,213	229,343	238,016	247,437	257,231	266,584	280,985	298,608	318,573	337,983	352,978	369,873		
June-86	48,446	112,684	160,960	207,617	233,762	263,664	302,247	319,414	339,302	351,896	365,470	378,302	387,035	413,763	422,216	433,663	460,852	480,856	494,886	512,562	523,474	541,163	550,005	554,546			
June-87	77,936	181,278	229,911	293,653	369,221	440,930	473,706	485,578	509,980	540,282	563,925	581,583	602,759	614,805	618,094	621,890	624,842	627,889	633,482	636,887	638,336	639,623	640,749				
June-88	139,053	319,817	519,537	680,966	823,361	912,703	998,546	1,039,983	1,059,846	1,072,337	1,112,168	1,116,550	1,122,900	1,125,982	1,127,653	1,131,576	1,136,086	1,139,881	1,139,671	1,140,874	1,141,510	1,142,078					
June-89	131,654	415,398	576,800	731,889	811,584	895,533	936,684	955,349	999,849	1,017,126	1,032,040	1,060,186	1,074,102	1,089,934	1,108,376	1,126,235	1,147,403	1,157,458	1,164,985	1,178,930	1,193,712						
June-90	233,608	695,685	1,052,182	1,224,162	1,354,697	1,427,692	1,488,096	1,536,324	1,567,188	1,604,683	1,637,523	1,658,777	1,680,547	1,714,885	1,752,807	1,778,979	1,821,497	1,836,851	1,849,519	1,851,871							
June-91	236,602	942,522	1,192,208	1,419,689	1,530,020	1,581,521	1,621,661	1,644,367	1,676,462	1,699,513	1,748,257	1,799,332	1,845,064	1,889,995	1,951,997	2,058,075	2,109,105	2,138,832	2,230,499								
June-92	391,819	811,780	1,023,022	1,084,480	1,141,810	1,171,673	1,196,735	1,319,302	1,369,241	1,426,734	1,445,752	1,475,976	1,501,400	1,542,584	1,553,065	1,562,833	1,573,916	1,589,949									
June-93	344,830	901,476	1,061,794	1,155,998	1,198,560	1,220,287	1,266,026	1,272,695	1,293,165	1,297,361	1,300,910	1,301,951	1,307,475	1,311,803	1,319,110	1,321,122	1,322,034										
June-94	431,268	816,076	959,344	1,052,996	1,141,756	1,231,287	1,271,524	1,296,482	1,314,355	1,335,010	1,357,475	1,376,074	1,390,533	1,402,752	1,413,794	1,423,336											
June-95	351,310	722,998	906,028	985,528	1,057,961	1,106,846	1,136,019	1,186,110	1,209,822	1,232,732	1,266,835	1,285,546	1,294,524	1,301,613	1,305,920												
June-96	344,486	709,731	859,884	962,823	1,085,060	1,150,008	1,181,678	1,213,854	1,256,984	1,305,951	1,334,696	1,371,532	1,394,601	1,418,259													
June-97	404,402	880,944	1,029,045	1,129,661	1,192,806	1,242,248	1,291,581	1,332,755	1,404,699	1,468,293	1,534,845	1,608,334	1,629,854														
June-98	352,321	850,419	1,071,815	1,188,934	1,283,207	1,349,964	1,408,091	1,486,280	1,529,830	1,572,573	1,615,592	1,716,755															
June-99	335,840	780,685	1,009,719	1,120,546	1,237,603	1,345,867	1,452,103	1,561,531	1,613,648	1,654,503	1,683,574																
June-00	496,994	1,118,525	1,328,041	1,481,979	1,601,386	1,717,688	1,766,903	1,812,535	1,852,179	1,901,468																	
June-01	553,191	1,161,108	1,486,434	1,729,264	2,113,882	2,296,440	2,415,155	2,501,361	2,567,715																		
June-02	441,054	954,595	1,190,752	1,457,269	1,628,226	1,698,307	1,736,904	1,769,478																			
June-03	268,200	928,702	1,552,091	1,775,257	1,904,289	1,988,413	2,045,138																				
June-04	152,994	1,174,712	1,612,636	1,744,790	1,811,022	1,896,424																					
June-05	504,986	1,476,366	1,809,319	2,048,757	2,193,956																						
June-06	456,471	1,195,789	1,564,242	1,729,098																							
June-07	537,825	1,000,141	1,218,822																								
June-08	539,208	1,080,479																									
June-09	508,581																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.326	1.428	1.264	1.202	1.175	1.097	1.146	1.288	1.104	1.086	1.054	1.015	1.002	1.019	1.006	1.000	1.002	1.003	1.000	1.000	1.003	1.012	1.072	1.036	1.027	1.000
June-84	2.619	1.477	1.266	1.232	1.109	1.200	1.187	1.179	1.094	1.065	1.047	1.004	1.006	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	
June-85	2.326	1.428	1.264	1.246	1.171	1.098	1.115	1.045	1.048	1.032	1.015	1.029	1.012	1.041	1.038	1.040	1.040	1.036	1.054	1.063	1.067	1.061	1.044	1.048		
June-86	2.326	1.428	1.290	1.126	1.128	1.146	1.057	1.062	1.037	1.039	1.035	1.023	1.069	1.020	1.027	1.063	1.043	1.029	1.036	1.021	1.034	1.016	1.008			
June-87	2.326	1.268	1.277	1.257	1.194	1.074	1.025	1.050	1.059	1.044	1.031	1.036	1.020	1.005	1.006	1.005	1.005	1.009	1.005	1.002	1.002	1.002				
June-88	2.300	1.624	1.311	1.209	1.109	1.094	1.041	1.019	1.012	1.037	1.004	1.006	1.003	1.001	1.003	1.004	1.003	1.000	1.001	1.001	1.000					
June-89	3.155	1.389	1.269	1.109	1.103	1.046	1.020	1.047	1.017	1.015	1.027	1.013	1.015	1.017	1.016	1.019	1.009	1.007	1.012	1.013						
June-90	2.978	1.512	1.163	1.107	1.054	1.042	1.032	1.020	1.024	1.020	1.013	1.013	1.020	1.022	1.015	1.024	1.008	1.007	1.001							
June-91	3.984	1.265	1.191	1.078	1.034	1.025	1.014	1.020	1.014	1.029	1.029	1.025	1.024	1.033	1.054	1.025	1.014	1.043								
June-92	2.072	1.260	1.060	1.053	1.026	1.021	1.102	1.038	1.042	1.013	1.021	1.017	1.027	1.007	1.006	1.007	1.010									
June-93	2.614	1.178	1.089	1.037	1.018	1.037	1.005	1.016	1.003	1.003	1.001	1.004	1.003	1.006	1.002	1.001										
June-94	1.892	1.176	1.098	1.084	1.078	1.033	1.020	1.014	1.016	1.017	1.014	1.011	1.009	1.008	1.007											
June-95	2.058	1.253	1.088	1.073	1.046	1.026	1.044	1.020	1.019	1.028	1.015	1.007	1.005	1.003												
June-96	2.060	1.212	1.120	1.127	1.060	1.028	1.027	1.036	1.039	1.022	1.028	1.017	1.017													
June-97	2.178	1.168	1.098	1.056	1.041	1.040	1.032	1.054	1.045	1.045	1.048	1.013														
June-98	2.414	1.260	1.109	1.079	1.052	1.043	1.056	1.029	1.028	1.027	1.063															
June-99	2.325	1.293	1.110	1.104	1.087	1.079	1.075	1.033	1.025	1.018																
June-00	2.251	1.187	1.116	1.081	1.073	1.029	1.026	1.022	1.027																	
June-01	2.099	1.280	1.163	1.222	1.086	1.052	1.036	1.027																		
June-02	2.164	1.247	1.224	1.117	1.043	1.023	1.019																			
June-03	3.463	1.671	1.144	1.073	1.044	1.029																				
June-04	7.678	1.373	1.082	1.038	1.047																					
June-05	2.924	1.226	1.132	1.071																						
June-06	2.620	1.308	1.105																							
June-07	1.860	1.219																								
June-08	2.004																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.654	1.325	1.168	1.121	1.081	1.060	1.054	1.054	1.036	1.032	1.028	1.016	1.017	1.014	1.015	1.017	1.013	1.015	1.014	1.014	1.018	1.018	1.031	1.028	1.013	1.000	
Latest 5	3.417	1.359	1.137	1.104	1.059	1.042	1.042	1.033	1.033	1.028	1.033	1.010	1.012	1.011	1.017	1.015	1.009	1.013	1.011	1.020	1.021	1.018					
Latest 3	2.161	1.251	1.107	1.061	1.045	1.034	1.027	1.027	1.027	1.030	1.046	1.012	1.010	1.006	1.005	1.011	1.011	1.019	1.005	1.005	1.012	1.026	1.018	1.028			
Volume Wtd																											
All Yrs	2.474	1.292	1.137	1.098	1.062	1.044	1.040	1.033	1.028	1.026	1.026	1.014	1.016	1.013	1.016	1.015	1.011	1.017	1.008	1.010	1.012	1.013	1.017	1.018	1.005		
Latest 5	2.705	1.343	1.133	1.102	1.059	1.041	1.040	1.031	1.032	1.028	1.035	1.011	1.013	1.013	1.019	1.016	1.010	1.017	1.007	1.012	1.012						
Latest 3	2.137	1.251	1.108	1.061	1.045	1.036	1.028	1.027	1.027	1.030	1.047	1.013	1.011	1.006	1.005	1.013	1.011	1.022	1.004	1.006	1.008	1.020	1.012				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.680*	*1.365*	*1.149*	*1.100*	*1.067*	*1.045*	*1.045*	*1.035*	*1.031*	*1.028*	*1.021*	*1.011*	*1.014*	*1.015*	*1.019*	*1.016*	*1.008*	*1.008*	*1.011*	*1.009*	*1.005*	*1.005*	*1.005*	*1.004*	*1.004*	*1.049*	
Selected	2.654	1.359	1.137	1.098	1.062	1.044	1.042	1.033	1.033	1.028	1.026	1.014	1.012	1.011	1.017	1.015	1.009	1.017	1.008	1.010	1.005	1.005	1.005	1.004	1.004	1.004	1.037
FacToUlt	6.983	2.631	1.935	1.701	1.550	1.460	1.398	1.342	1.299	1.258	1.223	1.192	1.175	1.161	1.148	1.129	1.112	1.102	1.084	1.075	1.065	1.060	1.054	1.049	1.045	1.041	1.037
Percent of Ult	14.3%	38.0%	51.7%	58.8%	64.5%	68.5%	71.5%	74.5%	77.0%	79.5%	81.7%	83.9%	85.1%	86.1%	87.1%	88.6%	89.9%	90.7%	92.2%	93.0%	93.9%	94.4%	94.8%	95.3%	95.7%	96.1%	96.5%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	255,410	301,615	828,022	1,465,642	572,612	224.2%	1,164,027	385.9%
6/30/82-83	164,749	176,261	164,749	174,207	0	0.0%	(2,054)	-1.2%
6/30/83-84	730,414	784,579	730,414	775,435	0	0.0%	(9,144)	-1.2%
6/30/84-85	367,000	373,000	381,000	387,000	14,000	3.8%	14,000	3.8%
6/30/85-86	578,000	584,000	577,000	582,000	(1,000)	-0.2%	(2,000)	-0.3%
6/30/86-87	683,000	684,000	676,000	677,000	(7,000)	-1.0%	(7,000)	-1.0%
6/30/87-88	1,225,000	1,229,000	1,210,000	1,214,000	(15,000)	-1.2%	(15,000)	-1.2%
6/30/88-89	1,275,000	1,277,000	1,270,000	1,271,000	(5,000)	-0.4%	(6,000)	-0.5%
6/30/89-90	2,016,000	2,025,000	1,987,000	1,992,000	(29,000)	-1.4%	(33,000)	-1.6%
6/30/90-91	2,360,000	2,379,000	2,418,000	2,419,000	58,000	2.5%	40,000	1.7%
6/30/91-92	1,750,000	1,770,000	1,753,000	1,753,000	3,000	0.2%	(17,000)	-1.0%
6/30/92-93	1,492,000	1,517,000	1,470,000	1,472,000	(22,000)	-1.5%	(45,000)	-3.0%
6/30/93-94	1,627,000	1,652,000	1,607,000	1,609,000	(20,000)	-1.2%	(43,000)	-2.6%
6/30/94-95	1,520,000	1,545,000	1,499,000	1,504,000	(21,000)	-1.4%	(41,000)	-2.7%
6/30/95-96	1,651,000	1,673,000	1,646,000	1,652,000	(5,000)	-0.3%	(21,000)	-1.3%
6/30/96-97	1,926,000	1,946,000	1,915,000	1,923,000	(11,000)	-0.6%	(23,000)	-1.2%
6/30/97-98	1,975,000	2,023,000	2,046,000	2,053,000	71,000	3.6%	30,000	1.5%
6/30/98-99	2,079,000	2,149,000	2,060,000	2,074,000	(19,000)	-0.9%	(75,000)	-3.5%
6/30/99-00	2,400,000	2,475,000	2,391,000	2,405,000	(9,000)	-0.4%	(70,000)	-2.8%
6/30/00-01	3,354,000	3,386,000	3,332,000	3,335,000	(22,000)	-0.7%	(51,000)	-1.5%
6/30/01-02	2,433,000	2,521,000	2,374,000	2,396,000	(59,000)	-2.4%	(125,000)	-5.0%
6/30/02-03	2,767,000	2,968,000	2,717,000	2,873,000	(50,000)	-1.8%	(95,000)	-3.2%
6/30/03-04	2,688,000	2,972,000	2,630,000	2,788,000	(58,000)	-2.2%	(184,000)	-6.2%
6/30/04-05	3,387,000	3,522,000	3,381,000	3,401,000	(6,000)	-0.2%	(121,000)	-3.4%
6/30/05-06	3,090,000	3,235,000	2,942,000	3,124,000	(148,000)	-4.8%	(111,000)	-3.4%
6/30/06-07	2,696,000	3,092,000	2,359,000	2,826,000	(337,000)	-12.5%	(266,000)	-8.6%
6/30/07-08	3,897,000	4,165,000	2,842,000	3,605,000	(1,055,000)	-27.1%	(560,000)	-13.4%
6/30/08-09								
Total	50,386,573	52,424,455	49,206,185	51,750,283	(1,180,388)	-2.3%	(674,171)	-1.3%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 4, Exhibit 2, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	3.5%	0.0%	1.2%	0.7%	1.000	1.000
324	96.5%	0.4%	3.5%	0.1%	0.1%	0.981	0.971
312	96.1%	0.4%	3.9%	0.1%	0.1%	0.947	0.922
300	95.7%	0.4%	4.3%	0.1%	0.1%	0.916	0.879
288	95.3%	0.5%	4.7%	0.2%	0.1%	0.889	0.840
276	94.8%	0.5%	5.2%	0.2%	0.1%	0.867	0.809
264	94.4%	0.5%	5.6%	0.2%	0.1%	0.846	0.781
252	93.9%	0.9%	6.1%	0.4%	0.3%	0.826	0.755
240	93.0%	0.8%	7.0%	0.4%	0.2%	0.818	0.746
228	92.2%	1.5%	7.8%	0.7%	0.5%	0.806	0.730
216	90.7%	0.8%	9.3%	0.4%	0.3%	0.808	0.734
204	89.9%	1.3%	10.1%	0.7%	0.5%	0.793	0.715
192	88.6%	1.5%	11.4%	0.8%	0.6%	0.788	0.709
180	87.1%	1.0%	12.9%	0.5%	0.4%	0.783	0.703
168	86.1%	1.1%	13.9%	0.6%	0.5%	0.769	0.685
156	85.1%	1.2%	14.9%	0.7%	0.6%	0.757	0.669
144	83.9%	2.2%	16.1%	1.4%	1.1%	0.746	0.656
132	81.7%	2.2%	18.3%	1.5%	1.2%	0.749	0.661
120	79.5%	2.5%	20.5%	1.7%	1.5%	0.748	0.661
108	77.0%	2.5%	23.0%	1.8%	1.5%	0.748	0.662
96	74.5%	3.0%	25.5%	2.3%	2.0%	0.744	0.658
84	71.5%	3.0%	28.5%	2.3%	2.1%	0.744	0.658
72	68.5%	4.0%	31.5%	3.2%	2.9%	0.741	0.654
60	64.5%	5.7%	35.5%	4.8%	4.4%	0.742	0.657
48	58.8%	7.1%	41.2%	6.2%	5.8%	0.751	0.669
36	51.7%	13.7%	48.3%	12.4%	11.8%	0.760	0.681
24	38.0%	23.7%	62.0%	22.3%	21.7%	0.786	0.715
12	14.3%	14.3%	85.7%	14.0%	13.9%	0.818	0.756
Total		100.0%					

NOTES:

(2) = 1 / Section 4, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	522,800	1,160,420		493,278	1,094,893
6/30/82-83	0	9,458	0.981	0	9,274
6/30/83-84	0	45,021	0.947	0	42,615
6/30/84-85	11,127	17,127	0.916	10,197	15,695
6/30/85-86	22,454	27,454	0.889	19,967	24,414
6/30/86-87	35,251	36,251	0.867	30,548	31,415
6/30/87-88	67,922	71,922	0.846	57,435	60,818
6/30/88-89	76,288	77,288	0.826	63,011	63,837
6/30/89-90	135,129	140,129	0.818	110,599	114,692
6/30/90-91	187,501	188,501	0.806	151,114	151,920
6/30/91-92	163,051	163,051	0.808	131,801	131,801
6/30/92-93	147,966	149,966	0.793	117,409	118,996
6/30/93-94	183,664	185,664	0.788	144,796	146,372
6/30/94-95	193,080	198,080	0.783	151,236	155,153
6/30/95-96	227,741	233,741	0.769	175,154	179,769
6/30/96-97	285,146	293,146	0.757	215,731	221,783
6/30/97-98	329,245	336,245	0.746	245,661	250,884
6/30/98-99	376,426	390,426	0.749	281,773	292,253
6/30/99-00	489,532	503,532	0.748	366,219	376,692
6/30/00-01	764,285	767,285	0.748	571,699	573,943
6/30/01-02	604,522	626,522	0.744	450,064	466,442
6/30/02-03	671,862	827,862	0.744	499,815	615,867
6/30/03-04	733,576	891,576	0.741	543,361	660,392
6/30/04-05	1,187,044	1,207,044	0.742	881,195	896,042
6/30/05-06	1,212,902	1,394,902	0.751	910,813	1,047,483
6/30/06-07	1,140,178	1,607,178	0.760	866,588	1,221,530
6/30/07-08	1,761,521	2,524,521	0.786	1,384,277	1,983,874
6/30/08-09	3,042,419	3,458,419	0.818	2,488,166	2,828,381
Total	14,572,633	17,532,732		11,361,908	13,777,230
			(7) Total Discount Factor:	0.780	0.786

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	522,800	1,160,420
(9) Projected Number of Years:	3	3
(10) Projected Paid Loss per Year:	174,267	386,807
(11) Discounted Value at 4%:	493,278	1,094,893

NOTES:
(2), (3) From Section 4, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 4, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Department of Corrections - Cluster 3
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	522,800	1,160,420		479,792	1,064,957
6/30/82-83	0	9,458	0.971	0	9,186
6/30/83-84	0	45,021	0.922	0	41,495
6/30/84-85	11,127	17,127	0.879	9,776	15,047
6/30/85-86	22,454	27,454	0.840	18,871	23,073
6/30/86-87	35,251	36,251	0.809	28,527	29,336
6/30/87-88	67,922	71,922	0.781	53,038	56,161
6/30/88-89	76,288	77,288	0.755	57,575	58,330
6/30/89-90	135,129	140,129	0.746	100,774	104,503
6/30/90-91	187,501	188,501	0.730	136,828	137,558
6/30/91-92	163,051	163,051	0.734	119,743	119,743
6/30/92-93	147,966	149,966	0.715	105,804	107,234
6/30/93-94	183,664	185,664	0.709	130,257	131,676
6/30/94-95	193,080	198,080	0.703	135,800	139,317
6/30/95-96	227,741	233,741	0.685	156,023	160,134
6/30/96-97	285,146	293,146	0.669	190,848	196,202
6/30/97-98	329,245	336,245	0.656	216,143	220,739
6/30/98-99	376,426	390,426	0.661	248,794	258,047
6/30/99-00	489,532	503,532	0.661	323,734	332,992
6/30/00-01	764,285	767,285	0.662	505,982	507,968
6/30/01-02	604,522	626,522	0.658	397,809	412,287
6/30/02-03	671,862	827,862	0.658	442,061	544,703
6/30/03-04	733,576	891,576	0.654	479,959	583,335
6/30/04-05	1,187,044	1,207,044	0.657	779,875	793,015
6/30/05-06	1,212,902	1,394,902	0.669	811,114	932,824
6/30/06-07	1,140,178	1,607,178	0.681	776,357	1,094,342
6/30/07-08	1,761,521	2,524,521	0.715	1,259,194	1,804,612
6/30/08-09	3,042,419	3,458,419	0.756	2,301,514	2,616,208
Total	14,572,633	17,532,732		10,266,194	12,495,025
			(7) Total Discount Factor:	0.704	0.713

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	522,800	1,160,420
(9) Projected Number of Years:	3	3
(10) Projected Paid Loss per Year:	174,267	386,807
(11) Discounted Value at 6%:	479,792	1,064,957

NOTES:
(2), (3) From Section 4, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 4, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4

Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		2,000,354			2,374,373	2,508,268	374,018	507,913		
6/30/82-83		134,406	137,109		138,000	140,000	3,594	5,594		
6/30/83-84		188,031	191,260		192,000	196,000	3,969	7,969		
6/30/84-85	139,178	1,625,634	1,980,133	1,649,891	1,650,000	1,980,000	24,366	354,366	1.186	1.423
6/30/85-86	149,671	1,369,416	1,939,402	1,392,458	1,392,000	1,665,930	22,584	296,514	0.930	1.113
6/30/86-87	171,999	2,031,370	2,889,470	2,080,147	2,080,000	2,889,000	48,630	857,630	1.209	1.680
6/30/87-88	201,511	1,944,517	2,076,642	2,051,785	2,052,000	2,077,000	107,483	132,483	1.018	1.031
6/30/88-89	206,011	1,707,511	1,877,510	1,845,893	1,846,000	1,878,000	138,489	170,489	0.896	0.912
6/30/89-90	206,006	522,038	585,173	590,404	585,000	590,000	62,962	67,962	0.284	0.286
6/30/90-91	189,307	2,151,513	2,468,122	2,465,619	2,466,000	2,468,000	314,487	316,487	1.303	1.304
6/30/91-92	188,230	2,203,348	2,834,698	2,624,215	2,624,000	2,835,000	420,652	631,652	1.394	1.506
6/30/92-93	192,221	450,365	515,436	516,109	455,000	473,000	4,635	22,635	0.237	0.246
6/30/93-94	203,766	710,934	1,223,366	928,305	928,000	1,223,000	217,066	512,066	0.455	0.600
6/30/94-95	204,442	761,806	942,752	939,462	770,000	800,000	8,194	38,194	0.377	0.391
6/30/95-96	211,792	591,722	747,649	746,169	598,000	622,000	6,278	30,278	0.282	0.294
6/30/96-97	240,609	512,427	686,369	685,559	686,000	686,000	173,573	173,573	0.285	0.285
6/30/97-98	239,416	463,804	590,885	594,331	591,000	594,000	127,196	130,196	0.247	0.248
6/30/98-99	240,064	670,315	871,166	869,374	869,000	871,000	198,685	200,685	0.362	0.363
6/30/99-00	262,199	1,216,150	1,676,122	1,651,456	1,651,000	1,676,000	434,850	459,850	0.630	0.639
6/30/00-01	274,893	1,189,057	1,654,329	1,630,937	1,631,000	1,654,000	441,943	464,943	0.593	0.602
6/30/01-02	264,006	772,068	1,071,832	1,065,633	1,066,000	1,072,000	293,932	299,932	0.404	0.406
6/30/02-03	261,467	690,728	983,386	979,966	980,000	983,000	289,272	292,272	0.375	0.376
6/30/03-04	274,600	268,295	406,750	419,543	407,000	420,000	138,705	151,705	0.148	0.153
6/30/04-05	253,275	473,141	792,122	782,494	782,000	792,000	308,859	318,859	0.309	0.313
6/30/05-06	329,111	353,027	795,600	939,679	796,000	940,000	442,973	586,973	0.242	0.286
6/30/06-07	343,116	272,353	650,914	795,064	651,000	795,000	378,647	522,647	0.190	0.232
6/30/07-08	346,351	207,607	695,164	858,251	695,000	858,000	487,393	650,393	0.201	0.248
6/30/08-09	338,291	157,647	1,144,455	1,010,868	1,011,000	1,144,000	853,353	986,353	0.299	0.338
Total	5,931,533	25,639,586	32,427,814	30,113,613	31,966,373	34,830,198	6,326,787	9,190,612		
Tot 6/30/84-09	5,931,533	23,316,795	32,099,445	30,113,613	29,262,000	31,985,930	5,945,205	8,669,135	0.493	0.539

NOTES:

(2) Provided by Commonwealth of Massachusetts

(3) Sum of Section 5, Exhibit 1, Page 2, Column 3 and Section 5, Exhibit 1, Page 9, Column 8

(4) From Section 5, Exhibit 1, Page 2, Column 8

(5) From Section 5, Exhibit 1, Page 3, Column 8

(6), (7) Selected based on (3), (4), and (5)

(8) = (6) - (3)

(9) = (7) - (3)

(10) = (6) / (2) / 10

(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		1,912,314							1	1		74
6/30/82-83		134,406	1.020	1.000	137,109	0	137,109		0	0		
6/30/83-84		160,531	1.020	1.000	163,760	27,500	191,260		0	0		
6/30/84-85	139,178	1,581,634	1.020	1.200	1,936,133	44,000	1,980,133	1.423	1	1	354,498	70
6/30/85-86	149,671	1,309,416	1.025	1.400	1,879,402	60,000	1,939,402	1.296	1	1	569,985	70
6/30/86-87	171,999	1,908,370	1.035	1.400	2,766,470	123,000	2,889,470	1.680	2	2	429,050	58
6/30/87-88	201,511	1,856,017	1.071	1.000	1,988,142	88,500	2,076,642	1.031	1	1	132,125	59
6/30/88-89	206,011	1,639,511	1.104	1.000	1,809,510	68,000	1,877,510	0.911	1	1	169,999	60
6/30/89-90	206,006	471,448	1.134	1.000	534,583	50,590	585,173	0.284	0	0		
6/30/90-91	189,307	1,943,013	1.163	1.000	2,259,622	208,500	2,468,122	1.304	1	1	316,610	70
6/30/91-92	188,230	2,034,348	1.191	1.100	2,665,698	169,000	2,834,698	1.506	2	2	315,675	56
6/30/92-93	192,221	292,355	1.223	1.000	357,426	158,010	515,436	0.268	0	0		
6/30/93-94	203,766	580,633	1.255	1.500	1,093,065	130,301	1,223,366	0.600	1	1	512,431	45
6/30/94-95	204,442	624,606	1.289	1.000	804,866	137,886	942,752	0.461	0	0		
6/30/95-96	211,792	475,722	1.325	1.000	630,169	117,481	747,649	0.353	0	0		
6/30/96-97	240,609	472,427	1.365	1.000	644,796	41,573	686,369	0.285	0	0		
6/30/97-98	239,416	320,304	1.384	1.000	443,142	147,743	590,885	0.247	0	0		
6/30/98-99	240,064	476,815	1.404	1.000	669,384	201,782	871,166	0.363	1	1	192,569	60
6/30/99-00	262,199	1,036,650	1.427	1.000	1,479,533	196,590	1,676,122	0.639	1	0		
6/30/00-01	274,893	1,019,057	1.433	1.000	1,460,794	193,535	1,654,329	0.602	2	2	220,868	53
6/30/01-02	264,006	579,568	1.472	1.000	853,252	218,579	1,071,832	0.406	1	2	136,842	61
6/30/02-03	261,467	500,756	1.508	1.000	755,173	228,213	983,386	0.376	3	1	254,418	46
6/30/03-04	274,600	212,295	1.565	1.000	332,342	74,408	406,750	0.148	2	0		
6/30/04-05	253,275	395,191	1.663	1.000	657,329	134,793	792,122	0.313	5	5	52,428	49
6/30/05-06	329,111	276,027	1.830	1.000	505,040	290,560	795,600	0.242	8	1	229,013	49
6/30/06-07	343,116	272,353	2.167	1.000	590,073	60,841	650,914	0.190	17	3	105,907	48
6/30/07-08	346,351	207,607	2.991	1.000	620,860	74,304	695,164	0.201	64	15	27,550	55
6/30/08-09	338,291	157,647	6.370	1.000	1,004,191	140,265	1,144,455	0.338		62	13,654	47
Total	5,931,533	22,851,023			29,041,862	3,385,953	32,427,814		115	103		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 5, Exhibit 1, Page 7
(5) Based on information from the MA WCRIB
(6) = (3) x (4) x (5)
(7) From Section 5, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
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Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	139,178	0.884	1,581,634	1.020	1,605,891	44,000	1,649,891	1.185	1.154
6/30/85-86	149,671	0.626	1,309,416	1.025	1,332,458	60,000	1,392,458	0.930	0.890
6/30/86-87	171,999	0.828	1,908,370	1.035	1,957,147	123,000	2,080,147	1.209	1.138
6/30/87-88	201,511	0.801	1,856,017	1.071	1,963,285	88,500	2,051,785	1.018	0.974
6/30/88-89	206,011	0.715	1,639,511	1.104	1,777,893	68,000	1,845,893	0.896	0.863
6/30/89-90	206,006	0.281	471,448	1.134	539,814	50,590	590,404	0.287	0.262
6/30/90-91	189,307	1.184	1,943,013	1.163	2,257,119	208,500	2,465,619	1.302	1.192
6/30/91-92	188,230	1.393	2,034,348	1.191	2,455,215	169,000	2,624,215	1.394	1.304
6/30/92-93	192,221	0.188	292,355	1.223	358,099	158,010	516,109	0.268	0.186
6/30/93-94	203,766	0.525	580,633	1.255	798,004	130,301	928,305	0.456	0.392
6/30/94-95	204,442	0.387	624,606	1.289	801,576	137,886	939,462	0.460	0.392
6/30/95-96	211,792	0.295	475,722	1.325	628,688	117,481	746,169	0.352	0.297
6/30/96-97	240,609	0.267	472,427	1.365	643,986	41,573	685,559	0.285	0.268
6/30/97-98	239,416	0.190	320,304	1.384	446,588	147,743	594,331	0.248	0.187
6/30/98-99	240,064	0.276	476,815	1.404	667,591	201,782	869,374	0.362	0.278
6/30/99-00	262,199	0.533	1,036,650	1.427	1,454,866	196,590	1,651,456	0.630	0.555
6/30/00-01	274,893	0.503	1,019,057	1.433	1,437,402	193,535	1,630,937	0.593	0.523
6/30/01-02	264,006	0.316	579,568	1.472	847,054	218,579	1,065,633	0.404	0.321
6/30/02-03	261,467	0.285	500,756	1.508	751,753	228,213	979,966	0.375	0.288
6/30/03-04	274,600	0.134	212,295	1.565	345,135	74,408	419,543	0.153	0.126
6/30/04-05	253,275	0.250	395,191	1.663	647,701	134,793	782,494	0.309	0.256
6/30/05-06	329,111	0.250	276,027	1.830	649,119	290,560	939,679	0.286	0.197
6/30/06-07	343,116	0.250	272,353	2.167	734,223	60,841	795,064	0.232	0.214
6/30/07-08	346,351	0.250	207,607	2.991	783,947	74,304	858,251	0.248	0.226
6/30/08-09	338,291	0.250	157,647	6.370	870,604	140,265	1,010,868	0.299	0.257
Total	5,931,533		20,643,772		26,755,161	3,358,453	30,113,613		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 5, Exhibit 1, Page 4, Column 11
(4) From Section 5, Exhibit 1, Page 2, Column 3
(5) From Section 5, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 5, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.884	0.884
6/30/85-86									0.626	0.626
6/30/86-87									0.828	0.828
6/30/87-88									0.801	0.801
6/30/88-89									0.715	0.715
6/30/89-90									0.281	0.281
6/30/90-91	189,307	2,259,622	1.194	0.937	1.118	1.000	1.118	1.194	1.098	1.184
6/30/91-92	188,230	2,665,698	1.416	1.028	1.455	1.000	1.455	1.416	1.323	1.393
6/30/92-93	192,221	357,426	0.186	1.198	0.223	1.000	0.223	0.186	0.226	0.188
6/30/93-94	203,766	1,093,065	0.536	1.183	0.635	1.000	0.635	0.536	0.542	0.525
6/30/94-95	204,442	804,866	0.394	1.172	0.461	1.000	0.461	0.394	0.468	0.387
6/30/95-96	211,792	630,169	0.298	1.163	0.346	1.000	0.346	0.298	0.357	0.295
6/30/96-97	240,609	644,796	0.268	1.151	0.309	1.000	0.309	0.268	0.313	0.267
6/30/97-98	239,416	443,142	0.185	1.136	0.210	1.000	0.210	0.185	0.237	0.190
6/30/98-99	240,064	669,384	0.279	1.121	0.313	1.000	0.313	0.279	0.315	0.276
6/30/99-00	262,199	1,479,533	0.564	1.103	0.623	1.000	0.623	0.564	0.610	0.533
6/30/00-01	274,893	1,460,794	0.531	1.075	0.571	1.000	0.571	0.531	0.549	0.503
6/30/01-02	264,006	853,252	0.323	1.054	0.341	1.000	0.341	0.323	0.350	0.316
6/30/02-03	261,467	755,173	0.289	1.051	0.303	1.000	0.303	0.289	0.350	0.285
6/30/03-04	274,600	332,342	0.121	1.051	0.127	1.000	0.127	0.121	0.250	0.134
6/30/04-05	253,275	657,329	0.260	1.044	0.271	1.000	0.271	0.260	0.250	0.250
6/30/05-06	329,111	505,040	0.153	1.033	0.159	1.000	0.159	0.153	0.250	0.250
6/30/06-07	343,116	590,073	0.172	1.022	0.176	1.000	0.176	0.172	0.250	0.250
6/30/07-08	346,351	620,860	0.179	1.011	0.181	1.000	0.181	0.179	0.250	0.250
6/30/08-09	338,291	1,004,191	0.297	1.000	0.297	1.000	0.297	0.297		0.250
Total	4,857,157	17,826,753								

Trend Last 4 (ex 08-09):	-10.4%	Avg 3 (x08-09):	0.172
Trend Last 8 (ex 08-09):	-13.9%	Avg 5 (x08-09):	0.183
Trend Last 12 (ex 08-09):	-7.1%	Avg 10 (x08-09):	0.306
Prior Selected Trend:	0.0%	Prior Sel Avg:	0.250
Selected Trend:	0.0%	Sel. Loss Cost:	0.250

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 5, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
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Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.940	
(2)	Credibility		15%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.957	
		(Low)		(High)
(5)	Selected Range	0.947		0.976
(6)	Incremental Paid for 2009	31,382		31,382
(7)	Estimated Reserve	564,702		1,279,509
(8)	Paid to Date (82 & Prior)	1,912,314		1,912,314
(9)	Est Ult Paid for 1982 & Prior	2,477,016		3,191,823

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	30,556	34,769
(11)	Projected Number of Years	6	6
(12)	Estimated Reserve	183,334	208,612
(13)	Paid to Date (82 & Prior)	1,912,314	1,880,932
(14)	Est Ult Paid for 1982 & Prior	2,095,649	2,089,544
(14a)	Paid Counts During Fiscal Year	1	1

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	2,286,333	2,420,228
(16)	Lump Sum Ultimates	88,040	88,040
(17)	Ult Loss Including Lump Sums	**2,374,373**	**2,508,268**
(18)	Implied Tail	1.196	1.266
(19)	Ult Loss Inc Lump Sums @ 6/08	2,356,771	2,542,770

NOTES:

(1) From Section 5, Exhibit 1, Page 6
(2) = (Average of Section 5, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 5, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 5, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 5, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	105,743	11.569			
1993	2	106,772	11.578	1.010		
1994	3	104,490	11.557	0.979		
1995	4	93,231	11.443	0.892		
1996	5	83,819	11.336	0.899		
1997	6	71,966	11.184	0.859		
1998	7	75,700	11.235	1.052		
1999	8	69,564	11.150	0.919		
2000	9	65,140	11.084	0.936	n =	18
2001	10	69,462	11.149	1.066	S(x) =	36,009
2002	11	72,621	11.193	1.045	S(x-sq) =	72,036,489
2003	12	73,534	11.206	1.013	S(xy) =	399,711
2004	13	73,411	11.204	0.998	S(y) =	200
2005	14	77,899	11.263	1.061	D =	8,721
2006	15	44,021	10.692	0.565	slope =	-0.067
2007	16	28,745	10.266	0.653	Avg Trend =	0.933
2008	17	31,541	10.359	1.097		
2009	18	31,382	10.354	0.995		
					Selected Trend:	**0.940**

NOTES:
(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008
(4) LN [(3)]
(5) Eg. 2009: 0.995 = 10.4 / 10.4

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Amherst) - Cluster 4
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	9,901	27,199	38,094	47,389	62,514	76,567	110,541	128,600	128,600	128,600	128,600	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406	134,406
June-84	12,002	32,972	46,180	57,447	75,782	92,840	110,643	140,015	147,985	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	160,531	
June-85	96,162	264,176	369,998	460,278	608,898	675,356	769,715	839,890	909,635	972,316	1,027,903	1,068,427	1,096,448	1,126,464	1,157,182	1,193,170	1,230,415	1,270,584	1,311,388	1,352,093	1,394,014	1,437,567	1,483,096	1,530,726	1,581,634		
June-86	62,242	170,991	239,486	289,205	386,115	436,793	545,340	637,721	703,230	742,718	771,694	801,514	833,158	865,475	902,795	941,906	984,064	1,026,987	1,069,806	1,113,907	1,159,474	1,207,370	1,257,125	1,309,416			
June-87	114,930	315,736	434,426	540,241	638,550	728,426	816,220	883,030	959,990	1,087,438	1,157,085	1,228,783	1,294,957	1,353,217	1,408,627	1,466,232	1,524,982	1,583,672	1,643,019	1,705,167	1,769,184	1,838,793	1,908,370				
June-88	145,512	388,262	580,167	742,458	913,661	1,023,389	1,122,499	1,187,899	1,243,915	1,301,898	1,363,345	1,426,364	1,496,845	1,538,376	1,582,716	1,627,788	1,673,942	1,720,105	1,757,371	1,788,805	1,821,696	1,856,017					
June-89	149,323	412,040	585,718	734,611	862,714	940,958	1,000,308	1,091,299	1,155,714	1,209,050	1,258,035	1,312,045	1,364,494	1,425,132	1,470,732	1,496,093	1,522,212	1,550,498	1,578,865	1,608,540	1,639,511						
June-90	147,842	316,313	418,270	483,765	493,004	500,207	470,618	470,618	471,448	471,448	471,448	471,448	471,448	471,448	471,448	471,448	471,448	471,448	471,448	471,448							
June-91	221,834	616,722	912,374	1,121,784	1,264,030	1,316,233	1,389,392	1,447,121	1,486,680	1,550,949	1,590,832	1,657,948	1,707,507	1,756,977	1,801,084	1,841,720	1,882,581	1,912,600	1,943,013								
June-92	172,146	475,588	707,613	916,461	996,673	1,097,913	1,173,097	1,245,955	1,399,954	1,481,116	1,564,487	1,649,535	1,732,053	1,809,950	1,869,935	1,921,123	1,976,310	2,034,348									
June-93	81,038	222,727	276,572	310,192	330,479	348,662	351,823	276,708	276,708	292,355	292,355	292,355	292,355	292,355	292,355	292,355	292,355										
June-94	106,895	214,659	321,406	344,959	362,159	373,504	398,819	422,133	440,603	460,274	479,091	498,642	518,380	538,584	559,634	580,633											
June-95	150,379	381,117	506,335	558,037	585,924	605,733	622,315	624,606	624,606	624,606	624,606	624,606	624,606	624,606	624,606												
June-96	188,667	308,485	416,852	435,702	459,899	469,932	470,598	475,072	475,222	475,722	475,722	475,722	475,722	475,722													
June-97	106,252	219,810	296,841	353,903	388,354	412,255	429,409	446,564	464,289	472,427	472,427	472,427	472,427														
June-98	89,150	206,061	269,266	292,631	307,643	318,681	318,681	318,681	319,304	320,304	320,304	320,304															
June-99	79,713	235,741	363,483	410,110	440,701	457,432	467,619	476,062	476,685	476,775	476,815																
June-00	199,557	423,727	611,687	721,978	842,583	936,681	993,407	1,021,874	1,036,650	1,036,650																	
June-01	195,155	433,892	620,127	728,970	802,692	874,675	926,705	967,811	1,019,057																		
June-02	134,258	318,384	436,848	510,454	554,485	576,982	577,623	579,568																			
June-03	110,118	229,192	295,970	379,354	446,784	478,317	500,756																				
June-04	119,754	192,578	206,484	211,562	212,295	212,295																					
June-05	118,177	251,133	297,710	349,273	395,191																						
June-06	109,288	227,014	271,354	276,027																							
June-07	130,909	212,144	272,353																								
June-08	136,833	207,607																									
June-09	157,647																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.747	1.401	1.244	1.319	1.225	1.444	1.163	1.000	1.000	1.000	1.045	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
June-84	2.747	1.401	1.244	1.319	1.225	1.192	1.265	1.057	1.085	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
June-85	2.747	1.401	1.244	1.323	1.109	1.140	1.091	1.083	1.069	1.057	1.039	1.026	1.027	1.027	1.031	1.031	1.033	1.032	1.031	1.031	1.031	1.032	1.032	1.033		
June-86	2.747	1.401	1.208	1.335	1.131	1.249	1.169	1.103	1.056	1.039	1.039	1.039	1.039	1.043	1.043	1.045	1.044	1.042	1.041	1.041	1.041	1.041	1.042			
June-87	2.747	1.376	1.244	1.182	1.141	1.121	1.082	1.087	1.133	1.064	1.062	1.054	1.045	1.041	1.041	1.040	1.038	1.037	1.038	1.038	1.039	1.038				
June-88	2.668	1.494	1.280	1.231	1.120	1.097	1.058	1.047	1.047	1.047	1.046	1.049	1.028	1.029	1.028	1.028	1.028	1.022	1.018	1.018	1.019					
June-89	2.759	1.422	1.254	1.174	1.091	1.063	1.091	1.059	1.046	1.041	1.043	1.040	1.044	1.032	1.017	1.017	1.019	1.018	1.019	1.019						
June-90	2.140	1.322	1.157	1.019	1.015	0.941	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
June-91	2.780	1.479	1.230	1.127	1.041	1.056	1.042	1.027	1.043	1.026	1.042	1.030	1.029	1.025	1.023	1.022	1.016	1.016								
June-92	2.763	1.488	1.295	1.088	1.102	1.068	1.062	1.124	1.058	1.056	1.054	1.050	1.045	1.033	1.027	1.029	1.029									
June-93	2.748	1.242	1.122	1.065	1.055	1.009	0.786	1.000	1.057	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
June-94	2.008	1.497	1.073	1.050	1.031	1.068	1.058	1.044	1.045	1.041	1.041	1.040	1.039	1.039	1.038											
June-95	2.534	1.329	1.102	1.050	1.034	1.027	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
June-96	1.635	1.351	1.045	1.056	1.022	1.001	1.010	1.000	1.001	1.000	1.000	1.000	1.000													
June-97	2.069	1.350	1.192	1.097	1.062	1.042	1.040	1.040	1.018	1.000	1.000	1.000														
June-98	2.311	1.307	1.087	1.051	1.036	1.000	1.000	1.002	1.003	1.000	1.000															
June-99	2.957	1.542	1.128	1.075	1.038	1.022	1.018	1.001	1.000	1.000																
June-00	2.123	1.444	1.180	1.167	1.112	1.061	1.029	1.014	1.000																	
June-01	2.223	1.429	1.176	1.101	1.090	1.059	1.044	1.053																		
June-02	2.371	1.372	1.168	1.086	1.041	1.001	1.003																			
June-03	2.081	1.291	1.282	1.178	1.071	1.047																				
June-04	1.608	1.072	1.025	1.003	1.000																					
June-05	2.125	1.185	1.173	1.131																						
June-06	2.077	1.195	1.017																							
June-07	1.621	1.284																								
June-08	1.517																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.341	1.363	1.174	1.140	1.081	1.081	1.051	1.039	1.037	1.022	1.026	1.022	1.021	1.021	1.021	1.019	1.021	1.019	1.018	1.021	1.022	1.022	1.018	1.011	1.000	1.000	
Latest 5	1.790	1.206	1.133	1.100	1.063	1.038	1.019	1.022	1.004	1.000	1.008	1.008	1.017	1.019	1.017	1.014	1.018	1.019	1.023	1.029	1.026	1.022					
Latest 3	1.738	1.222	1.072	1.104	1.037	1.036	1.025	1.023	1.001	1.000	1.000	1.000	1.013	1.013	1.022	1.017	1.015	1.011	1.012	1.025	1.033	1.037	1.025	1.011			
Volume Wtd																											
All Yrs	2.291	1.380	1.184	1.130	1.076	1.065	1.047	1.049	1.043	1.033	1.036	1.033	1.030	1.028	1.027	1.027	1.026	1.024	1.026	1.027	1.030	1.034	1.033	1.028	1.000		
Latest 5	1.773	1.208	1.145	1.106	1.077	1.043	1.024	1.026	1.004	1.000	1.008	1.008	1.027	1.025	1.023	1.020	1.022	1.021	1.026	1.028	1.031						
Latest 3	1.715	1.219	1.079	1.121	1.045	1.039	1.029	1.027	1.001	1.000	1.000	1.000	1.012	1.014	1.027	1.024	1.020	1.015	1.016	1.025	1.032	1.037	1.034				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	*2.130*	*1.383*	*1.189*	*1.107*	*1.070*	*1.029*	*1.030*	*1.009*	*1.004*	*1.016*	*1.004*	*1.018*	*1.032*	*1.030*	*1.026*	*1.027*	*1.026*	*1.026*	*1.027*	*1.029*	*1.035*	*1.032*	*1.010*	*1.005*	*1.000*	*1.021*	
Selected	2.130	1.380	1.184	1.100	1.063	1.038	1.024	1.027	1.004	1.017	1.015	1.014	1.030	1.028	1.027	1.027	1.026	1.024	1.026	1.027	1.030	1.034	1.010	1.005	1.000	1.000	1.020
FacToUlt	6.370	2.991	2.167	1.830	1.663	1.565	1.508	1.472	1.433	1.427	1.404	1.384	1.365	1.325	1.289	1.255	1.223	1.191	1.163	1.134	1.104	1.071	1.035	1.025	1.020	1.020	1.020
Percent of Ult	15.7%	33.4%	46.2%	54.7%	60.1%	63.9%	66.3%	67.9%	69.8%	70.1%	71.2%	72.3%	73.3%	75.5%	77.6%	79.7%	81.8%	83.9%	86.0%	88.2%	90.6%	93.4%	96.6%	97.5%	98.0%	98.0%	98.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	2,356,771	2,542,770	2,374,373	2,508,268	17,601	0.7%	(34,503)	-1.4%
6/30/82-83	138,000	140,000	138,000	140,000	0	0.0%	0	0.0%
6/30/83-84	192,000	196,000	192,000	196,000	0	0.0%	0	0.0%
6/30/84-85	1,606,000	1,968,000	1,650,000	1,980,000	44,000	2.7%	12,000	0.6%
6/30/85-86	1,350,000	1,636,684	1,392,000	1,665,930	42,000	3.1%	29,246	1.8%
6/30/86-87	2,055,000	2,893,000	2,080,000	2,889,000	25,000	1.2%	(4,000)	-0.1%
6/30/87-88	2,067,000	2,106,000	2,052,000	2,077,000	(15,000)	-0.7%	(29,000)	-1.4%
6/30/88-89	1,858,000	1,902,000	1,846,000	1,878,000	(12,000)	-0.6%	(24,000)	-1.3%
6/30/89-90	603,000	607,000	585,000	590,000	(18,000)	-3.0%	(17,000)	-2.8%
6/30/90-91	2,471,000	2,508,000	2,466,000	2,468,000	(5,000)	-0.2%	(40,000)	-1.6%
6/30/91-92	2,616,000	2,850,000	2,624,000	2,835,000	8,000	0.3%	(15,000)	-0.5%
6/30/92-93	455,000	473,000	455,000	473,000	0	0.0%	0	0.0%
6/30/93-94	825,000	1,102,000	928,000	1,223,000	103,000	12.5%	121,000	11.0%
6/30/94-95	770,000	800,000	770,000	800,000	0	0.0%	0	0.0%
6/30/95-96	598,000	622,000	598,000	622,000	0	0.0%	0	0.0%
6/30/96-97	706,000	732,000	686,000	686,000	(20,000)	-2.8%	(46,000)	-6.3%
6/30/97-98	601,000	634,000	591,000	594,000	(10,000)	-1.7%	(40,000)	-6.3%
6/30/98-99	887,000	910,000	869,000	871,000	(18,000)	-2.0%	(39,000)	-4.3%
6/30/99-00	1,695,000	1,728,000	1,651,000	1,676,000	(44,000)	-2.6%	(52,000)	-3.0%
6/30/00-01	1,616,000	1,648,000	1,631,000	1,654,000	15,000	0.9%	6,000	0.4%
6/30/01-02	1,089,000	1,109,000	1,066,000	1,072,000	(23,000)	-2.1%	(37,000)	-3.3%
6/30/02-03	957,000	1,020,000	980,000	983,000	23,000	2.4%	(37,000)	-3.6%
6/30/03-04	436,000	568,000	407,000	420,000	(29,000)	-6.7%	(148,000)	-26.1%
6/30/04-05	788,000	789,000	782,000	792,000	(6,000)	-0.8%	3,000	0.4%
6/30/05-06	779,000	905,000	796,000	940,000	17,000	2.2%	35,000	3.9%
6/30/06-07	797,000	944,000	651,000	795,000	(146,000)	-18.3%	(149,000)	-15.8%
6/30/07-08	968,000	1,034,000	695,000	858,000	(273,000)	-28.2%	(176,000)	-17.0%
6/30/08-09								
Total	31,279,771	34,367,454	30,955,373	33,686,198	(324,399)	-1.0%	(681,257)	-2.0%

NOTES:
(2), (3) From Aon analysis as of June 30, 2008
(4), (5) From Section 5, Exhibit 1, Page 1, Columns 6, 7
(6) = (4) - (2)
(7) = (4) / (2) - 1
(8) = (5) - (3)
(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	1,912,314	1.231	2,353,280	0.0%	0.0%	0	88,040	88,040	3.7%	1.000	88,040	88,040	88,040
6/30/82-83	134,406	1.020	137,109	0.0%	0.0%	0	0	0	0.0%	1.000	0	0	0
6/30/83-84	160,531	1.020	163,760	0.0%	0.0%	0	27,500	27,500	16.8%	1.000	27,500	27,500	27,500
6/30/84-85	1,581,634	1.224	1,936,133	0.0%	0.0%	0	44,000	44,000	2.3%	1.000	44,000	44,000	44,000
6/30/85-86	1,309,416	1.435	1,879,402	0.0%	0.0%	0	60,000	60,000	3.2%	1.000	60,000	60,000	60,000
6/30/86-87	1,908,370	1.450	2,766,470	0.0%	0.0%	0	123,000	123,000	4.4%	1.000	123,000	123,000	123,000
6/30/87-88	1,856,017	1.071	1,988,142	0.0%	0.0%	0	88,500	88,500	4.5%	1.000	88,500	88,500	88,500
6/30/88-89	1,639,511	1.104	1,809,510	0.0%	0.0%	0	68,000	68,000	3.8%	1.000	68,000	68,000	68,000
6/30/89-90	471,448	1.134	534,583	0.0%	0.0%	0	50,590	50,590	9.5%	1.000	50,590	50,590	50,590
6/30/90-91	1,943,013	1.163	2,259,622	0.0%	0.0%	0	208,500	208,500	9.2%	1.000	208,500	208,500	208,500
6/30/91-92	2,034,348	1.310	2,665,698	0.0%	0.0%	0	169,000	169,000	6.3%	1.000	169,000	169,000	169,000
6/30/92-93	292,355	1.223	357,426	0.0%	0.0%	0	158,010	158,010	44.2%	1.000	158,010	158,010	158,010
6/30/93-94	580,633	1.883	1,093,065	0.0%	0.0%	0	130,301	130,301	11.9%	1.000	130,301	130,301	10,327
6/30/94-95	624,606	1.289	804,866	0.0%	0.0%	0	137,200	137,200	17.0%	1.010	138,572	137,886	138,306
6/30/95-96	475,722	1.325	630,169	0.1%	0.1%	630	116,000	116,630	18.5%	1.020	118,332	117,481	118,152
6/30/96-97	472,427	1.365	644,796	0.2%	0.3%	1,934	40,000	41,934	6.5%	1.030	41,212	41,573	42,598
6/30/97-98	320,304	1.384	443,142	0.3%	0.6%	2,659	143,500	146,159	33.0%	1.041	149,327	147,743	148,675
6/30/98-99	476,815	1.404	669,384	0.4%	1.0%	6,694	193,500	200,194	29.9%	1.051	203,370	201,782	204,066
6/30/99-00	1,036,650	1.427	1,479,533	0.5%	1.5%	22,193	179,500	201,693	13.6%	1.067	191,486	196,590	202,857
6/30/00-01	1,019,057	1.433	1,460,794	0.7%	2.2%	32,137	170,000	202,137	13.8%	1.088	184,932	193,535	210,754
6/30/01-02	579,568	1.472	853,252	0.7%	2.9%	24,744	192,500	217,244	25.5%	1.142	219,914	218,579	224,475
6/30/02-03	500,756	1.508	755,173	0.8%	3.7%	27,941	189,972	217,913	28.9%	1.256	238,512	228,213	221,156
6/30/03-04	212,295	1.565	332,342	0.6%	4.3%	14,382	56,000	70,382	21.2%	1.401	78,435	74,408	86,222
6/30/04-05	395,191	1.663	657,329	3.7%	8.0%	52,636	77,950	130,586	19.9%	1.783	139,000	134,793	152,484
6/30/05-06	276,027	1.830	505,040	8.1%	16.1%	81,420	77,000	158,420	31.4%	5.490	422,700	290,560	190,658
6/30/06-07	272,353	2.167	590,073	4.5%	20.6%	121,682	0	121,682	20.6%	9.780	0	60,841	160,574
6/30/07-08	207,607	2.991	620,860	3.3%	23.9%	148,608	0	148,608	23.9%	30.514	0	74,304	160,000
6/30/08-09	157,647	6.370	1,004,191	4.0%	27.9%	280,529	0	280,529	27.9%	30.514	0	140,265	
Total	22,851,023		31,395,142			818,190	2,788,563	3,606,753	11.5%		3,341,232	3,473,993	3,356,444

NOTES:
(2) From Section 5, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 5, Exhibit 1, Page 2, Column 6
(5) From Section 5, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 5, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 5, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Amherst) - Cluster 4
INDEMNITY
Lump Sum Developmen
Incremental Lump Sum Payments

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0	0	0	0	0	0	0	0	7,000	0	0	0	0	0	54,000	0	0	0	0	0	0	0	0	0	27,040	0	0	0
Jun-83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27,500	0	0	0	0	0	0	0	0	0		
Jun-85	0	0	0	0	0	16,500	0	0	0	0	0	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0			
Jun-86	0	0	0	0	0	0	0	0	50,000	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0				
Jun-87	0	0	0	0	0	10,000	37,500	0	10,000	0	0	0	19,000	46,500	0	0	0	0	0	0	0	0	0					
Jun-88	0	0	0	12,500	12,500	0	43,500	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0						
Jun-89	0	0	0	0	14,000	0	0	9,000	45,000	0	0	0	0	0	0	0	0	0	0	0	0							
Jun-90	0	0	0	33,000	8,000	9,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Jun-91	0	0	0	30,000	20,000	60,000	46,500	0	27,000	0	0	0	0	0	25,000	0	0	0	0									
Jun-92	0	5,000	0	100,500	0	0	0	27,500	0	0	0	0	0	36,000	0	0	0	0										
Jun-93	0	20,010	43,000	10,000	0	10,000	0	75,000	0	0	0	0	0	0	0	0	0											
Jun-94	0	0	1	0	0	0	0	0	0	10,300	0	0	0	0	0	120,000												
Jun-95	0	37,200	35,000	40,000	25,000	0	0	0	0	0	0	0	0	0	0													
Jun-96	0	0	16,000	0	25,000	37,500	37,500	0	0	0	0	0	0	0														
Jun-97	0	0	0	0	0	0	0	0	0	40,000	0	0	0															
Jun-98	0	0	88,500	0	30,000	25,000	0	0	0	0	0	0																
Jun-99	0	40,000	93,500	27,500	0	22,500	0	0	0	10,000	0																	
Jun-00	0	0	23,000	27,500	75,000	0	24,000	0	30,000	0																		
Jun-01	0	17,500	72,500	50,000	0	30,000	0	0	0																			
Jun-02	0	24,000	18,000	52,500	63,000	35,000	0	0																				
Jun-03	0	9,000	26,500	32,000	30,000	92,472	0																					
Jun-04	0	6,000	0	0	50,000	0																						
Jun-05	0	24,450	18,500	0	35,000																							
Jun-06	0	35,000	28,000	14,000																								
Jun-07	0	0	0																									
Jun-08	0	0																										
Jun-09	0																											

Cumulative Lump Sum Payments

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	7,000	7,000	7,000	7,000	7,000	7,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	88,040	88,040	88,040	88,040
Jun-83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27,500	27,500	27,500	27,500	27,500	27,500	27,500	27,500	27,500	27,500		
Jun-85	0	0	0	0	0	16,500	16,500	16,500	16,500	16,500	16,500	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000			
Jun-86	0	0	0	0	0	0	0	0	50,000	50,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000				
Jun-87	0	0	0	0	0	10,000	47,500	47,500	57,500	57,500	57,500	57,500	76,500	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000					
Jun-88	0	0	0	12,500	25,000	25,000	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	88,500	88,500	88,500	88,500						
Jun-89	0	0	0	0	14,000	14,000	14,000	23,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000							
Jun-90	0	0	0	33,000	41,000	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590								
Jun-91	0	0	0	30,000	50,000	110,000	156,500	156,500	183,500	183,500	183,500	183,500	183,500	183,500	208,500	208,500	208,500	208,500	208,500									
Jun-92	0	5,000	5,000	105,500	105,500	105,500	105,500	133,000	133,000	133,000	133,000	133,000	133,000	169,000	169,000	169,000	169,000	169,000										
Jun-93	0	20,010	63,010	73,010	73,010	83,010	83,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010											
Jun-94	0	0	1	1	1	1	1	1	1	10,301	10,301	10,301	10,301	10,301	10,301	130,301												
Jun-95	0	37,200	72,200	112,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200													
Jun-96	0	0	16,000	16,000	41,000	78,500	116,000	116,000	116,000	116,000	116,000	116,000	116,000	116,000														
Jun-97	0	0	0	0	0	0	0	0	0	40,000	40,000	40,000	40,000															
Jun-98	0	0	88,500	88,500	118,500	143,500	143,500	143,500	143,500	143,500	143,500	143,500																
Jun-99	0	40,000	133,500	161,000	161,000	183,500	183,500	183,500	183,500	193,500	193,500																	
Jun-00	0	0	23,000	50,500	125,500	125,500	149,500	149,500	179,500	179,500																		
Jun-01	0	17,500	90,000	140,000	140,000	170,000	170,000	170,000	170,000																			
Jun-02	0	24,000	42,000	94,500	157,500	192,500	192,500	192,500																				
Jun-03	0	9,000	35,500	67,500	97,500	189,972	189,972																					
Jun-04	0	6,000	6,000	6,000	56,000	56,000																						
Jun-05	0	24,450	42,950	42,950	77,950																							
Jun-06	0	35,000	63,000	77,000																								
Jun-07	0	0	0																									
Jun-08	0	0																										
Jun-09	0																											

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Amherst) - Cluster 4
INDEMNITY
Lump Sum Developmen
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sum

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.168	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.027	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
Jun-87	0.000	0.000	0.000	0.000	0.000	0.004	0.014	0.000	0.004	0.000	0.000	0.000	0.007	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.000	0.000	0.006	0.006	0.000	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000						
Jun-89	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.005	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
Jun-90	0.000	0.000	0.000	0.062	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
Jun-91	0.000	0.000	0.000	0.013	0.009	0.027	0.021	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000									
Jun-92	0.000	0.002	0.000	0.038	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000											
Jun-93	0.000	0.056	0.120	0.028	0.000	0.028	0.000	0.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000											
Jun-94	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.110												
Jun-95	0.000	0.046	0.043	0.050	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000													
Jun-96	0.000	0.000	0.025	0.000	0.040	0.060	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000														
Jun-97	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.062	0.000	0.000	0.000															
Jun-98	0.000	0.000	0.200	0.000	0.068	0.056	0.000	0.000	0.000	0.000	0.000	0.000																
Jun-99	0.000	0.060	0.140	0.041	0.000	0.034	0.000	0.000	0.000	0.015	0.000																	
Jun-00	0.000	0.000	0.016	0.019	0.051	0.000	0.016	0.000	0.020	0.000																		
Jun-01	0.000	0.012	0.050	0.034	0.000	0.021	0.000	0.000	0.000																			
Jun-02	0.000	0.028	0.021	0.062	0.074	0.041	0.000	0.000																				
Jun-03	0.000	0.012	0.035	0.042	0.040	0.122	0.000																					
Jun-04	0.000	0.018	0.000	0.000	0.150	0.000																						
Jun-05	0.000	0.037	0.028	0.000	0.053																							
Jun-06	0.000	0.069	0.055	0.028																								
Jun-07	0.000	0.000	0.000																									
Jun-08	0.000	0.000																										
Jun-09	0.000																											
Averages		*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
Simple Avg																												
All Yrs (ex P)	0.000	0.013	0.029	0.018	0.024	0.019	0.006	0.011	0.005	0.005	0.000	0.001	0.000	0.002	0.001	0.009	0.015	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Latest 5	0.000	0.025	0.024	0.026	0.063	0.037	0.003	0.000	0.004	0.015	0.000	0.000	0.000	0.003	0.002	0.022	0.000	0.000	0.002	0.000	0.000	0.000	0.000					
Latest 3	0.000	0.023	0.028	0.009	0.081	0.054	0.000	0.000	0.007	0.005	0.000	0.000	0.000	0.000	0.000	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Olympic Avg																												
All Yrs (ex P)	0.000	0.011	0.023	0.016	0.019	0.015	0.004	0.001	0.004	0.002	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Latest 10	0.000	0.021	0.043	0.020	0.041	0.026	0.002	0.000	0.000	0.003	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000										
Latest 5	0.000	0.018	0.021	0.023	0.056	0.021	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Dev Factor Selection																												
Prior	*NA*	*0.040*	*0.035*	*0.045*	*0.086*	*0.044*	*0.005*	*0.008*	*0.007*	*0.007*	*0.005*	*0.004*	*0.003*	*0.002*	*0.001*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	
Selected	NA	0.040	0.033	0.045	0.081	0.037	0.006	0.008	0.007	0.007	0.005	0.004	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FacToUlt	NA	0.279	0.239	0.206	0.161	0.080	0.043	0.037	0.029	0.022	0.015	0.010	0.006	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Amherst) - Cluster 4
INDEMNITY
Paid Loss Development
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	7,000	7,000	7,000	7,000	7,000	7,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	61,000	88,040	88,040	88,040	88,040
Jun-83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27,500	27,500	27,500	27,500	27,500	27,500	27,500	27,500	27,500	27,500		
Jun-85	0	0	0	0	0	16,500	16,500	16,500	16,500	16,500	16,500	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000	44,000			
Jun-86	0	0	0	0	0	0	0	0	50,000	50,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000				
Jun-87	0	0	0	0	0	10,000	47,500	47,500	57,500	57,500	57,500	57,500	76,500	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000					
Jun-88	0	0	0	12,500	25,000	25,000	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	68,500	88,500	88,500	88,500	88,500						
Jun-89	0	0	0	0	14,000	14,000	14,000	23,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000							
Jun-90	0	0	0	33,000	41,000	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590	50,590								
Jun-91	0	0	0	30,000	50,000	110,000	156,500	156,500	183,500	183,500	183,500	183,500	183,500	183,500	208,500	208,500	208,500	208,500	208,500									
Jun-92	0	5,000	5,000	105,500	105,500	105,500	105,500	133,000	133,000	133,000	133,000	133,000	133,000	169,000	169,000	169,000	169,000	169,000										
Jun-93	0	20,010	63,010	73,010	73,010	83,010	83,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010	158,010											
Jun-94	0	0	1	1	1	1	1	1	1	10,301	10,301	10,301	10,301	10,301	10,301	130,301												
Jun-95	0	37,200	72,200	112,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200	137,200													
Jun-96	0	0	16,000	16,000	41,000	78,500	116,000	116,000	116,000	116,000	116,000	116,000	116,000	116,000														
Jun-97	0	0	0	0	0	0	0	0	0	40,000	40,000	40,000	40,000															
Jun-98	0	0	88,500	88,500	118,500	143,500	143,500	143,500	143,500	143,500	143,500	143,500																
Jun-99	0	40,000	133,500	161,000	161,000	183,500	183,500	183,500	183,500	193,500	193,500																	
Jun-00	0	0	23,000	50,500	125,500	125,500	149,500	149,500	179,500	179,500																		
Jun-01	0	17,500	90,000	140,000	140,000	170,000	170,000	170,000	170,000																			
Jun-02	0	24,000	42,000	94,500	157,500	192,500	192,500	192,500																				
Jun-03	0	9,000	35,500	67,500	97,500	189,972	189,972																					
Jun-04	0	6,000	6,000	6,000	56,000	56,000																						
Jun-05	0	24,450	42,950	42,950	77,950																							
Jun-06	0	35,000	63,000	77,000																								
Jun-07	0	0	0																									
Jun-08	0	0																										
Jun-09	0																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs									1.000	1.000	1.000	1.000	1.000	8.714	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.443	1.000	1.000	1.000	
Jun-83																												
Jun-84																	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Jun-85						1.000	1.000	1.000	1.000	1.000	2.667	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Jun-86									1.000	1.200	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Jun-87						4.750	1.000	1.211	1.000	1.000	1.000	1.330	1.608	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
Jun-88				2.000	1.000	2.740	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.292	1.000	1.000	1.000							
Jun-89					1.000	1.000	1.643	2.957	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
Jun-90				1.242	1.234	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
Jun-91				1.667	2.200	1.423	1.000	1.173	1.000	1.000	1.000	1.000	1.000	1.136	1.000	1.000	1.000	1.000										
Jun-92		1.000	21.100	1.000	1.000	1.000	1.261	1.000	1.000	1.000	1.000	1.000	1.271	1.000	1.000	1.000	1.000											
Jun-93		3.149	1.159	1.000	1.137	1.000	1.904	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
Jun-94			1.000	1.000	1.000	1.000	1.000	1.000	10301.000	1.000	1.000	1.000	1.000	1.000	12.649													
Jun-95		1.941	1.554	1.223	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
Jun-96			1.000	2.563	1.915	1.478	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
Jun-97										1.000	1.000	1.000																
Jun-98			1.000	1.339	1.211	1.000	1.000	1.000	1.000	1.000	1.000																	
Jun-99		3.338	1.206	1.000	1.140	1.000	1.000	1.000	1.054	1.000																		
Jun-00			2.196	2.485	1.000	1.191	1.000	1.201	1.000																			
Jun-01		5.143	1.556	1.000	1.214	1.000	1.000	1.000																				
Jun-02		1.750	2.250	1.667	1.222	1.000	1.000																					
Jun-03		3.944	1.901	1.444	1.948	1.000																						
Jun-04		1.000	1.000	9.333	1.000																							
Jun-05		1.757	1.000	1.815																								
Jun-06		1.800	1.222																									
Jun-07																												
Jun-08																												

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)		2.482	2.796	1.986	1.264	1.387	1.113	1.169	687.670	1.013	1.119	1.025	1.073	1.012	2.165	1.000	1.000	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Latest 5		2.050	1.475	3.052	1.277	1.038	1.000	1.050	1.014	1.000	1.000	1.000	1.054	1.027	3.330	1.000	1.000	1.058	1.000	1.000	1.000	1.000	1.000					
Latest 3		1.519	1.074	4.198	1.390	1.000	1.000	1.067	1.018	1.000	1.000	1.000	1.000	1.000	4.883	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Volume Wtd																												
All Yrs (ex P)		3.120	1.631	1.375	1.260	1.116	1.068	1.104	1.039	1.007	1.022	1.017	1.075	1.023	1.125	1.029	1.000	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Latest 5		1.981	1.520	1.507	1.273	1.028	1.000	1.046	1.080	1.000	1.000	1.000	1.065	1.038	1.201	1.000	1.000	1.039	1.000	1.000	1.000							
Latest 3		1.782	1.125	1.988	1.410	1.000	1.000	1.060	1.020	1.000	1.000	1.000	1.000	1.000	1.356	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					

Dev Factor Selection																												
Prior	1.000	3.375	1.300	4.148	1.264	1.131	1.099	1.038	1.020	1.015	1.010	1.010	1.010	1.005	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.000	3.120	1.782	3.079	1.273	1.116	1.099	1.050	1.020	1.015	1.010	1.010	1.010	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
FacToUlt	30.514	30.514	9.780	5.490	1.783	1.401	1.256	1.142	1.088	1.067	1.051	1.041	1.030	1.020	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent of Ult	3.3%	3.3%	10.2%	18.2%	56.1%	71.4%	79.6%	87.5%	91.9%	93.7%	95.1%	96.1%	97.1%	98.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	2.0%	0.0%	0.7%	0.4%	1.000	1.000
324	98.0%	0.0%	2.0%	0.0%	0.0%	0.981	0.971
312	98.0%	0.0%	2.0%	0.0%	0.0%	0.943	0.916
300	98.0%	0.5%	2.0%	0.2%	0.1%	0.907	0.864
288	97.5%	1.0%	2.5%	0.4%	0.2%	0.893	0.846
276	96.6%	3.2%	3.4%	1.3%	0.9%	0.893	0.847
264	93.4%	2.7%	6.6%	1.2%	0.8%	0.918	0.883
252	90.6%	2.4%	9.4%	1.1%	0.7%	0.911	0.873
240	88.2%	2.2%	11.8%	1.0%	0.7%	0.898	0.854
228	86.0%	2.0%	14.0%	1.0%	0.7%	0.881	0.832
216	83.9%	2.2%	16.1%	1.1%	0.8%	0.865	0.808
204	81.8%	2.1%	18.2%	1.1%	0.8%	0.849	0.787
192	79.7%	2.1%	20.3%	1.1%	0.8%	0.833	0.766
180	77.6%	2.1%	22.4%	1.2%	0.9%	0.818	0.746
168	75.5%	2.2%	24.5%	1.3%	1.0%	0.803	0.727
156	73.3%	1.0%	26.7%	0.6%	0.5%	0.790	0.710
144	72.3%	1.0%	27.7%	0.7%	0.5%	0.767	0.680
132	71.2%	1.2%	28.8%	0.8%	0.6%	0.746	0.654
120	70.1%	0.3%	29.9%	0.2%	0.2%	0.728	0.630
108	69.8%	1.8%	30.2%	1.3%	1.1%	0.703	0.599
96	67.9%	1.6%	32.1%	1.2%	1.0%	0.693	0.588
84	66.3%	2.4%	33.7%	1.9%	1.7%	0.682	0.575
72	63.9%	3.8%	36.1%	3.0%	2.7%	0.677	0.571
60	60.1%	5.5%	39.9%	4.6%	4.2%	0.682	0.579
48	54.7%	8.5%	45.3%	7.4%	6.9%	0.695	0.598
36	46.2%	12.7%	53.8%	11.5%	11.0%	0.718	0.628
24	33.4%	17.7%	66.6%	16.7%	16.3%	0.746	0.665
12	15.7%	15.7%	84.3%	15.4%	15.2%	0.772	0.700
Total		100.0%					

NOTES:

(2) = 1 / Section 5, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	374,018	507,913		333,311	452,634
6/30/82-83	3,594	5,594	0.981	3,524	5,485
6/30/83-84	3,969	7,969	0.943	3,742	7,514
6/30/84-85	24,366	354,366	0.907	22,090	321,269
6/30/85-86	22,584	296,514	0.893	20,174	264,881
6/30/86-87	48,630	857,630	0.893	43,439	766,081
6/30/87-88	107,483	132,483	0.918	98,655	121,602
6/30/88-89	138,489	170,489	0.911	126,198	155,358
6/30/89-90	62,962	67,962	0.898	56,511	60,999
6/30/90-91	314,487	316,487	0.881	277,219	278,982
6/30/91-92	420,652	631,652	0.865	363,654	546,063
6/30/92-93	4,635	22,635	0.849	3,935	19,215
6/30/93-94	217,066	512,066	0.833	180,894	426,736
6/30/94-95	8,194	38,194	0.818	6,702	31,240
6/30/95-96	6,278	30,278	0.803	5,042	24,319
6/30/96-97	173,573	173,573	0.790	137,058	137,058
6/30/97-98	127,196	130,196	0.767	97,578	99,879
6/30/98-99	198,685	200,685	0.746	148,317	149,810
6/30/99-00	434,850	459,850	0.728	316,578	334,778
6/30/00-01	441,943	464,943	0.703	310,620	326,785
6/30/01-02	293,932	299,932	0.693	203,771	207,931
6/30/02-03	289,272	292,272	0.682	197,181	199,226
6/30/03-04	138,705	151,705	0.677	93,948	102,753
6/30/04-05	308,859	318,859	0.682	210,733	217,556
6/30/05-06	442,973	586,973	0.695	307,943	408,048
6/30/06-07	378,647	522,647	0.718	271,757	375,106
6/30/07-08	487,393	650,393	0.746	363,400	484,933
6/30/08-09	853,353	986,353	0.772	659,134	761,864
Total	6,326,787	9,190,612		4,863,108	7,288,105
			(7) Total Discount Factor:	0.769	0.793

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	374,018	507,913
(9) Projected Number of Years:	6	6
(10) Projected Paid Loss per Year:	62,336	84,652
(11) Discounted Value at 4%:	333,311	452,634

NOTES:
(2), (3) From Section 5, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 5, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	374,018	507,913		315,724	428,750
6/30/82-83	3,594	5,594	0.971	3,491	5,433
6/30/83-84	3,969	7,969	0.916	3,637	7,302
6/30/84-85	24,366	354,366	0.864	21,063	306,328
6/30/85-86	22,584	296,514	0.846	19,115	250,970
6/30/86-87	48,630	857,630	0.847	41,200	726,598
6/30/87-88	107,483	132,483	0.883	94,867	116,933
6/30/88-89	138,489	170,489	0.873	120,933	148,877
6/30/89-90	62,962	67,962	0.854	53,767	58,037
6/30/90-91	314,487	316,487	0.832	261,545	263,208
6/30/91-92	420,652	631,652	0.808	340,021	510,576
6/30/92-93	4,635	22,635	0.787	3,649	17,819
6/30/93-94	217,066	512,066	0.766	166,376	392,487
6/30/94-95	8,194	38,194	0.746	6,114	28,496
6/30/95-96	6,278	30,278	0.727	4,564	22,010
6/30/96-97	173,573	173,573	0.710	123,153	123,153
6/30/97-98	127,196	130,196	0.680	86,508	88,548
6/30/98-99	198,685	200,685	0.654	129,866	131,173
6/30/99-00	434,850	459,850	0.630	274,149	289,910
6/30/00-01	441,943	464,943	0.599	264,531	278,298
6/30/01-02	293,932	299,932	0.588	172,819	176,346
6/30/02-03	289,272	292,272	0.575	166,228	167,951
6/30/03-04	138,705	151,705	0.571	79,202	86,625
6/30/04-05	308,859	318,859	0.579	178,967	184,761
6/30/05-06	442,973	586,973	0.598	264,825	350,913
6/30/06-07	378,647	522,647	0.628	237,897	328,370
6/30/07-08	487,393	650,393	0.665	324,139	432,542
6/30/08-09	853,353	986,353	0.700	597,149	690,218
Total	6,326,787	9,190,612		4,355,496	6,612,634
			(7) Total Discount Factor:	0.688	0.719

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	374,018	507,913
(9) Projected Number of Years:	6	6
(10) Projected Paid Loss per Year:	62,336	84,652
(11) Discounted Value at 6%:	315,724	428,750

NOTES:
(2), (3) From Section 5, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 5, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	2,494,790	2,646,392	2,105,687	389,102	540,705				32,649	35,914	8.4%	6.6%
6/30/82-83	229,124	232,650	225,530	3,594	7,120	97.7%	0.0%	0.0%	0	0	0.0%	0.0%
6/30/83-84	224,907	230,155	220,938	3,969	9,217	97.1%	0.0%	0.0%	0	0	0.0%	0.0%
6/30/84-85	1,723,757	2,054,488	1,698,661	25,096	355,826	89.9%	0.5%	5.0%	1,245	17,647	5.0%	5.0%
6/30/85-86	1,443,177	1,717,613	1,420,086	23,090	297,527	89.9%	0.5%	4.9%	1,138	14,666	4.9%	4.9%
6/30/86-87	2,264,000	3,073,000	2,213,783	50,217	859,217	83.0%	0.5%	2.9%	1,473	25,212	2.9%	2.9%
6/30/87-88	2,256,000	2,281,000	2,146,040	109,960	134,960	94.6%	0.5%	9.3%	10,185	12,500	9.3%	9.3%
6/30/88-89	2,146,000	2,178,000	2,002,874	143,126	175,126	92.6%	0.5%	6.8%	9,723	11,897	6.8%	6.8%
6/30/89-90	743,890	750,463	679,355	64,535	71,108	90.9%	0.5%	5.5%	3,555	3,917	5.5%	5.5%
6/30/90-91	2,941,000	2,943,000	2,613,838	327,162	329,162	88.8%	0.5%	4.5%	14,665	14,755	4.5%	4.5%
6/30/91-92	3,174,000	3,385,000	2,736,189	437,811	648,811	83.4%	1.0%	6.0%	26,427	39,163	6.0%	6.0%
6/30/92-93	727,000	745,000	712,440	14,560	32,560	96.8%	1.0%	31.2%	4,548	10,172	31.2%	31.2%
6/30/93-94	1,401,000	1,697,000	1,165,388	235,612	531,612	75.2%	1.0%	4.0%	9,514	21,466	4.0%	4.0%
6/30/94-95	1,078,423	1,111,476	1,067,175	11,248	44,301	97.5%	1.0%	39.4%	4,434	17,465	39.4%	39.4%
6/30/95-96	856,000	880,000	835,707	20,293	44,293	96.3%	1.0%	26.9%	5,455	11,905	26.9%	26.9%
6/30/96-97	886,000	887,000	700,394	185,606	186,606	79.0%	2.0%	9.5%	17,682	17,778	9.5%	9.5%
6/30/97-98	790,000	794,000	649,150	140,850	144,850	82.0%	2.0%	11.1%	15,618	16,062	11.1%	11.1%
6/30/98-99	1,080,000	1,083,000	864,680	215,320	218,320	80.0%	4.0%	20.0%	42,961	43,559	20.0%	20.0%
6/30/99-00	1,993,000	2,019,000	1,528,038	464,962	490,962	76.2%	4.0%	16.8%	78,058	82,422	16.8%	16.8%
6/30/00-01	2,022,000	2,045,000	1,538,062	483,938	506,938	75.6%	4.0%	16.4%	79,452	83,228	16.4%	16.4%
6/30/01-02	1,404,000	1,410,000	1,065,189	338,811	344,811	75.7%	4.0%	16.5%	55,786	56,774	16.5%	16.5%
6/30/02-03	1,261,000	1,265,000	926,397	334,603	338,603	73.3%	2.4%	8.8%	29,598	29,952	8.8%	8.8%
6/30/03-04	589,000	606,000	413,829	175,171	192,171	69.3%	4.1%	13.3%	23,301	25,562	13.3%	13.3%
6/30/04-05	1,149,000	1,163,000	754,344	394,656	408,656	65.3%	13.0%	37.4%	147,661	152,899	37.4%	37.4%
6/30/05-06	1,203,000	1,363,000	639,587	563,413	723,413	49.9%	15.4%	30.7%	173,058	222,204	30.7%	30.7%
6/30/06-07	961,000	1,174,000	456,371	504,629	717,629	42.8%	7.1%	12.4%	62,580	88,994	12.4%	12.4%
6/30/07-08	1,260,000	1,499,000	537,365	722,635	961,635	39.0%	3.8%	6.2%	44,956	59,825	6.2%	6.2%
6/30/08-09	1,546,000	1,875,000	332,848	1,213,152	1,542,152	19.5%	19.5%	24.2%	293,637	373,269	24.2%	24.2%
Total	39,847,067	43,108,237	32,249,946	7,597,121	10,858,291				1,189,359	1,489,207	15.7%	13.7%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		105,333			120,417	138,125	15,084	32,792		
6/30/82-83		91,124	91,732		91,124	92,650	0	1,526		
6/30/83-84		32,907	33,160		32,907	34,155	0	1,248		
6/30/84-85	139,178	73,027	73,661	73,638	73,757	74,488	730	1,461	0.053	0.054
6/30/85-86	149,671	50,670	51,161	51,173	51,177	51,683	507	1,013	0.034	0.035
6/30/86-87	171,999	182,412	184,366	184,107	184,000	184,000	1,588	1,588	0.107	0.107
6/30/87-88	201,511	201,522	204,291	204,035	204,000	204,000	2,478	2,478	0.101	0.101
6/30/88-89	206,011	295,364	300,320	300,294	300,000	300,000	4,636	4,636	0.146	0.146
6/30/89-90	206,006	157,317	160,757	161,020	158,890	160,463	1,573	3,146	0.077	0.078
6/30/90-91	189,307	462,325	474,796	474,741	475,000	475,000	12,675	12,675	0.251	0.251
6/30/91-92	188,230	532,841	549,950	549,771	550,000	550,000	17,159	17,159	0.292	0.292
6/30/92-93	192,221	262,075	271,842	271,839	272,000	272,000	9,925	9,925	0.142	0.142
6/30/93-94	203,766	454,454	473,748	473,441	473,000	474,000	18,546	19,546	0.232	0.233
6/30/94-95	204,442	305,369	320,403	320,322	308,423	311,476	3,054	6,107	0.151	0.152
6/30/95-96	211,792	243,985	257,709	257,832	258,000	258,000	14,015	14,015	0.122	0.122
6/30/96-97	240,609	187,967	200,306	200,895	200,000	201,000	12,033	13,033	0.083	0.084
6/30/97-98	239,416	185,346	199,488	200,258	199,000	200,000	13,654	14,654	0.083	0.084
6/30/98-99	240,064	194,365	211,287	212,186	211,000	212,000	16,635	17,635	0.088	0.088
6/30/99-00	262,199	311,888	342,432	342,652	342,000	343,000	30,112	31,112	0.130	0.131
6/30/00-01	274,893	349,005	390,848	390,784	391,000	391,000	41,995	41,995	0.142	0.142
6/30/01-02	264,006	293,121	337,858	338,279	338,000	338,000	44,879	44,879	0.128	0.128
6/30/02-03	261,467	235,669	280,897	282,269	281,000	282,000	45,331	46,331	0.107	0.108
6/30/03-04	274,600	145,534	182,094	186,157	182,000	186,000	36,466	40,466	0.066	0.068
6/30/04-05	253,275	281,203	370,523	366,681	367,000	371,000	85,797	89,797	0.145	0.146
6/30/05-06	329,111	286,559	406,622	422,606	407,000	423,000	120,441	136,441	0.124	0.129
6/30/06-07	343,116	184,018	310,058	379,287	310,000	379,000	125,982	194,982	0.090	0.110
6/30/07-08	346,351	329,758	641,056	565,222	565,000	641,000	235,243	311,243	0.163	0.185
6/30/08-09	338,291	175,201	730,939	535,288	535,000	731,000	359,799	555,799	0.158	0.216
Total	5,931,533	6,610,360	8,052,303	7,744,775	7,880,695	8,278,039	1,270,335	1,667,679		
Tot 6/30/84-09	5,931,533	6,380,996	7,927,411	7,744,775	7,636,247	8,013,111	1,255,251	1,632,114	0.129	0.135

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 5, Exhibit 2, Page 2, Column 3
(4) From Section 5, Exhibit 2, Page 2, Column 8
(5) From Section 5, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		105,333							1	1	
6/30/82-83		91,124	1.007	1.000	91,732	N/A	91,732		0	0	
6/30/83-84		32,907	1.008	1.000	33,160	N/A	33,160		0	0	
6/30/84-85	139,178	73,027	1.009	1.000	73,661	N/A	73,661	0.053	1	0	
6/30/85-86	149,671	50,670	1.010	1.000	51,161	N/A	51,161	0.034	1	1	491
6/30/86-87	171,999	182,412	1.011	1.000	184,366	N/A	184,366	0.107	2	2	977
6/30/87-88	201,511	201,522	1.014	1.000	204,291	N/A	204,291	0.101	2	2	1,384
6/30/88-89	206,011	295,364	1.017	1.000	300,320	N/A	300,320	0.146	1	1	4,956
6/30/89-90	206,006	157,317	1.022	1.000	160,757	N/A	160,757	0.078	0	0	
6/30/90-91	189,307	462,325	1.027	1.000	474,796	N/A	474,796	0.251	1	1	12,471
6/30/91-92	188,230	532,841	1.032	1.000	549,950	N/A	549,950	0.292	3	3	5,703
6/30/92-93	192,221	262,075	1.037	1.000	271,842	N/A	271,842	0.141	0	0	
6/30/93-94	203,766	454,454	1.042	1.000	473,748	N/A	473,748	0.232	2	1	19,294
6/30/94-95	204,442	305,369	1.049	1.000	320,403	N/A	320,403	0.157	0	0	
6/30/95-96	211,792	243,985	1.056	1.000	257,709	N/A	257,709	0.122	0	0	
6/30/96-97	240,609	187,967	1.066	1.000	200,306	N/A	200,306	0.083	0	0	
6/30/97-98	239,416	185,346	1.076	1.000	199,488	N/A	199,488	0.083	2	2	7,071
6/30/98-99	240,064	194,365	1.087	1.000	211,287	N/A	211,287	0.088	1	1	16,922
6/30/99-00	262,199	311,888	1.098	1.000	342,432	N/A	342,432	0.131	3	2	15,272
6/30/00-01	274,893	349,005	1.120	1.000	390,848	N/A	390,848	0.142	3	3	13,948
6/30/01-02	264,006	293,121	1.153	1.000	337,858	N/A	337,858	0.128	7	5	8,947
6/30/02-03	261,467	235,669	1.192	1.000	280,897	N/A	280,897	0.107	16	2	22,614
6/30/03-04	274,600	145,534	1.251	1.000	182,094	N/A	182,094	0.066	2	2	18,280
6/30/04-05	253,275	281,203	1.318	1.000	370,523	N/A	370,523	0.146	11	5	17,864
6/30/05-06	329,111	286,559	1.419	1.000	406,622	N/A	406,622	0.124	29	5	24,013
6/30/06-07	343,116	184,018	1.685	1.000	310,058	N/A	310,058	0.090	113	12	10,503
6/30/07-08	346,351	329,758	1.944	1.000	641,056	N/A	641,056	0.185	181	98	3,177
6/30/08-09	338,291	175,201	4.172	1.000	730,939	N/A	730,939	0.216		214	2,597
Total	5,931,533	6,610,360			8,052,303		8,052,303		382	363	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 5, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
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University of Massachusetts (Amherst) - Cluster 4
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	139,178	0.051	73,027	1.009	73,638	N/A	73,638	0.053	0.053
6/30/85-86	149,671	0.035	50,670	1.010	51,173	N/A	51,173	0.034	0.034
6/30/86-87	171,999	0.093	182,412	1.011	184,107	N/A	184,107	0.107	0.107
6/30/87-88	201,511	0.092	201,522	1.014	204,035	N/A	204,035	0.101	0.101
6/30/88-89	206,011	0.145	295,364	1.017	300,294	N/A	300,294	0.146	0.146
6/30/89-90	206,006	0.084	157,317	1.022	161,020	N/A	161,020	0.078	0.078
6/30/90-91	189,307	0.250	462,325	1.027	474,741	N/A	474,741	0.251	0.251
6/30/91-92	188,230	0.289	532,841	1.032	549,771	N/A	549,771	0.292	0.292
6/30/92-93	192,221	0.141	262,075	1.037	271,839	N/A	271,839	0.141	0.141
6/30/93-94	203,766	0.229	454,454	1.042	473,441	N/A	473,441	0.232	0.232
6/30/94-95	204,442	0.156	305,369	1.049	320,322	N/A	320,322	0.157	0.157
6/30/95-96	211,792	0.123	243,985	1.056	257,832	N/A	257,832	0.122	0.122
6/30/96-97	240,609	0.087	187,967	1.066	200,895	N/A	200,895	0.083	0.083
6/30/97-98	239,416	0.088	185,346	1.076	200,258	N/A	200,258	0.084	0.084
6/30/98-99	240,064	0.093	194,365	1.087	212,186	N/A	212,186	0.088	0.088
6/30/99-00	262,199	0.132	311,888	1.098	342,652	N/A	342,652	0.131	0.131
6/30/00-01	274,893	0.142	349,005	1.120	390,784	N/A	390,784	0.142	0.142
6/30/01-02	264,006	0.129	293,121	1.153	338,279	N/A	338,279	0.128	0.128
6/30/02-03	261,467	0.111	235,669	1.192	282,269	N/A	282,269	0.108	0.108
6/30/03-04	274,600	0.074	145,534	1.251	186,157	N/A	186,157	0.068	0.068
6/30/04-05	253,275	0.140	281,203	1.318	366,681	N/A	366,681	0.145	0.145
6/30/05-06	329,111	0.140	286,559	1.419	422,606	N/A	422,606	0.128	0.128
6/30/06-07	343,116	0.140	184,018	1.685	379,287	N/A	379,287	0.111	0.111
6/30/07-08	346,351	0.140	329,758	1.944	565,222	N/A	565,222	0.163	0.163
6/30/08-09	338,291	0.140	175,201	4.172	535,288	N/A	535,288	0.158	0.158
Total	5,931,533		6,380,996		7,744,775		7,744,775		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 5, Exhibit 2, Page 4, Column 11
(4) From Section 5, Exhibit 2, Page 2, Column 3
(5) From Section 5, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.051	0.051
6/30/85-86									0.035	0.035
6/30/86-87									0.093	0.093
6/30/87-88									0.092	0.092
6/30/88-89									0.145	0.145
6/30/89-90									0.084	0.084
6/30/90-91	189,307	474,796	0.251	1.157	0.290	1.208	0.351	0.251	0.229	0.250
6/30/91-92	188,230	549,950	0.292	1.152	0.336	1.196	0.402	0.292	0.327	0.289
6/30/92-93	192,221	271,842	0.141	1.152	0.163	1.184	0.193	0.141	0.163	0.141
6/30/93-94	203,766	473,748	0.232	1.142	0.265	1.173	0.311	0.232	0.238	0.229
6/30/94-95	204,442	320,403	0.157	1.134	0.178	1.161	0.206	0.157	0.180	0.156
6/30/95-96	211,792	257,709	0.122	1.120	0.136	1.149	0.157	0.122	0.137	0.123
6/30/96-97	240,609	200,306	0.083	1.101	0.092	1.138	0.104	0.083	0.095	0.087
6/30/97-98	239,416	199,488	0.083	1.100	0.092	1.127	0.103	0.083	0.094	0.088
6/30/98-99	240,064	211,287	0.088	1.100	0.097	1.116	0.108	0.088	0.097	0.093
6/30/99-00	262,199	342,432	0.131	1.100	0.144	1.105	0.159	0.131	0.129	0.132
6/30/00-01	274,893	390,848	0.142	1.075	0.153	1.094	0.167	0.142	0.135	0.142
6/30/01-02	264,006	337,858	0.128	1.067	0.137	1.083	0.148	0.128	0.117	0.129
6/30/02-03	261,467	280,897	0.107	1.040	0.112	1.072	0.120	0.107	0.110	0.111
6/30/03-04	274,600	182,094	0.066	1.014	0.067	1.062	0.071	0.066	0.074	0.074
6/30/04-05	253,275	370,523	0.146	1.003	0.147	1.051	0.154	0.146	0.150	0.140
6/30/05-06	329,111	406,622	0.124	1.000	0.124	1.041	0.129	0.124	0.150	0.140
6/30/06-07	343,116	310,058	0.090	1.000	0.090	1.030	0.093	0.090	0.140	0.140
6/30/07-08	346,351	641,056	0.185	1.000	0.185	1.020	0.189	0.185	0.140	0.140
6/30/08-09	338,291	730,939	0.216	1.000	0.216	1.010	0.218	0.216		0.140
Total	4,857,157	6,952,855								

Trend Last 4 (ex 08-09):	3.9%	Avg 3 (x08-09):	0.137
Trend Last 8 (ex 08-09):	0.4%	Avg 5 (x08-09):	0.127
Trend Last 12 (ex 08-09):	2.4%	Avg 10 (x08-09):	0.134
Prior Selected Trend:	1.0%	Prior Sel Avg:	0.140
Selected Trend:	1.0%	Sel. Loss Cost:	0.140

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 5, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		1.000	
(2)	Credibility		12%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.903	
		(Low)		(High)
(5)	Selected Range	0.894		0.912
(6)	Incremental Paid for 2009	3,150		3,150
(7)	Estimated Reserve	26,649		32,792
(8)	Paid to Date (82 & Prior)	105,333		105,333
(9)	Est Ult Paid for 1982 & Prior	131,982		138,125

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	1,760	851
(11)	Projected Number of Years	2	2
(12)	Estimated Reserve	3,519	1,702
(13)	Paid to Date (82 & Prior)	105,333	102,183
(14)	Est Ult Paid for 1982 & Prior	108,852	103,885
(14a)	Paid Counts During Fiscal Year	1	1

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	120,417	138,125
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**120,417**	**138,125**
(18)	Implied Tail	1.143	1.311
(19)	Ult Loss Inc Lump Sums @ 6/08	110,831	121,368

NOTES:

(1) From Section 5, Exhibit 2, Page 6
(2) = (Average of Section 5, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 5, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 5, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	9,975	9.208			
1993	2	1,394	7.240	0.140		
1994	3	30,337	10.320	21.763		
1995	4	-7,026		-0.232		
1996	5	2,087	7.643	-0.297		
1997	6	418	6.035	0.200		
1998	7	0		0.000		
1999	8	390	5.966			
2000	9	1,546	7.343	3.964	n =	18
2001	10	0		0.000	S(x) =	36,009
2002	11	0			S(x-sq) =	72,036,489
2003	12	0			S(xy) =	
2004	13	1,400	7.244		S(y) =	
2005	14	0		0.000	D =	8,721
2006	15	424	6.050		slope =	
2007	16	284	5.649	0.670		
2008	17	1,845	7.520	6.499		
2009	18	3,150	8.055	1.707	Avg Trend =	
					Selected Trend:	**1.000**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 1.707 = 3150 / 1845

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Amherst) - Cluster 4
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	7,015	19,272	26,992	33,578	44,296	54,254	69,123	86,430	87,691	89,009	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124	91,124
June-84	2,065	5,673	7,945	9,884	13,039	15,948	22,112	25,109	27,259	27,620	27,620	29,236	29,236	29,236	29,774	29,774	33,170	32,907	32,907	32,907	32,907	32,907	32,907	32,907	32,907	32,907	
June-85	5,341	14,673	20,551	25,565	32,019	36,080	42,108	45,751	51,440	65,690	69,695	65,951	67,047	67,047	67,068	67,485	69,103	70,526	70,577	71,427	71,777	71,777	71,777	73,027	73,027		
June-86	4,254	11,686	16,367	29,076	33,757	37,603	39,971	43,583	45,896	47,123	47,123	47,123	47,123	47,123	48,153	48,153	48,153	48,153	48,503	49,375	49,375	49,375	50,070	50,670			
June-87	17,332	47,614	74,474	96,432	115,240	124,178	130,253	135,326	138,193	142,828	144,778	146,075	148,983	150,159	151,984	152,431	153,300	154,154	156,424	159,661	167,912	175,836	182,412				
June-88	21,776	71,312	105,389	144,783	150,052	156,889	162,436	164,340	165,770	169,300	170,433	171,904	172,900	173,563	174,460	176,155	179,540	184,256	189,906	193,501	195,901	201,522					
June-89	31,748	113,449	180,690	213,618	227,584	232,537	247,318	252,055	260,621	266,739	270,947	278,041	284,182	288,891	291,536	292,751	293,625	293,975	294,069	294,094	295,364						
June-90	19,060	117,509	146,705	152,013	155,556	157,028	157,217	157,317	157,317	157,317	157,317	157,317	157,317	157,317	157,317	157,317	157,317	157,317	157,317	157,317							
June-91	49,629	201,675	266,883	315,231	324,767	338,441	344,037	344,920	345,667	349,590	353,310	355,602	356,167	359,042	361,717	364,813	366,594	376,706	462,325								
June-92	93,121	216,421	309,712	382,754	413,527	441,551	469,869	498,257	502,052	506,299	508,720	511,219	517,091	518,976	521,249	523,045	528,030	532,841									
June-93	81,970	229,344	254,404	256,957	260,901	261,422	261,544	261,544	261,544	262,036	262,075	262,075	262,075	262,075	262,075	262,075	262,075										
June-94	77,508	161,802	222,213	282,819	289,168	318,109	326,227	327,931	339,521	345,752	357,217	392,989	403,792	437,920	445,327	454,454											
June-95	86,716	239,689	284,148	295,763	301,706	303,344	303,490	305,369	305,369	305,369	305,369	305,369	305,369	305,369	305,369												
June-96	81,054	187,654	205,831	215,693	219,869	225,627	237,068	241,239	242,923	243,938	243,985	243,985	243,985	243,985													
June-97	61,666	103,895	129,694	181,008	185,516	187,189	187,267	187,617	187,617	187,967	187,967	187,967	187,967														
June-98	40,014	98,284	119,324	134,344	139,107	141,779	147,819	148,338	149,621	183,281	184,542	185,346															
June-99	57,055	145,931	161,873	165,175	173,370	179,001	181,785	183,278	186,735	189,893	194,365																
June-00	78,904	144,101	178,359	211,117	245,711	260,589	272,440	284,728	298,320	311,888																	
June-01	78,435	185,081	235,180	264,482	271,555	289,614	313,258	334,076	349,005																		
June-02	42,493	107,557	182,137	222,791	235,866	244,961	262,574	293,121																			
June-03	25,041	124,452	162,035	187,240	223,402	231,574	235,669																				
June-04	58,014	123,410	131,529	133,995	134,242	145,534																					
June-05	90,145	204,953	256,853	271,491	281,203																						
June-06	104,747	269,295	283,925	286,559																							
June-07	90,114	168,280	184,018																								
June-08	174,365	329,758																									
June-09	175,201																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.747	1.401	1.244	1.319	1.225	1.274	1.250	1.015	1.015	1.024	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
June-84	2.747	1.400	1.244	1.319	1.223	1.387	1.136	1.086	1.013	1.000	1.059	1.000	1.000	1.018	1.000	1.114	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
June-85	2.747	1.401	1.244	1.252	1.127	1.167	1.087	1.124	1.277	1.061	0.946	1.017	1.000	1.000	1.006	1.024	1.021	1.001	1.012	1.005	1.000	1.000	1.017	1.000		
June-86	2.747	1.401	1.777	1.161	1.114	1.063	1.090	1.053	1.027	1.000	1.000	1.000	1.000	1.022	1.000	1.000	1.000	1.007	1.018	1.000	1.000	1.014	1.012			
June-87	2.747	1.564	1.295	1.195	1.078	1.049	1.039	1.021	1.034	1.014	1.009	1.020	1.008	1.012	1.003	1.006	1.006	1.015	1.021	1.052	1.047	1.037				
June-88	3.275	1.478	1.374	1.036	1.046	1.035	1.012	1.009	1.021	1.007	1.009	1.006	1.004	1.005	1.010	1.019	1.026	1.031	1.019	1.012	1.029					
June-89	3.573	1.593	1.182	1.065	1.022	1.064	1.019	1.034	1.023	1.016	1.026	1.022	1.017	1.009	1.004	1.003	1.001	1.000	1.000	1.004						
June-90	6.165	1.248	1.036	1.023	1.009	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
June-91	4.064	1.323	1.181	1.030	1.042	1.017	1.003	1.002	1.011	1.011	1.006	1.002	1.008	1.007	1.009	1.005	1.028	1.227								
June-92	2.324	1.431	1.236	1.080	1.068	1.064	1.060	1.008	1.008	1.005	1.005	1.011	1.004	1.004	1.003	1.010	1.009									
June-93	2.798	1.109	1.010	1.015	1.002	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
June-94	2.088	1.373	1.273	1.022	1.100	1.026	1.005	1.035	1.018	1.033	1.100	1.027	1.085	1.017	1.020											
June-95	2.764	1.185	1.041	1.020	1.005	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
June-96	2.315	1.097	1.048	1.019	1.026	1.051	1.018	1.007	1.004	1.000	1.000	1.000	1.000													
June-97	1.685	1.248	1.396	1.025	1.009	1.000	1.002	1.000	1.002	1.000	1.000	1.000														
June-98	2.456	1.214	1.126	1.035	1.019	1.043	1.004	1.009	1.225	1.007	1.004															
June-99	2.558	1.109	1.020	1.050	1.032	1.016	1.008	1.019	1.017	1.024																
June-00	1.826	1.238	1.184	1.164	1.061	1.045	1.045	1.048	1.045																	
June-01	2.360	1.271	1.125	1.027	1.067	1.082	1.066	1.045																		
June-02	2.531	1.693	1.223	1.059	1.039	1.072	1.116																			
June-03	4.970	1.302	1.156	1.193	1.037	1.018																				
June-04	2.127	1.066	1.019	1.002	1.084																					
June-05	2.274	1.253	1.057	1.036																						
June-06	2.571	1.054	1.009																							
June-07	1.867	1.094																								
June-08	1.891																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.778	1.302	1.187	1.093	1.065	1.070	1.048	1.027	1.041	1.012	1.010	1.007	1.009	1.007	1.005	1.016	1.008	1.031	1.009	1.010	1.013	1.010	1.007	1.000	1.000	1.000	
Latest 5	2.146	1.154	1.093	1.063	1.057	1.046	1.048	1.024	1.059	1.006	1.021	1.005	1.018	1.006	1.006	1.003	1.013	1.055	1.012	1.015	1.015	1.010					
Latest 3	2.110	1.134	1.028	1.077	1.053	1.057	1.076	1.037	1.096	1.010	1.001	1.000	1.028	1.006	1.008	1.005	1.012	1.076	1.006	1.023	1.025	1.017	1.010	1.000			
Volume Wtd																											
All Yrs	2.462	1.252	1.139	1.058	1.046	1.042	1.034	1.019	1.026	1.010	1.015	1.009	1.015	1.007	1.007	1.008	1.011	1.067	1.008	1.014	1.022	1.017	1.008	1.000	1.000		
Latest 5	2.118	1.144	1.084	1.061	1.055	1.050	1.056	1.029	1.049	1.005	1.029	1.008	1.021	1.007	1.008	1.005	1.013	1.080	1.009	1.016	1.026						
Latest 3	2.078	1.128	1.029	1.078	1.048	1.059	1.075	1.040	1.079	1.010	1.001	1.000	1.036	1.007	1.009	1.006	1.014	1.104	1.006	1.018	1.033	1.024	1.012				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.254*	*1.274*	*1.116*	*1.085*	*1.045*	*1.055*	*1.029*	*1.019*	*1.020*	*1.010*	*1.010*	*1.010*	*1.010*	*1.007*	*1.003*	*1.005*	*1.005*	*1.005*	*1.005*	*1.005*	*1.003*	*1.003*	*1.001*	*1.001*	*1.001*	*1.012*	
Selected	2.146	1.154	1.187	1.077	1.053	1.050	1.034	1.029	1.020	1.010	1.010	1.010	1.009	1.007	1.006	1.005	1.005	1.005	1.005	1.005	1.003	1.003	1.001	1.001	1.001	1.001	1.007
FacToUlt	4.172	1.944	1.685	1.419	1.318	1.251	1.192	1.153	1.120	1.098	1.087	1.076	1.066	1.056	1.049	1.042	1.037	1.032	1.027	1.022	1.017	1.014	1.011	1.010	1.009	1.008	1.007
Percent of Ult	24.0%	51.4%	59.3%	70.5%	75.9%	79.9%	83.9%	86.8%	89.3%	91.1%	92.0%	92.9%	93.8%	94.7%	95.3%	95.9%	96.4%	96.9%	97.4%	97.9%	98.3%	98.6%	98.9%	99.0%	99.1%	99.2%	99.3%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	110,831	121,368	120,417	138,125	9,586	8.6%	16,757	13.8%
6/30/82-83	91,124	93,127	91,124	92,650	0	0.0%	(478)	-0.5%
6/30/83-84	32,907	34,331	32,907	34,155	0	0.0%	(176)	-0.5%
6/30/84-85	73,757	74,488	73,757	74,488	0	0.0%	0	0.0%
6/30/85-86	50,571	51,071	51,177	51,683	606	1.2%	612	1.2%
6/30/86-87	179,000	179,000	184,000	184,000	5,000	2.8%	5,000	2.8%
6/30/87-88	200,000	200,000	204,000	204,000	4,000	2.0%	4,000	2.0%
6/30/88-89	302,000	302,000	300,000	300,000	(2,000)	-0.7%	(2,000)	-0.7%
6/30/89-90	158,890	160,463	158,890	160,463	0	0.0%	0	0.0%
6/30/90-91	390,000	392,000	475,000	475,000	85,000	21.8%	83,000	21.2%
6/30/91-92	550,000	553,000	550,000	550,000	0	0.0%	(3,000)	-0.5%
6/30/92-93	274,000	276,000	272,000	272,000	(2,000)	-0.7%	(4,000)	-1.4%
6/30/93-94	468,000	469,000	473,000	474,000	5,000	1.1%	5,000	1.1%
6/30/94-95	308,423	311,476	308,423	311,476	0	0.0%	0	0.0%
6/30/95-96	261,000	263,000	258,000	258,000	(3,000)	-1.1%	(5,000)	-1.9%
6/30/96-97	203,000	205,000	200,000	201,000	(3,000)	-1.5%	(4,000)	-2.0%
6/30/97-98	201,000	203,000	199,000	200,000	(2,000)	-1.0%	(3,000)	-1.5%
6/30/98-99	209,000	211,000	211,000	212,000	2,000	1.0%	1,000	0.5%
6/30/99-00	335,000	335,000	342,000	343,000	7,000	2.1%	8,000	2.4%
6/30/00-01	381,000	382,000	391,000	391,000	10,000	2.6%	9,000	2.4%
6/30/01-02	309,000	309,000	338,000	338,000	29,000	9.4%	29,000	9.4%
6/30/02-03	287,000	288,000	281,000	282,000	(6,000)	-2.1%	(6,000)	-2.1%
6/30/03-04	174,000	181,000	182,000	186,000	8,000	4.6%	5,000	2.8%
6/30/04-05	381,000	382,000	367,000	371,000	(14,000)	-3.7%	(11,000)	-2.9%
6/30/05-06	446,000	463,000	407,000	423,000	(39,000)	-8.7%	(40,000)	-8.6%
6/30/06-07	337,000	408,000	310,000	379,000	(27,000)	-8.0%	(29,000)	-7.1%
6/30/07-08	548,000	786,000	565,000	641,000	17,000	3.1%	(145,000)	-18.4%
6/30/08-09								
Total	7,261,503	7,633,325	7,345,695	7,547,039	84,192	1.2%	(86,285)	-1.1%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 5, Exhibit 2, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	0.7%	0.0%	0.2%	0.1%	1.000	1.000
324	99.3%	0.1%	0.7%	0.0%	0.0%	0.981	0.971
312	99.2%	0.1%	0.8%	0.0%	0.0%	0.948	0.923
300	99.1%	0.1%	0.9%	0.0%	0.0%	0.919	0.883
288	99.0%	0.1%	1.0%	0.0%	0.0%	0.894	0.847
276	98.9%	0.3%	1.1%	0.1%	0.1%	0.871	0.815
264	98.6%	0.3%	1.4%	0.1%	0.1%	0.869	0.813
252	98.3%	0.5%	1.7%	0.2%	0.1%	0.861	0.804
240	97.9%	0.5%	2.1%	0.2%	0.2%	0.863	0.807
228	97.4%	0.5%	2.6%	0.2%	0.2%	0.858	0.800
216	96.9%	0.5%	3.1%	0.2%	0.2%	0.849	0.789
204	96.4%	0.5%	3.6%	0.3%	0.2%	0.838	0.774
192	95.9%	0.6%	4.1%	0.3%	0.3%	0.827	0.759
180	95.3%	0.6%	4.7%	0.4%	0.3%	0.819	0.750
168	94.7%	0.8%	5.3%	0.5%	0.4%	0.811	0.739
156	93.8%	0.9%	6.2%	0.6%	0.4%	0.807	0.734
144	92.9%	0.9%	7.1%	0.6%	0.5%	0.803	0.729
132	92.0%	0.9%	8.0%	0.6%	0.5%	0.796	0.720
120	91.1%	1.8%	8.9%	1.2%	1.0%	0.787	0.709
108	89.3%	2.5%	10.7%	1.8%	1.5%	0.794	0.720
96	86.8%	2.9%	13.2%	2.1%	1.8%	0.805	0.735
84	83.9%	4.0%	16.1%	3.1%	2.7%	0.811	0.743
72	79.9%	4.0%	20.1%	3.2%	2.9%	0.819	0.754
60	75.9%	5.4%	24.1%	4.5%	4.2%	0.820	0.755
48	70.5%	11.1%	29.5%	9.7%	9.1%	0.824	0.760
36	59.3%	7.9%	40.7%	7.2%	6.8%	0.844	0.786
24	51.4%	27.5%	48.6%	25.9%	25.2%	0.839	0.779
12	24.0%	24.0%	76.0%	23.5%	23.3%	0.869	0.820
Total		100.0%					

NOTES:

(2) = 1 / Section 5, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Amherst) - Cluster 4
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	15,084	32,792		14,510	31,543
6/30/82-83	0	1,526	0.981	0	1,496
6/30/83-84	0	1,248	0.948	0	1,182
6/30/84-85	730	1,461	0.919	671	1,343
6/30/85-86	507	1,013	0.894	453	906
6/30/86-87	1,588	1,588	0.871	1,382	1,382
6/30/87-88	2,478	2,478	0.869	2,152	2,152
6/30/88-89	4,636	4,636	0.861	3,993	3,993
6/30/89-90	1,573	3,146	0.863	1,358	2,715
6/30/90-91	12,675	12,675	0.858	10,871	10,871
6/30/91-92	17,159	17,159	0.849	14,568	14,568
6/30/92-93	9,925	9,925	0.838	8,321	8,321
6/30/93-94	18,546	19,546	0.827	15,332	16,158
6/30/94-95	3,054	6,107	0.819	2,502	5,004
6/30/95-96	14,015	14,015	0.811	11,363	11,363
6/30/96-97	12,033	13,033	0.807	9,709	10,516
6/30/97-98	13,654	14,654	0.803	10,959	11,762
6/30/98-99	16,635	17,635	0.796	13,238	14,033
6/30/99-00	30,112	31,112	0.787	23,703	24,490
6/30/00-01	41,995	41,995	0.794	33,352	33,352
6/30/01-02	44,879	44,879	0.805	36,136	36,136
6/30/02-03	45,331	46,331	0.811	36,757	37,568
6/30/03-04	36,466	40,466	0.819	29,883	33,161
6/30/04-05	85,797	89,797	0.820	70,366	73,647
6/30/05-06	120,441	136,441	0.824	99,225	112,406
6/30/06-07	125,982	194,982	0.844	106,293	164,510
6/30/07-08	235,243	311,243	0.839	197,333	261,085
6/30/08-09	359,799	555,799	0.869	312,827	483,240
Total	1,270,335	1,667,679		1,067,257	1,408,904
			(7) Total Discount Factor:	0.840	0.845

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	15,084	32,792
(9) Projected Number of Years:	2	2
(10) Projected Paid Loss per Year:	7,542	16,396
(11) Discounted Value at 4%:	14,510	31,543

NOTES:
(2), (3) From Section 5, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 5, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
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University of Massachusetts (Amherst) - Cluster 4
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	15,084	32,792		14,242	30,962
6/30/82-83	0	1,526	0.971	0	1,482
6/30/83-84	0	1,248	0.923	0	1,152
6/30/84-85	730	1,461	0.883	645	1,289
6/30/85-86	507	1,013	0.847	429	858
6/30/86-87	1,588	1,588	0.815	1,294	1,294
6/30/87-88	2,478	2,478	0.813	2,015	2,015
6/30/88-89	4,636	4,636	0.804	3,726	3,726
6/30/89-90	1,573	3,146	0.807	1,269	2,539
6/30/90-91	12,675	12,675	0.800	10,142	10,142
6/30/91-92	17,159	17,159	0.789	13,531	13,531
6/30/92-93	9,925	9,925	0.774	7,686	7,686
6/30/93-94	18,546	19,546	0.759	14,076	14,835
6/30/94-95	3,054	6,107	0.750	2,289	4,579
6/30/95-96	14,015	14,015	0.739	10,352	10,352
6/30/96-97	12,033	13,033	0.734	8,833	9,567
6/30/97-98	13,654	14,654	0.729	9,954	10,683
6/30/98-99	16,635	17,635	0.720	11,983	12,703
6/30/99-00	30,112	31,112	0.709	21,360	22,069
6/30/00-01	41,995	41,995	0.720	30,219	30,219
6/30/01-02	44,879	44,879	0.735	32,979	32,979
6/30/02-03	45,331	46,331	0.743	33,664	34,407
6/30/03-04	36,466	40,466	0.754	27,503	30,520
6/30/04-05	85,797	89,797	0.755	64,771	67,791
6/30/05-06	120,441	136,441	0.760	91,507	103,663
6/30/06-07	125,982	194,982	0.786	99,073	153,335
6/30/07-08	235,243	311,243	0.779	183,315	242,538
6/30/08-09	359,799	555,799	0.820	295,203	456,015
Total	1,270,335	1,667,679		992,060	1,312,931
			(7) Total Discount Factor:	0.781	0.787

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	15,084	32,792
(9) Projected Number of Years:	2	2
(10) Projected Paid Loss per Year:	7,542	16,396
(11) Discounted Value at 6%:	14,242	30,962

NOTES:
(2), (3) From Section 5, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 5, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
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University of Massachusetts (Medical Center) - Cluster 4

Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		1,329,412			1,329,412	1,329,412	0	0		
6/30/82-83		306,340	308,405		306,340	313,999	0	7,659		
6/30/83-84		1,443,839	1,453,125		1,472,716	1,501,593	28,877	57,754		
6/30/84-85	90,571	852,745	859,122	859,532	869,800	886,855	17,055	34,110	0.960	0.979
6/30/85-86	97,399	2,517,941	2,548,572	2,547,080	2,547,000	2,549,000	29,059	31,059	2.615	2.617
6/30/86-87	111,929	3,126,114	3,756,506	3,172,955	3,173,000	3,464,730	46,886	338,616	2.835	3.095
6/30/87-88	131,134	2,658,888	2,976,246	2,715,012	2,715,000	2,845,629	56,112	186,741	2.070	2.170
6/30/88-89	151,343	2,623,646	2,720,157	2,731,545	2,676,119	2,754,828	52,473	131,182	1.768	1.820
6/30/89-90	112,226	3,243,583	3,394,756	3,401,032	3,308,455	3,405,762	64,872	162,179	2.948	3.035
6/30/90-91	112,428	1,101,823	1,158,584	1,158,186	1,123,859	1,156,914	22,036	55,091	1.000	1.029
6/30/91-92	122,872	1,518,304	1,592,708	1,591,590	1,548,670	1,594,219	30,366	75,915	1.260	1.297
6/30/92-93	129,919	638,167	673,027	672,622	650,930	670,075	12,763	31,908	0.501	0.516
6/30/93-94	142,718	1,734,892	1,828,123	1,825,333	1,825,000	1,828,000	90,108	93,108	1.279	1.281
6/30/94-95	152,788	521,127	542,649	542,968	543,000	543,000	21,873	21,873	0.355	0.355
6/30/95-96	164,973	491,723	514,324	514,992	501,557	511,392	9,834	19,669	0.304	0.310
6/30/96-97	193,880	422,390	435,539	437,860	430,838	439,286	8,448	16,896	0.222	0.227
6/30/97-98	192,992	545,727	596,461	596,366	556,642	567,556	10,915	21,829	0.288	0.294
6/30/98-99	191,535	629,546	669,153	670,647	669,000	671,000	39,454	41,454	0.349	0.350
6/30/99-00	169,941	685,976	753,626	752,209	752,000	754,000	66,024	68,024	0.443	0.444
6/30/00-01	171,840	737,973	800,205	799,467	799,000	800,000	61,027	62,027	0.465	0.466
6/30/01-02	183,110	339,569	378,934	381,250	379,000	381,000	39,431	41,431	0.207	0.208
6/30/02-03	195,846	660,661	773,194	770,889	771,000	773,000	110,339	112,339	0.394	0.395
6/30/03-04	229,073	962,971	1,135,628	1,132,090	1,132,000	1,136,000	169,029	173,029	0.494	0.496
6/30/04-05	211,119	178,589	222,836	311,263	223,000	311,000	44,411	132,411	0.106	0.147
6/30/05-06	266,856	708,823	1,042,591	1,019,782	1,020,000	1,043,000	311,177	334,177	0.382	0.391
6/30/06-07	273,358	353,698	624,357	738,632	624,000	739,000	270,302	385,302	0.228	0.270
6/30/07-08	299,832	626,548	1,577,228	1,431,065	1,431,000	1,577,000	804,452	950,452	0.477	0.526
6/30/08-09	306,218	126,394	828,639	988,292	829,000	988,000	702,606	861,606	0.271	0.323
Total	4,405,899	31,087,407	34,164,696	31,762,660	34,207,338	35,535,250	3,119,931	4,447,843		
Tot 6/30/84-09	4,405,899	28,007,816	32,403,166	31,762,660	31,098,870	32,390,247	3,091,054	4,382,431	0.706	0.735

NOTES:

(2) Provided by Commonwealth of Massachusetts

(3) Sum of Section 6, Exhibit 1, Page 2, Column 3 and Section 6, Exhibit 1, Page 9, Column 8

(4) From Section 6, Exhibit 1, Page 2, Column 8

(5) From Section 6, Exhibit 1, Page 3, Column 8

(6), (7) Selected based on (3), (4), and (5)

(8) = (6) - (3)

(9) = (7) - (3)

(10) = (6) / (2) / 10

(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
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University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		1,242,912							0	0		
6/30/82-83		271,340	1.008	1.000	273,405	35,000	308,405		0	0		
6/30/83-84		1,219,902	1.008	1.000	1,229,188	223,937	1,453,125		0	0		
6/30/84-85	90,571	837,745	1.008	1.000	844,122	15,000	859,122	0.949	0	0		
6/30/85-86	97,399	2,421,446	1.013	1.000	2,452,077	96,495	2,548,572	2.617	0	0		
6/30/86-87	111,929	2,818,196	1.020	1.200	3,448,588	307,918	3,756,506	3.356	1	1	630,391	78
6/30/87-88	131,134	2,428,406	1.028	1.100	2,745,764	230,482	2,976,246	2.270	2	2	158,679	70
6/30/88-89	151,343	2,245,396	1.043	1.000	2,341,907	378,250	2,720,157	1.797	0	0		
6/30/89-90	112,226	2,830,333	1.053	1.000	2,981,506	413,250	3,394,756	3.025	0	0		
6/30/90-91	112,428	887,647	1.064	1.000	944,408	214,176	1,158,584	1.031	0	0		
6/30/91-92	122,872	1,163,553	1.064	1.000	1,237,957	354,751	1,592,708	1.296	0	0		
6/30/92-93	129,919	494,916	1.070	1.000	529,776	143,251	673,027	0.518	0	0		
6/30/93-94	142,718	1,323,640	1.070	1.000	1,416,871	411,252	1,828,123	1.281	1	1	93,232	67
6/30/94-95	152,788	273,127	1.079	1.000	294,649	248,000	542,649	0.355	0	0		
6/30/95-96	164,973	253,697	1.089	1.000	276,298	238,026	514,324	0.312	0	0		
6/30/96-97	193,880	113,590	1.102	1.000	125,128	310,411	435,539	0.225	0	0		
6/30/97-98	192,992	445,227	1.111	1.000	494,483	101,978	596,461	0.309	0	0		
6/30/98-99	191,535	287,796	1.118	1.000	321,791	347,362	669,153	0.349	0	0		
6/30/99-00	169,941	487,559	1.128	1.000	549,867	203,759	753,626	0.443	0	0		
6/30/00-01	171,840	431,926	1.137	1.000	490,994	309,212	800,205	0.466	1	0		
6/30/01-02	183,110	244,070	1.151	1.000	280,830	98,104	378,934	0.207	0	0		
6/30/02-03	195,846	559,245	1.166	1.000	651,839	121,355	773,194	0.395	3	3	30,865	51
6/30/03-04	229,073	635,971	1.215	1.000	772,652	362,976	1,135,628	0.496	4	2	68,340	48
6/30/04-05	211,119	111,589	1.301	1.000	145,123	77,713	222,836	0.106	0	0		
6/30/05-06	266,856	498,323	1.480	1.000	737,477	305,115	1,042,591	0.391	4	4	59,789	48
6/30/06-07	273,358	238,698	1.709	1.000	408,042	216,315	624,357	0.228	11	2	84,672	39
6/30/07-08	299,832	456,548	2.224	1.000	1,015,193	562,036	1,577,228	0.526	53	19	29,402	48
6/30/08-09	306,218	126,394	4.425	1.000	559,277	269,362	828,639	0.271		42	10,307	46
Total	4,405,899	25,349,190			27,569,211	6,595,486	34,164,696		80	76		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 6, Exhibit 1, Page 7
(5) Based on information from the MA WCRIB
(6) = (3) x (4) x (5)
(7) From Section 6, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

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Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	90,571	0.992	837,745	1.008	844,532	15,000	859,532	0.949	0.932
6/30/85-86	97,399	2.395	2,421,446	1.013	2,450,585	96,495	2,547,080	2.615	2.516
6/30/86-87	111,929	2.162	2,818,196	1.020	2,865,037	307,918	3,172,955	2.835	2.560
6/30/87-88	131,134	1.577	2,428,406	1.028	2,484,530	230,482	2,715,012	2.070	1.895
6/30/88-89	151,343	1.730	2,245,396	1.043	2,353,295	378,250	2,731,545	1.805	1.555
6/30/89-90	112,226	2.767	2,830,333	1.053	2,987,782	413,250	3,401,032	3.031	2.662
6/30/90-91	112,428	0.834	887,647	1.064	944,010	214,176	1,158,186	1.030	0.840
6/30/91-92	122,872	0.992	1,163,553	1.064	1,236,839	354,751	1,591,590	1.295	1.007
6/30/92-93	129,919	0.403	494,916	1.070	529,371	143,251	672,622	0.518	0.407
6/30/93-94	142,718	0.963	1,323,640	1.070	1,414,081	411,252	1,825,333	1.279	0.991
6/30/94-95	152,788	0.196	273,127	1.079	294,968	248,000	542,968	0.355	0.193
6/30/95-96	164,973	0.172	253,697	1.089	276,966	238,026	514,992	0.312	0.168
6/30/96-97	193,880	0.078	113,590	1.102	127,449	310,411	437,860	0.226	0.066
6/30/97-98	192,992	0.256	445,227	1.111	494,387	101,978	596,366	0.309	0.256
6/30/98-99	191,535	0.175	287,796	1.118	323,284	347,362	670,647	0.350	0.169
6/30/99-00	169,941	0.316	487,559	1.128	548,450	203,759	752,209	0.443	0.323
6/30/00-01	171,840	0.282	431,926	1.137	490,255	309,212	799,467	0.465	0.285
6/30/01-02	183,110	0.163	244,070	1.151	283,146	98,104	381,250	0.208	0.155
6/30/02-03	195,846	0.325	559,245	1.166	649,534	121,355	770,889	0.394	0.332
6/30/03-04	229,073	0.329	635,971	1.215	769,114	362,976	1,132,090	0.494	0.336
6/30/04-05	211,119	0.250	111,589	1.301	233,550	77,713	311,263	0.147	0.111
6/30/05-06	266,856	0.250	498,323	1.480	714,667	305,115	1,019,782	0.382	0.268
6/30/06-07	273,358	0.250	238,698	1.709	522,318	216,315	738,632	0.270	0.191
6/30/07-08	299,832	0.250	456,548	2.224	869,030	562,036	1,431,065	0.477	0.290
6/30/08-09	306,218	0.250	126,394	4.425	718,930	269,362	988,292	0.323	0.235
Total	4,405,899		22,615,036		25,426,111	6,336,549	31,762,660		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 6, Exhibit 1, Page 4, Column 11
(4) From Section 6, Exhibit 1, Page 2, Column 3
(5) From Section 6, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 6, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.992	0.992
6/30/85-86									2.395	2.395
6/30/86-87									2.162	2.162
6/30/87-88									1.577	1.577
6/30/88-89									1.730	1.730
6/30/89-90									2.767	2.767
6/30/90-91	112,428	944,408	0.840	0.937	0.787	1.208	0.951	0.840	0.847	0.834
6/30/91-92	122,872	1,237,957	1.008	1.028	1.035	1.196	1.238	1.008	1.096	0.992
6/30/92-93	129,919	529,776	0.408	1.198	0.489	1.184	0.579	0.408	0.519	0.403
6/30/93-94	142,718	1,416,871	0.993	1.183	1.174	1.173	1.377	0.993	1.185	0.963
6/30/94-95	152,788	294,649	0.193	1.172	0.226	1.161	0.262	0.193	0.252	0.196
6/30/95-96	164,973	276,298	0.167	1.163	0.195	1.149	0.224	0.167	0.221	0.172
6/30/96-97	193,880	125,128	0.065	1.151	0.074	1.138	0.085	0.065	0.106	0.078
6/30/97-98	192,992	494,483	0.256	1.136	0.291	1.127	0.328	0.256	0.297	0.256
6/30/98-99	191,535	321,791	0.168	1.121	0.188	1.116	0.210	0.168	0.220	0.175
6/30/99-00	169,941	549,867	0.324	1.103	0.357	1.105	0.394	0.324	0.348	0.316
6/30/00-01	171,840	490,994	0.286	1.075	0.307	1.094	0.336	0.286	0.310	0.282
6/30/01-02	183,110	280,830	0.153	1.054	0.162	1.083	0.175	0.153	0.200	0.163
6/30/02-03	195,846	651,839	0.333	1.051	0.350	1.072	0.375	0.333	0.305	0.325
6/30/03-04	229,073	772,652	0.337	1.051	0.354	1.062	0.376	0.337	0.356	0.329
6/30/04-05	211,119	145,123	0.069	1.044	0.072	1.051	0.075	0.069	0.250	0.250
6/30/05-06	266,856	737,477	0.276	1.033	0.286	1.041	0.297	0.276	0.250	0.250
6/30/06-07	273,358	408,042	0.149	1.022	0.153	1.030	0.157	0.149	0.250	0.250
6/30/07-08	299,832	1,015,193	0.339	1.011	0.342	1.020	0.349	0.339	0.250	0.250
6/30/08-09	306,218	559,277	0.183	1.000	0.183	1.010	0.184	0.183		0.250
Total	3,711,297	11,252,654								

Trend Last 4 (ex 08-09):	50.1%	Avg 3 (x08-09):	0.268
Trend Last 8 (ex 08-09):	-2.1%	Avg 5 (x08-09):	0.251
Trend Last 12 (ex 08-09):	2.5%	Avg 10 (x08-09):	0.275
Prior Selected Trend:	1.0%	Prior Sel Avg:	0.250
Selected Trend:	1.0%	Sel. Loss Cost:	0.250

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 6, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.860	
(2)	Credibility		11%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.949	
		(Low)		(High)
(5)	Selected Range	0.939		0.968
(6)	Incremental Paid for 2009	0		0
(7)	Estimated Reserve	0		0
(8)	Paid to Date (82 & Prior)	1,242,912		1,242,912
(9)	Est Ult Paid for 1982 & Prior	1,242,912		1,242,912

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	0	0
(11)	Projected Number of Years	1	1
(12)	Estimated Reserve	0	0
(13)	Paid to Date (82 & Prior)	1,242,912	1,242,912
(14)	Est Ult Paid for 1982 & Prior	1,242,912	1,242,912
(14a)	Paid Counts During Fiscal Year	0	0

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	1,242,912	1,242,912
(16)	Lump Sum Ultimates	86,500	86,500
(17)	Ult Loss Including Lump Sums	**1,329,412**	**1,329,412**
(18)	Implied Tail	1.000	1.000
(19)	Ult Loss Inc Lump Sums @ 6/08	1,329,412	1,329,412

NOTES:

(1) From Section 6, Exhibit 1, Page 6
(2) = (Average of Section 6, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 6, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 6, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 6, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	92,878	11.439			
1993	2	83,290	11.330	0.897		
1994	3	82,744	11.324	0.993		
1995	4	76,872	11.250	0.929		
1996	5	73,496	11.205	0.956		
1997	6	42,425	10.655	0.577		
1998	7	43,683	10.685	1.030		
1999	8	44,262	10.698	1.013		
2000	9	49,469	10.809	1.118	n =	12
2001	10	47,733	10.773	0.965	S(x) =	23,970
2002	11	28,782	10.268	0.603	S(x-sq) =	47,880,218
2003	12	12,543	9.437	0.436	S(xy) =	259,401
2004	13	0			S(y) =	130
2005	14	0			D =	1,716
2006	15	0			slope =	-0.137
2007	16	0			Avg Trend =	0.863
2008	17	0				
2009	18	0				
					Selected Trend:	**0.860**

NOTES:
(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008
(4) LN [(3)]
(5) Eg. 2003: 0.436 = 12543 / 28782

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Medical Center) - Cluster 4
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	20,333	51,116	80,072	103,773	130,398	141,779	176,965	199,729	221,812	232,715	258,415	258,415	263,521	253,827	259,034	264,240	271,340	271,340	271,340	271,340	271,340	271,340	271,340	271,340	271,340	271,340	271,340
June-84	57,600	144,806	226,837	293,981	343,659	432,433	537,475	627,523	702,624	756,969	803,646	836,058	882,478	912,918	944,937	977,381	1,013,642	1,052,979	1,095,405	1,138,804	1,183,544	1,219,902	1,219,902	1,219,902	1,219,902	1,219,902	
June-85	63,759	160,290	251,092	325,415	403,737	509,752	570,921	613,784	663,935	693,110	702,075	726,654	753,001	779,914	809,196	840,064	837,165	837,745	837,745	837,745	837,745	837,745	837,745	837,745	837,745		
June-86	154,113	387,438	606,915	783,976	961,962	1,132,149	1,274,833	1,393,763	1,502,381	1,636,065	1,751,114	1,854,218	1,962,657	2,114,127	2,191,041	2,271,411	2,297,923	2,325,043	2,352,163	2,379,342	2,408,086	2,421,446	2,421,446	2,421,446			
June-87	166,736	419,172	641,668	854,284	1,072,274	1,249,198	1,388,337	1,542,716	1,758,390	1,875,672	1,986,394	2,093,920	2,135,258	2,199,362	2,260,862	2,284,043	2,302,892	2,321,741	2,340,539	2,359,336	2,708,676	2,762,266	2,818,196				
June-88	174,358	435,032	660,480	866,856	1,054,956	1,195,356	1,302,385	1,395,569	1,488,786	1,568,531	1,652,757	1,723,638	1,803,152	1,884,392	1,957,379	2,019,197	2,082,510	2,146,026	2,212,010	2,280,936	2,353,096	2,428,406					
June-89	244,759	583,650	955,229	1,207,778	1,405,394	1,580,598	1,710,863	1,867,443	1,974,910	2,078,269	2,163,384	2,208,386	2,233,112	2,239,652	2,239,652	2,245,396	2,245,396	2,245,396	2,245,396	2,245,396	2,245,396						
June-90	351,648	811,854	1,353,747	1,739,540	2,053,362	2,300,598	2,503,649	2,605,537	2,726,706	2,654,988	2,740,214	2,830,333	2,830,333	2,830,333	2,830,333	2,830,333	2,830,333	2,830,333	2,830,333	2,830,333							
June-91	156,076	357,539	517,757	630,387	728,239	832,901	871,395	947,686	887,647	887,647	887,647	887,647	887,647	887,647	887,647	887,647	887,647	887,647	887,647								
June-92	261,100	669,245	900,334	1,044,793	1,152,142	1,241,017	1,237,974	1,112,699	1,137,295	1,163,553	1,163,553	1,163,553	1,163,553	1,163,553	1,163,553	1,163,553	1,163,553	1,163,553									
June-93	206,631	396,390	480,534	554,071	597,393	614,181	494,916	494,916	494,916	494,916	494,916	494,916	494,916	494,916	494,916	494,916	494,916										
June-94	247,518	643,612	941,958	1,088,319	1,200,112	1,123,946	1,143,130	1,179,142	1,181,321	1,181,499	1,181,499	1,246,051	1,265,620	1,286,180	1,304,675	1,323,640											
June-95	205,179	254,027	345,287	415,297	285,940	285,940	285,940	286,111	286,111	286,111	286,111	273,127	273,127	273,127	273,127												
June-96	155,417	406,013	576,300	245,663	246,118	246,118	246,697	246,697	253,697	253,697	253,697	253,697	253,697	253,697													
June-97	97,433	256,318	57,502	85,876	119,079	124,761	113,590	113,590	113,590	113,590	113,590	113,590	113,590														
June-98	240,727	143,983	232,600	419,169	444,399	445,227	445,227	445,227	445,227	445,227	445,227	445,227															
June-99	58,149	198,506	223,119	274,795	288,604	286,087	287,457	287,658	287,796	287,796	287,796																
June-00	139,725	319,021	396,283	425,910	459,317	480,109	487,559	487,559	487,559	487,559																	
June-01	103,272	231,200	298,053	357,230	397,007	413,694	429,139	431,926	431,926																		
June-02	111,843	169,158	211,386	237,447	244,070	244,070	244,070	244,070																			
June-03	103,346	214,476	266,732	299,619	422,566	501,970	559,245																				
June-04	158,939	366,873	493,674	593,313	624,409	635,971																					
June-05	66,383	103,442	111,589	111,589	111,589																						
June-06	148,922	299,710	423,237	498,323																							
June-07	129,667	222,028	238,698																								
June-08	199,585	456,548																									
June-09	126,394																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.514	1.566	1.296	1.257	1.087	1.248	1.129	1.111	1.049	1.110	1.000	1.020	0.963	1.021	1.020	1.027	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
June-84	2.514	1.566	1.296	1.169	1.258	1.243	1.168	1.120	1.077	1.062	1.040	1.056	1.034	1.035	1.034	1.037	1.039	1.040	1.040	1.039	1.031	1.000	1.000	1.000	1.000	
June-85	2.514	1.566	1.296	1.241	1.263	1.120	1.075	1.082	1.044	1.013	1.035	1.036	1.036	1.038	1.038	0.997	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
June-86	2.514	1.566	1.292	1.227	1.177	1.126	1.093	1.078	1.089	1.070	1.059	1.058	1.077	1.036	1.037	1.012	1.012	1.012	1.012	1.012	1.006	1.000	1.000			
June-87	2.514	1.531	1.331	1.255	1.165	1.111	1.111	1.140	1.067	1.059	1.054	1.020	1.030	1.028	1.010	1.008	1.008	1.008	1.008	1.148	1.020	1.020				
June-88	2.495	1.518	1.312	1.217	1.133	1.090	1.072	1.067	1.054	1.054	1.043	1.046	1.045	1.039	1.032	1.031	1.030	1.031	1.031	1.032	1.032					
June-89	2.385	1.637	1.264	1.164	1.125	1.082	1.092	1.058	1.052	1.041	1.021	1.011	1.003	1.000	1.003	1.000	1.000	1.000	1.000	1.000						
June-90	2.309	1.667	1.285	1.180	1.120	1.088	1.041	1.047	0.974	1.032	1.033	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
June-91	2.291	1.448	1.218	1.155	1.144	1.046	1.088	0.937	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
June-92	2.563	1.345	1.160	1.103	1.077	0.998	0.899	1.022	1.023	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
June-93	1.918	1.212	1.153	1.078	1.028	0.806	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
June-94	2.600	1.464	1.155	1.103	0.937	1.017	1.032	1.002	1.000	1.000	1.055	1.016	1.016	1.014	1.015											
June-95	1.238	1.359	1.203	0.689	1.000	1.000	1.001	1.000	1.000	1.000	0.955	1.000	1.000	1.000												
June-96	2.612	1.419	0.426	1.002	1.000	1.002	1.000	1.028	1.000	1.000	1.000	1.000	1.000													
June-97	2.631	0.224	1.493	1.387	1.048	0.910	1.000	1.000	1.000	1.000	1.000	1.000														
June-98	0.598	1.615	1.802	1.060	1.002	1.000	1.000	1.000	1.000	1.000	1.000															
June-99	3.414	1.124	1.232	1.050	0.991	1.005	1.001	1.000	1.000	1.000																
June-00	2.283	1.242	1.075	1.078	1.045	1.016	1.000	1.000	1.000																	
June-01	2.239	1.289	1.199	1.111	1.042	1.037	1.006	1.000																		
June-02	1.512	1.250	1.123	1.028	1.000	1.000	1.000																			
June-03	2.075	1.244	1.123	1.410	1.188	1.114																				
June-04	2.308	1.346	1.202	1.052	1.019																					
June-05	1.558	1.079	1.000	1.000																						
June-06	2.013	1.412	1.177																							
June-07	1.712	1.075																								
June-08	2.287																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.216	1.351	1.213	1.131	1.084	1.050	1.040	1.036	1.024	1.026	1.018	1.018	1.015	1.016	1.016	1.010	1.009	1.010	1.011	1.033	1.015	1.004	1.000	1.000	1.000	1.000	
Latest 5	1.976	1.231	1.125	1.120	1.059	1.034	1.001	1.000	1.000	1.000	1.002	1.003	1.003	1.003	1.003	1.000	1.006	1.008	1.010	1.038	1.018	1.004					
Latest 3	2.004	1.189	1.126	1.154	1.069	1.050	1.002	1.000	1.000	1.000	1.000	1.000	1.005	1.005	1.005	1.000	1.000	1.000	1.010	1.060	1.019	1.007	1.000	1.000			
Volume Wtd																											
All Yrs	2.163	1.394	1.196	1.138	1.094	1.060	1.049	1.047	1.029	1.034	1.031	1.021	1.022	1.017	1.015	1.009	1.009	1.010	1.011	1.043	1.018	1.007	1.000	1.000	1.000		
Latest 5	2.059	1.271	1.155	1.125	1.060	1.042	1.002	1.000	1.000	1.000	1.023	1.008	1.006	1.005	1.003	1.000	1.007	1.008	1.010	1.045	1.019						
Latest 3	2.046	1.237	1.170	1.153	1.070	1.063	1.002	1.000	1.000	1.000	1.000	1.000	1.011	1.009	1.006	1.000	1.000	1.000	1.009	1.061	1.019	1.009	1.000				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	*1.987*	*1.306*	*1.158*	*1.136*	*1.090*	*1.018*	*1.013*	*1.006*	*1.008*	*1.008*	*1.002*	*1.006*	*1.010*	*1.010*	*1.005*	*1.006*	*1.008*	*1.009*	*1.010*	*1.010*	*1.011*	*1.008*	*1.007*	*1.005*	*1.000*	*1.009*	
Selected	1.990	1.301	1.155	1.138	1.070	1.042	1.013	1.012	1.008	1.009	1.007	1.008	1.011	1.010	1.008	1.000	1.006	1.000	1.010	1.010	1.015	1.008	1.007	1.005	1.000	1.000	1.008
FacToUlt	4.425	2.224	1.709	1.480	1.301	1.215	1.166	1.151	1.137	1.128	1.118	1.111	1.102	1.089	1.079	1.070	1.070	1.064	1.064	1.053	1.043	1.028	1.020	1.013	1.008	1.008	1.008
Percent of Ult	22.6%	45.0%	58.5%	67.6%	76.9%	82.3%	85.8%	86.9%	88.0%	88.7%	89.4%	90.0%	90.8%	91.8%	92.7%	93.4%	93.4%	94.0%	94.0%	94.9%	95.9%	97.3%	98.1%	98.8%	99.2%	99.2%	99.2%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	1,329,412	1,329,412	1,329,412	1,329,412	0	0.0%	0	0.0%
6/30/82-83	306,340	313,999	306,340	313,999	0	0.0%	0	0.0%
6/30/83-84	1,472,716	1,501,593	1,472,716	1,501,593	0	0.0%	0	0.0%
6/30/84-85	869,800	886,855	869,800	886,855	0	0.0%	0	0.0%
6/30/85-86	2,566,000	2,621,000	2,547,000	2,549,000	(19,000)	-0.7%	(72,000)	-2.7%
6/30/86-87	3,139,000	3,438,279	3,173,000	3,464,730	34,000	1.1%	26,451	0.8%
6/30/87-88	2,665,000	2,794,429	2,715,000	2,845,629	50,000	1.9%	51,200	1.8%
6/30/88-89	2,676,119	2,754,828	2,676,119	2,754,828	0	0.0%	0	0.0%
6/30/89-90	3,308,455	3,405,762	3,308,455	3,405,762	0	0.0%	0	0.0%
6/30/90-91	1,123,859	1,156,914	1,123,859	1,156,914	0	0.0%	0	0.0%
6/30/91-92	1,548,670	1,594,219	1,548,670	1,594,219	0	0.0%	0	0.0%
6/30/92-93	650,930	670,075	650,930	670,075	0	0.0%	0	0.0%
6/30/93-94	1,836,000	1,859,000	1,825,000	1,828,000	(11,000)	-0.6%	(31,000)	-1.7%
6/30/94-95	549,000	557,000	543,000	543,000	(6,000)	-1.1%	(14,000)	-2.5%
6/30/95-96	501,557	511,392	501,557	511,392	0	0.0%	0	0.0%
6/30/96-97	430,838	439,286	430,838	439,286	0	0.0%	0	0.0%
6/30/97-98	556,642	567,556	556,642	567,556	0	0.0%	0	0.0%
6/30/98-99	675,000	686,000	669,000	671,000	(6,000)	-0.9%	(15,000)	-2.2%
6/30/99-00	763,000	767,000	752,000	754,000	(11,000)	-1.4%	(13,000)	-1.7%
6/30/00-01	809,000	813,000	799,000	800,000	(10,000)	-1.2%	(13,000)	-1.6%
6/30/01-02	391,000	403,000	379,000	381,000	(12,000)	-3.1%	(22,000)	-5.5%
6/30/02-03	698,000	698,000	771,000	773,000	73,000	10.5%	75,000	10.7%
6/30/03-04	1,152,000	1,154,000	1,132,000	1,136,000	(20,000)	-1.7%	(18,000)	-1.6%
6/30/04-05	254,000	370,000	223,000	311,000	(31,000)	-12.2%	(59,000)	-15.9%
6/30/05-06	920,000	941,000	1,020,000	1,043,000	100,000	10.9%	102,000	10.8%
6/30/06-07	758,000	863,000	624,000	739,000	(134,000)	-17.7%	(124,000)	-14.4%
6/30/07-08	1,171,000	1,279,000	1,431,000	1,577,000	260,000	22.2%	298,000	23.3%
6/30/08-09								
Total	33,121,338	34,375,599	33,378,338	34,547,250	257,000	0.8%	171,651	0.5%

NOTES:
(2), (3) From Aon analysis as of June 30, 2008
(4), (5) From Section 6, Exhibit 1, Page 1, Columns 6, 7
(6) = (4) - (2)
(7) = (4) / (2) - 1
(8) = (5) - (3)
(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	1,242,912	1.000	1,242,912	0.0%	0.0%	0	86,500	86,500	7.0%	1.000	86,500	86,500	86,500
6/30/82-83	271,340	1.008	273,405	0.0%	0.0%	0	35,000	35,000	12.8%	1.000	35,000	35,000	35,000
6/30/83-84	1,219,902	1.008	1,229,188	0.0%	0.0%	0	223,937	223,937	18.2%	1.000	223,937	223,937	223,937
6/30/84-85	837,745	1.008	844,122	0.0%	0.0%	0	15,000	15,000	1.8%	1.000	15,000	15,000	15,000
6/30/85-86	2,421,446	1.013	2,452,077	0.0%	0.0%	0	96,495	96,495	3.9%	1.000	96,495	96,495	96,495
6/30/86-87	2,818,196	1.224	3,448,588	0.0%	0.0%	0	307,918	307,918	8.9%	1.000	307,918	307,918	307,918
6/30/87-88	2,428,406	1.131	2,745,764	0.0%	0.0%	0	230,482	230,482	8.4%	1.000	230,482	230,482	230,482
6/30/88-89	2,245,396	1.043	2,341,907	0.0%	0.0%	0	378,250	378,250	16.2%	1.000	378,250	378,250	378,250
6/30/89-90	2,830,333	1.053	2,981,506	0.0%	0.0%	0	413,250	413,250	13.9%	1.000	413,250	413,250	413,250
6/30/90-91	887,647	1.064	944,408	0.0%	0.0%	0	214,176	214,176	22.7%	1.000	214,176	214,176	214,176
6/30/91-92	1,163,553	1.064	1,237,957	0.0%	0.0%	0	354,751	354,751	28.7%	1.000	354,751	354,751	354,751
6/30/92-93	494,916	1.070	529,776	0.0%	0.0%	0	143,251	143,251	27.0%	1.000	143,251	143,251	143,251
6/30/93-94	1,323,640	1.070	1,416,871	0.0%	0.0%	0	411,252	411,252	29.0%	1.000	411,252	411,252	411,252
6/30/94-95	273,127	1.079	294,649	0.0%	0.0%	0	248,000	248,000	84.2%	1.000	248,000	248,000	248,000
6/30/95-96	253,697	1.089	276,298	0.0%	0.0%	0	238,026	238,026	86.1%	1.000	238,026	238,026	239,216
6/30/96-97	113,590	1.102	125,128	0.1%	0.1%	134	308,800	308,934	246.9%	1.010	311,888	310,411	311,988
6/30/97-98	445,227	1.111	494,483	0.1%	0.2%	936	100,500	101,436	20.5%	1.020	102,520	101,978	102,458
6/30/98-99	287,796	1.118	321,791	0.1%	0.3%	869	341,750	342,619	106.5%	1.030	352,105	347,362	348,972
6/30/99-00	487,559	1.128	549,867	0.2%	0.5%	2,628	198,417	201,045	36.6%	1.041	206,474	203,759	206,311
6/30/00-01	431,926	1.137	490,994	0.2%	0.6%	3,165	306,047	309,212	63.0%	1.054	322,681	309,212	312,626
6/30/01-02	244,070	1.151	280,830	0.3%	0.9%	2,605	95,499	98,104	34.9%	1.082	103,363	98,104	107,477
6/30/02-03	559,245	1.166	651,839	2.1%	3.1%	19,939	101,416	121,355	18.6%	1.158	117,462	121,355	103,555
6/30/03-04	635,971	1.215	772,652	1.6%	4.7%	35,976	327,000	362,976	47.0%	1.208	395,023	362,976	345,671
6/30/04-05	111,589	1.301	145,123	2.7%	7.4%	10,713	67,000	77,713	53.5%	1.284	86,039	77,713	90,516
6/30/05-06	498,323	1.480	737,477	5.4%	12.8%	94,615	210,500	305,115	41.4%	1.406	295,962	305,115	222,474
6/30/06-07	238,698	1.709	408,042	12.0%	24.8%	101,315	115,000	216,315	53.0%	1.937	222,746	216,315	266,117
6/30/07-08	456,548	2.224	1,015,193	13.8%	38.6%	392,036	170,000	562,036	55.4%	4.675	794,774	562,036	400,000
6/30/08-09	126,394	4.425	559,277	9.5%	48.2%	269,362	0	269,362	48.2%	4.675	0	269,362	
Total	25,349,190		28,812,123			934,293	5,738,217	6,672,510	23.2%		6,707,326	6,681,986	6,215,641

NOTES:
(2) From Section 6, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 6, Exhibit 1, Page 2, Column 6
(5) From Section 6, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 6, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 6, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Medical Center) - Cluster 4
INDEMNITY
Lump Sum Development
Incremental Lump Sum Payments

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	26,500	0	0	0	0	0	0	0	60,000	0	0	0	0	0	0
Jun-83	0	0	0	0	0	20,000	0	0	0	0	0	0	0	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	25,750	0	0	36,687	25,000	0	35,500	17,000	0	0	0	0	0	0	0	0	0	84,000	0	0	0	0		
Jun-85	0	0	0	0	0	0	0	0	0	0	5,000	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0			
Jun-86	0	0	0	0	0	0	23,000	15,000	10,995	10,000	0	0	0	37,500	0	0	0	0	0	0	0	0	0	0				
Jun-87	0	0	8,323	0	0	43,000	9,000	5,000	0	30,000	38,424	25,671	112,500	36,000	0	0	0	0	0	0	0	0	0					
Jun-88	0	0	0	0	10,482	6,500	21,000	46,000	29,000	0	45,000	32,500	0	0	40,000	0	0	0	0	0	0	0						
Jun-89	0	0	16,000	76,750	27,500	0	75,000	15,000	0	0	143,000	0	25,000	0	0	0	0	0	0	0	0							
Jun-90	0	0	47,500	50,000	3,000	72,500	51,250	50,500	77,200	51,300	0	10,000	0	0	0	0	0	0	0	0								
Jun-91	0	6,300	28,000	0	88,376	13,000	30,000	41,500	7,000	0	0	0	0	0	0	0	0	0	0									
Jun-92	0	0	80,001	43,500	79,250	35,000	117,000	0	0	0	0	0	0	0	0	0	0	0										
Jun-93	0	28,000	1	22,500	52,750	40,000	0	0	0	0	0	0	0	0	0	0	0											
Jun-94	0	68,500	118,500	39,375	92,877	79,500	0	0	12,500	0	0	0	0	0	0	0												
Jun-95	0	158,500	29,500	35,000	25,000	0	0	0	0	0	0	0	0	0	0													
Jun-96	0	25,000	162,356	22,670	0	0	0	0	28,000	0	0	0	0	0														
Jun-97	15,000	113,800	110,000	0	70,000	0	0	0	0	0	0	0	0															
Jun-98	1,500	62,500	15,000	0	21,500	0	0	0	0	0	0	0																
Jun-99	0	33,750	125,000	160,000	23,000	0	0	0	0	0	0																	
Jun-00	5,000	72,513	47,154	18,750	0	0	25,000	30,000	0	0																		
Jun-01	0	71,047	80,000	60,000	0	50,000	0	45,000	0																			
Jun-02	0	9,000	38,999	30,000	17,500	0	0	0																				
Jun-03	0	16,416	55,000	0	0	0	30,000																					
Jun-04	0	65,000	30,000	125,000	55,000	52,000																						
Jun-05	0	0	67,000	0	0																							
Jun-06	0	15,000	18,000	177,500																								
Jun-07	0	70,000	45,000																									
Jun-08	0	170,000																										
Jun-09	0																											

Cumulative Lump Sum Payments

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	26,500	26,500	26,500	26,500	26,500	26,500	26,500	26,500	86,500	86,500	86,500	86,500	86,500	86,500	86,500
Jun-83	0	0	0	0	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	
Jun-84	0	0	0	0	25,750	25,750	25,750	62,437	87,437	87,437	122,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	223,937	223,937	223,937	223,937	223,937		
Jun-85	0	0	0	0	0	0	0	0	0	0	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000			
Jun-86	0	0	0	0	0	0	23,000	38,000	48,995	58,995	58,995	58,995	58,995	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495				
Jun-87	0	0	8,323	8,323	8,323	51,323	60,323	65,323	65,323	95,323	133,747	159,418	271,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918					
Jun-88	0	0	0	0	10,482	16,982	37,982	83,982	112,982	112,982	157,982	190,482	190,482	190,482	230,482	230,482	230,482	230,482	230,482	230,482	230,482	230,482						
Jun-89	0	0	16,000	92,750	120,250	120,250	195,250	210,250	210,250	210,250	353,250	353,250	378,250	378,250	378,250	378,250	378,250	378,250	378,250	378,250	378,250							
Jun-90	0	0	47,500	97,500	100,500	173,000	224,250	274,750	351,950	403,250	403,250	413,250	413,250	413,250	413,250	413,250	413,250	413,250	413,250	413,250								
Jun-91	0	6,300	34,300	34,300	122,676	135,676	165,676	207,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176									
Jun-92	0	0	80,001	123,501	202,751	237,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751											
Jun-93	0	28,000	28,001	50,501	103,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251											
Jun-94	0	68,500	187,000	226,375	319,252	398,752	398,752	398,752	411,252	411,252	411,252	411,252	411,252	411,252	411,252	411,252												
Jun-95	0	158,500	188,000	223,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000													
Jun-96	0	25,000	187,356	210,026	210,026	210,026	210,026	210,026	238,026	238,026	238,026	238,026	238,026	238,026														
Jun-97	15,000	128,800	238,800	238,800	308,800	308,800	308,800	308,800	308,800	308,800	308,800	308,800	308,800															
Jun-98	1,500	64,000	79,000	79,000	100,500	100,500	100,500	100,500	100,500	100,500	100,500	100,500																
Jun-99	0	33,750	158,750	318,750	341,750	341,750	341,750	341,750	341,750	341,750	341,750																	
Jun-00	5,000	77,513	124,667	143,417	143,417	143,417	168,417	198,417	198,417	198,417																		
Jun-01	0	71,047	151,047	211,047	211,047	261,047	261,047	306,047	306,047																			
Jun-02	0	9,000	47,999	77,999	95,499	95,499	95,499	95,499																				
Jun-03	0	16,416	71,416	71,416	71,416	71,416	101,416																					
Jun-04	0	65,000	95,000	220,000	275,000	327,000																						
Jun-05	0	0	67,000	67,000	67,000																							
Jun-06	0	15,000	33,000	210,500																								
Jun-07	0	70,000	115,000																									
Jun-08	0	170,000																										
Jun-09	0																											

Commonwealth of Massachusetts Workers Compensation
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INDEMNITY
Lump Sum Development
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sums

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.000	0.000	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.073	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.030	0.020	0.000	0.029	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.068	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.006	0.004	0.004	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
Jun-87	0.000	0.000	0.002	0.000	0.000	0.012	0.003	0.001	0.000	0.009	0.011	0.007	0.033	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.000	0.000	0.000	0.004	0.002	0.008	0.017	0.011	0.000	0.016	0.012	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000						
Jun-89	0.000	0.000	0.007	0.033	0.012	0.000	0.032	0.006	0.000	0.000	0.061	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
Jun-90	0.000	0.000	0.016	0.017	0.001	0.024	0.017	0.017	0.026	0.017	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
Jun-91	0.000	0.007	0.030	0.000	0.094	0.014	0.032	0.044	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000									
Jun-92	0.000	0.000	0.065	0.035	0.064	0.028	0.095	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000										
Jun-93	0.000	0.053	0.000	0.042	0.100	0.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000											
Jun-94	0.000	0.048	0.084	0.028	0.066	0.056	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000												
Jun-95	0.000	0.538	0.100	0.119	0.085	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000													
Jun-96	0.000	0.090	0.588	0.082	0.000	0.000	0.000	0.000	0.101	0.000	0.000	0.000	0.000	0.000														
Jun-97	0.120	0.909	0.879	0.000	0.559	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000															
Jun-98	0.003	0.126	0.030	0.000	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000																
Jun-99	0.000	0.105	0.388	0.497	0.071	0.000	0.000	0.000	0.000	0.000	0.000																	
Jun-00	0.009	0.132	0.086	0.034	0.000	0.000	0.045	0.055	0.000	0.000																		
Jun-01	0.000	0.145	0.163	0.122	0.000	0.102	0.000	0.092	0.000																			
Jun-02	0.000	0.032	0.139	0.107	0.062	0.000	0.000	0.000																				
Jun-03	0.000	0.025	0.084	0.000	0.000	0.000	0.046																					
Jun-04	0.000	0.084	0.039	0.162	0.071	0.067																						
Jun-05	0.000	0.000	0.462	0.000	0.000																							
Jun-06	0.000	0.020	0.024	0.241																								
Jun-07	0.000	0.172	0.110																									
Jun-08	0.000	0.167																										
Jun-09	0.000																											
Averages		*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
Simple Avg																												
All Yrs (ex P)	0.005	0.102	0.132	0.063	0.054	0.021	0.014	0.013	0.009	0.002	0.007	0.002	0.003	0.006	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	
Latest 5	0.000	0.089	0.144	0.102	0.027	0.034	0.018	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.000					
Latest 3	0.000	0.120	0.199	0.134	0.024	0.022	0.015	0.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Olympic Avg																												
All Yrs (ex P)	0.000	0.073	0.105	0.046	0.033	0.018	0.010	0.010	0.005	0.001	0.004	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Latest 10	0.000	0.089	0.130	0.083	0.031	0.008	0.006	0.007	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000										
Latest 5	0.000	0.091	0.078	0.090	0.021	0.022	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Dev Factor Selection																												
Prior	*NA*	*0.090*	*0.135*	*0.120*	*0.056*	*0.034*	*0.012*	*0.029*	*0.010*	*0.002*	*0.000*	*0.000*	*0.001*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	
Selected	NA	0.095	0.138	0.120	0.054	0.027	0.016	0.021	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FacToUlt	NA	0.482	0.386	0.248	0.128	0.074	0.047	0.031	0.009	0.006	0.005	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Medical Center) - Cluster 4
INDEMNITY
Paid Loss Development
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	26,500	26,500	26,500	26,500	26,500	26,500	26,500	26,500	86,500	86,500	86,500	86,500	86,500	86,500	86,500
Jun-83	0	0	0	0	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	
Jun-84	0	0	0	0	25,750	25,750	25,750	62,437	87,437	87,437	122,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	139,937	223,937	223,937	223,937	223,937	223,937		
Jun-85	0	0	0	0	0	0	0	0	0	0	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000			
Jun-86	0	0	0	0	0	0	23,000	38,000	48,995	58,995	58,995	58,995	58,995	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495	96,495				
Jun-87	0	0	8,323	8,323	8,323	51,323	60,323	65,323	65,323	95,323	133,747	159,418	271,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918	307,918					
Jun-88	0	0	0	0	10,482	16,982	37,982	83,982	112,982	112,982	157,982	190,482	190,482	190,482	230,482	230,482	230,482	230,482	230,482	230,482	230,482	230,482						
Jun-89	0	0	16,000	92,750	120,250	120,250	195,250	210,250	210,250	210,250	353,250	353,250	378,250	378,250	378,250	378,250	378,250	378,250	378,250	378,250	378,250							
Jun-90	0	0	47,500	97,500	100,500	173,000	224,250	274,750	351,950	403,250	403,250	413,250	413,250	413,250	413,250	413,250	413,250	413,250	413,250	413,250								
Jun-91	0	6,300	34,300	34,300	122,676	135,676	165,676	207,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176	214,176									
Jun-92	0	0	80,001	123,501	202,751	237,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751	354,751										
Jun-93	0	28,000	28,001	50,501	103,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251	143,251											
Jun-94	0	68,500	187,000	226,375	319,252	398,752	398,752	398,752	411,252	411,252	411,252	411,252	411,252	411,252	411,252	411,252												
Jun-95	0	158,500	188,000	223,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000	248,000													
Jun-96	0	25,000	187,356	210,026	210,026	210,026	210,026	210,026	238,026	238,026	238,026	238,026	238,026	238,026														
Jun-97	15,000	128,800	238,800	238,800	308,800	308,800	308,800	308,800	308,800	308,800	308,800	308,800	308,800															
Jun-98	1,500	64,000	79,000	79,000	100,500	100,500	100,500	100,500	100,500	100,500	100,500	100,500																
Jun-99	0	33,750	158,750	318,750	341,750	341,750	341,750	341,750	341,750	341,750	341,750																	
Jun-00	5,000	77,513	124,667	143,417	143,417	143,417	168,417	198,417	198,417	198,417																		
Jun-01	0	71,047	151,047	211,047	211,047	261,047	261,047	306,047	306,047																			
Jun-02	0	9,000	47,999	77,999	95,499	95,499	95,499	95,499																				
Jun-03	0	16,416	71,416	71,416	71,416	71,416	101,416																					
Jun-04	0	65,000	95,000	220,000	275,000	327,000																						
Jun-05	0	0	67,000	67,000	67,000																							
Jun-06	0	15,000	33,000	210,500																								
Jun-07	0	70,000	115,000																									
Jun-08	0	170,000																										
Jun-09	0																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs														1.000	1.000	1.000	1.000	1.000	1.000	1.000	3.264	1.000	1.000	1.000	1.000	1.000	1.000	
Jun-83						1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.750	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84					1.000	1.000	2.425	1.400	1.000	1.406	1.138	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.600	1.000	1.000	1.000	1.000			
Jun-85											1.000	1.000	1.000	1.000	1.000	1.000	1.000	3.000	1.000	1.000	1.000	1.000	1.000	1.000				
Jun-86							1.652	1.289	1.204	1.000	1.000	1.000	1.636	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Jun-87			1.000	1.000	6.166	1.175	1.083	1.000	1.459	1.403	1.192	1.706	1.132	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
Jun-88					1.620	2.237	2.211	1.345	1.000	1.398	1.206	1.000	1.000	1.210	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
Jun-89			5.797	1.296	1.000	1.624	1.077	1.000	1.000	1.680	1.000	1.071	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
Jun-90			2.053	1.031	1.721	1.296	1.225	1.281	1.146	1.000	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
Jun-91		5.444	1.000	3.577	1.106	1.221	1.250	1.034	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
Jun-92			1.544	1.642	1.173	1.492	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
Jun-93		1.000	1.804	2.045	1.387	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
Jun-94		2.730	1.211	1.410	1.249	1.000	1.000	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
Jun-95		1.186	1.186	1.112	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
Jun-96		7.494	1.121	1.000	1.000	1.000	1.000	1.133	1.000	1.000	1.000	1.000	1.000															
Jun-97	8.587	1.854	1.000	1.293	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000																
Jun-98	42.667	1.234	1.000	1.272	1.000	1.000	1.000	1.000	1.000	1.000	1.000																	
Jun-99		4.704	2.008	1.072	1.000	1.000	1.000	1.000	1.000	1.000																		
Jun-00	15.503	1.608	1.150	1.000	1.000	1.174	1.178	1.000	1.000																			
Jun-01		2.126	1.397	1.000	1.237	1.000	1.172	1.000																				
Jun-02		5.333	1.625	1.224	1.000	1.000	1.000																					
Jun-03		4.350	1.000	1.000	1.000	1.420																						
Jun-04		1.462	2.316	1.250	1.189																							
Jun-05			1.000	1.000																								
Jun-06		2.200	6.379																									
Jun-07		1.643																										
Jun-08																												

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	22.252	2.958	1.873	1.346	1.413	1.192	1.225	1.084	1.048	1.118	1.035	1.052	1.108	1.016	1.000	1.000	1.000	1.222	1.000	1.000	1.100	1.000	1.000	1.000	1.000	1.000		
Latest 5		2.414	2.464	1.095	1.085	1.119	1.070	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.120	1.000	1.000					
Latest 3		1.921	3.232	1.083	1.063	1.140	1.117	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Volume Wtd																												
All Yrs (ex P)	46.829	2.340	1.467	1.237	1.136	1.123	1.084	1.053	1.026	1.080	1.026	1.042	1.029	1.014	1.000	1.000	1.000	1.005	1.000	1.000	1.102	1.000	1.000	1.000	1.000			
Latest 5		2.292	2.058	1.112	1.128	1.060	1.078	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.106							
Latest 3		2.529	2.551	1.153	1.118	1.070	1.143	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					

Dev Factor Selection																												
Prior	1.000	2.404	1.378	1.095	1.047	1.043	1.070	1.027	1.028	1.010	1.010	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.000	2.414	1.378	1.095	1.063	1.043	1.070	1.027	1.013	1.010	1.010	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
FacToUlt	4.675	4.675	1.937	1.406	1.284	1.208	1.158	1.082	1.054	1.041	1.030	1.020	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent of Ult	21.4%	21.4%	51.6%	71.1%	77.9%	82.8%	86.3%	92.4%	94.8%	96.1%	97.1%	98.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	0.8%	0.0%	0.3%	0.2%	1.000	1.000
324	99.2%	0.0%	0.8%	0.0%	0.0%	0.981	0.971
312	99.2%	0.0%	0.8%	0.0%	0.0%	0.943	0.916
300	99.2%	0.5%	0.8%	0.2%	0.1%	0.907	0.864
288	98.8%	0.7%	1.2%	0.3%	0.2%	0.915	0.877
276	98.1%	0.8%	1.9%	0.3%	0.2%	0.915	0.878
264	97.3%	1.4%	2.7%	0.6%	0.4%	0.909	0.870
252	95.9%	0.9%	4.1%	0.4%	0.3%	0.910	0.872
240	94.9%	0.9%	5.1%	0.4%	0.3%	0.895	0.850
228	94.0%	0.0%	6.0%	0.0%	0.0%	0.879	0.829
216	94.0%	0.6%	6.0%	0.3%	0.2%	0.846	0.782
204	93.4%	0.0%	6.6%	0.0%	0.0%	0.828	0.758
192	93.4%	0.7%	6.6%	0.4%	0.3%	0.796	0.715
180	92.7%	0.9%	7.3%	0.5%	0.4%	0.786	0.704
168	91.8%	1.0%	8.2%	0.6%	0.5%	0.780	0.697
156	90.8%	0.7%	9.2%	0.5%	0.4%	0.776	0.693
144	90.0%	0.6%	10.0%	0.4%	0.3%	0.764	0.677
132	89.4%	0.8%	10.6%	0.5%	0.4%	0.748	0.658
120	88.7%	0.7%	11.3%	0.5%	0.4%	0.737	0.644
108	88.0%	1.1%	12.0%	0.8%	0.6%	0.725	0.629
96	86.9%	1.1%	13.1%	0.8%	0.7%	0.720	0.624
84	85.8%	3.5%	14.2%	2.7%	2.4%	0.715	0.619
72	82.3%	5.4%	17.7%	4.4%	3.9%	0.745	0.660
60	76.9%	9.3%	23.1%	7.8%	7.2%	0.778	0.704
48	67.6%	9.1%	32.4%	7.9%	7.4%	0.815	0.753
36	58.5%	13.5%	41.5%	12.3%	11.7%	0.827	0.767
24	45.0%	22.4%	55.0%	21.1%	20.5%	0.841	0.785
12	22.6%	22.6%	77.4%	22.2%	22.0%	0.858	0.807
Total		100.0%					

NOTES:

(2) = 1 / Section 6, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	0	0		0	0
6/30/82-83	0	7,659	0.981	0	7,510
6/30/83-84	28,877	57,754	0.943	27,227	54,454
6/30/84-85	17,055	34,110	0.907	15,462	30,924
6/30/85-86	29,059	31,059	0.915	26,582	28,412
6/30/86-87	46,886	338,616	0.915	42,919	309,967
6/30/87-88	56,112	186,741	0.909	51,005	169,743
6/30/88-89	52,473	131,182	0.910	47,772	119,429
6/30/89-90	64,872	162,179	0.895	58,065	145,164
6/30/90-91	22,036	55,091	0.879	19,379	48,448
6/30/91-92	30,366	75,915	0.846	25,677	64,193
6/30/92-93	12,763	31,908	0.828	10,563	26,406
6/30/93-94	90,108	93,108	0.796	71,703	74,090
6/30/94-95	21,873	21,873	0.786	17,203	17,203
6/30/95-96	9,834	19,669	0.780	7,673	15,347
6/30/96-97	8,448	16,896	0.776	6,558	13,115
6/30/97-98	10,915	21,829	0.764	8,337	16,673
6/30/98-99	39,454	41,454	0.748	29,531	31,028
6/30/99-00	66,024	68,024	0.737	48,683	50,157
6/30/00-01	61,027	62,027	0.725	44,230	44,955
6/30/01-02	39,431	41,431	0.720	28,384	29,824
6/30/02-03	110,339	112,339	0.715	78,871	80,301
6/30/03-04	169,029	173,029	0.745	125,942	128,922
6/30/04-05	44,411	132,411	0.778	34,568	103,064
6/30/05-06	311,177	334,177	0.815	253,658	272,407
6/30/06-07	270,302	385,302	0.827	223,492	318,577
6/30/07-08	804,452	950,452	0.841	676,251	798,983
6/30/08-09	702,606	861,606	0.858	602,905	739,343
Total	3,119,931	4,447,843		2,582,640	3,738,640
			(7) Total Discount Factor:	0.828	0.841

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	0	0
(9) Projected Number of Years:	1	1
(10) Projected Paid Loss per Year:	0	0
(11) Discounted Value at 4%:	0	0

NOTES:
(2), (3) From Section 6, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 6, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	0	0		0	0
6/30/82-83	0	7,659	0.971	0	7,439
6/30/83-84	28,877	57,754	0.916	26,460	52,920
6/30/84-85	17,055	34,110	0.864	14,743	29,486
6/30/85-86	29,059	31,059	0.877	25,487	27,242
6/30/86-87	46,886	338,616	0.878	41,187	297,458
6/30/87-88	56,112	186,741	0.870	48,796	162,392
6/30/88-89	52,473	131,182	0.872	45,752	114,379
6/30/89-90	64,872	162,179	0.850	55,167	137,918
6/30/90-91	22,036	55,091	0.829	18,262	45,654
6/30/91-92	30,366	75,915	0.782	23,740	59,350
6/30/92-93	12,763	31,908	0.758	9,672	24,180
6/30/93-94	90,108	93,108	0.715	64,417	66,562
6/30/94-95	21,873	21,873	0.704	15,395	15,395
6/30/95-96	9,834	19,669	0.697	6,854	13,707
6/30/96-97	8,448	16,896	0.693	5,853	11,707
6/30/97-98	10,915	21,829	0.677	7,392	14,784
6/30/98-99	39,454	41,454	0.658	25,958	27,273
6/30/99-00	66,024	68,024	0.644	42,546	43,835
6/30/00-01	61,027	62,027	0.629	38,388	39,017
6/30/01-02	39,431	41,431	0.624	24,605	25,853
6/30/02-03	110,339	112,339	0.619	68,270	69,508
6/30/03-04	169,029	173,029	0.660	111,569	114,209
6/30/04-05	44,411	132,411	0.704	31,284	93,274
6/30/05-06	311,177	334,177	0.753	234,229	251,542
6/30/06-07	270,302	385,302	0.767	207,378	295,608
6/30/07-08	804,452	950,452	0.785	631,191	745,746
6/30/08-09	702,606	861,606	0.807	567,004	695,317
Total	3,119,931	4,447,843		2,391,601	3,481,754
			(7) Total Discount Factor:	0.767	0.783

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	0	0
(9) Projected Number of Years:	1	1
(10) Projected Paid Loss per Year:	0	0
(11) Discounted Value at 6%:	0	0

NOTES:
(2), (3) From Section 6, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 6, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	1,455,812	1,462,132	1,455,812	0	6,320				0	0		
6/30/82-83	327,672	335,649	327,566	106	8,083	98.8%	0.5%	40.5%	43	3,274	40.5%	40.5%
6/30/83-84	1,523,932	1,553,573	1,494,800	29,132	58,773	97.1%	0.5%	17.5%	5,099	10,288	17.5%	17.5%
6/30/84-85	1,033,339	1,052,834	1,015,470	17,869	37,364	97.4%	0.5%	18.9%	3,375	7,056	18.9%	18.9%
6/30/85-86	2,763,432	2,768,662	2,733,296	30,136	35,367	98.8%	0.5%	42.2%	12,726	14,935	42.2%	42.2%
6/30/86-87	3,571,000	3,861,730	3,523,471	47,529	338,260	94.8%	1.0%	19.3%	9,157	65,170	19.3%	19.3%
6/30/87-88	3,054,000	3,184,629	2,997,192	56,808	187,437	96.1%	1.0%	25.5%	14,510	47,876	25.5%	25.5%
6/30/88-89	3,167,349	3,268,054	3,112,432	54,917	155,622	96.7%	1.0%	30.6%	16,786	47,568	30.6%	30.6%
6/30/89-90	3,865,186	3,987,422	3,797,545	67,641	189,877	96.7%	1.0%	30.5%	20,626	57,900	30.5%	30.5%
6/30/90-91	1,427,065	1,473,696	1,403,520	23,545	70,176	96.8%	1.0%	31.0%	7,287	21,720	31.0%	31.0%
6/30/91-92	2,221,204	2,296,867	2,187,492	33,712	109,375	96.8%	1.0%	31.6%	10,645	34,536	31.6%	31.6%
6/30/92-93	1,048,102	1,085,031	1,033,363	14,739	51,668	96.9%	1.0%	32.1%	4,735	16,597	32.1%	32.1%
6/30/93-94	2,521,000	2,524,000	2,426,870	94,130	97,130	96.2%	2.0%	52.8%	49,659	51,241	52.8%	52.8%
6/30/94-95	961,000	961,000	936,521	24,479	24,479	97.5%	2.0%	78.5%	19,220	19,220	78.5%	78.5%
6/30/95-96	886,424	913,492	874,675	11,749	38,817	97.2%	2.0%	71.2%	8,364	27,634	71.2%	71.2%
6/30/96-97	626,838	645,086	616,419	10,419	28,667	96.9%	2.0%	65.1%	6,781	18,657	65.1%	65.1%
6/30/97-98	1,011,642	1,045,306	996,296	15,345	49,010	96.9%	0.1%	1.8%	273	872	1.8%	1.8%
6/30/98-99	977,000	979,000	933,878	43,122	45,122	95.5%	5.0%	110.8%	47,792	50,008	110.8%	110.8%
6/30/99-00	933,000	935,000	863,844	69,156	71,156	92.5%	5.0%	66.6%	46,034	47,366	66.6%	66.6%
6/30/00-01	1,005,000	1,006,000	934,992	70,008	71,008	93.0%	5.0%	71.3%	49,918	50,632	71.3%	71.3%
6/30/01-02	538,000	541,000	486,871	51,129	54,129	90.2%	5.0%	51.3%	26,206	27,744	51.3%	51.3%
6/30/02-03	978,000	981,000	841,757	136,243	139,243	85.9%	4.3%	30.6%	41,732	42,651	30.6%	30.6%
6/30/03-04	1,474,000	1,495,100	1,258,023	215,977	237,077	84.7%	1.2%	7.8%	16,934	18,588	7.8%	7.8%
6/30/04-05	418,000	533,600	340,972	77,028	192,628	71.7%	13.1%	46.2%	35,550	88,901	46.2%	46.2%
6/30/05-06	1,383,000	1,426,250	999,362	383,638	426,888	71.1%	0.5%	1.8%	6,848	7,620	1.8%	1.8%
6/30/06-07	942,000	1,089,700	589,081	352,919	500,619	58.0%	13.2%	31.3%	110,544	156,807	31.3%	31.3%
6/30/07-08	1,943,000	2,172,350	981,297	961,703	1,191,053	47.7%	10.3%	19.7%	189,349	234,505	19.7%	19.7%
6/30/08-09	1,276,000	1,503,550	274,177	1,001,823	1,229,373	19.7%	28.0%	34.8%	348,969	428,233	34.8%	34.8%
Total	43,331,996	45,081,713	39,436,993	3,895,003	5,644,719				1,109,163	1,597,599	28.5%	28.3%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		126,400			126,400	132,720	0	6,320		
6/30/82-83		21,226	21,226		21,332	21,651	106	425		
6/30/83-84		50,961	50,961		51,216	51,980	255	1,019		
6/30/84-85	90,571	162,725	162,725	162,725	163,539	165,980	814	3,255	0.181	0.183
6/30/85-86	97,399	215,355	215,355	215,355	216,432	219,662	1,077	4,307	0.222	0.226
6/30/86-87	111,929	397,356	397,356	397,356	398,000	397,000	644	-356	0.356	0.355
6/30/87-88	131,134	338,304	338,642	338,672	339,000	339,000	696	696	0.259	0.259
6/30/88-89	151,343	488,786	489,764	489,841	491,230	513,225	2,444	24,439	0.325	0.339
6/30/89-90	112,226	553,962	555,626	555,860	556,732	581,660	2,770	27,698	0.496	0.518
6/30/90-91	112,428	301,697	302,906	302,900	303,205	316,782	1,508	15,085	0.270	0.282
6/30/91-92	122,872	669,188	672,541	672,491	672,534	702,647	3,346	33,459	0.547	0.572
6/30/92-93	129,919	395,196	397,515	397,477	397,172	414,956	1,976	19,760	0.306	0.319
6/30/93-94	142,718	691,979	696,152	696,033	696,000	696,000	4,022	4,022	0.488	0.488
6/30/94-95	152,788	415,394	418,137	418,070	418,000	418,000	2,606	2,606	0.274	0.274
6/30/95-96	164,973	382,952	385,867	385,797	384,867	402,100	1,915	19,148	0.233	0.244
6/30/96-97	193,880	194,029	195,702	195,747	196,000	205,800	1,971	11,771	0.101	0.106
6/30/97-98	192,992	450,569	455,358	455,202	455,000	477,750	4,431	27,181	0.236	0.248
6/30/98-99	191,535	304,333	308,182	308,137	308,000	308,000	3,667	3,667	0.161	0.161
6/30/99-00	169,941	177,868	181,018	181,117	181,000	181,000	3,132	3,132	0.107	0.107
6/30/00-01	171,840	197,019	205,946	206,096	206,000	206,000	8,981	8,981	0.120	0.120
6/30/01-02	183,110	147,302	159,381	160,116	159,000	160,000	11,698	12,698	0.087	0.087
6/30/02-03	195,846	181,096	206,744	207,580	207,000	208,000	25,904	26,904	0.106	0.106
6/30/03-04	229,073	295,052	342,472	342,170	342,000	359,100	46,948	64,048	0.149	0.157
6/30/04-05	211,119	162,383	195,284	212,179	195,000	222,600	32,617	60,217	0.092	0.105
6/30/05-06	266,856	290,539	363,232	365,306	363,000	383,250	72,461	92,711	0.136	0.144
6/30/06-07	273,358	235,383	317,584	334,438	318,000	350,700	82,617	115,317	0.116	0.128
6/30/07-08	299,832	354,750	566,793	511,788	512,000	595,350	157,250	240,600	0.171	0.199
6/30/08-09	306,218	147,783	490,770	447,395	447,000	515,550	299,217	367,767	0.146	0.168
Total	4,405,899	8,349,587	9,093,238	8,959,851	9,124,658	9,546,462	775,072	1,196,876		
Tot 6/30/84-09	4,405,899	8,151,000	9,021,051	8,959,851	8,925,710	9,340,112	774,711	1,189,112	0.203	0.212

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 6, Exhibit 2, Page 2, Column 3
(4) From Section 6, Exhibit 2, Page 2, Column 8
(5) From Section 6, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		126,400							0	0	
6/30/82-83		21,226	1.000	1.000	21,226	N/A	21,226		0	0	
6/30/83-84		50,961	1.000	1.000	50,961	N/A	50,961		0	0	
6/30/84-85	90,571	162,725	1.000	1.000	162,725	N/A	162,725	0.180	0	0	
6/30/85-86	97,399	215,355	1.000	1.000	215,355	N/A	215,355	0.221	0	0	
6/30/86-87	111,929	397,356	1.000	1.000	397,356	N/A	397,356	0.355	0	0	
6/30/87-88	131,134	338,304	1.001	1.000	338,642	N/A	338,642	0.258	1	2	169
6/30/88-89	151,343	488,786	1.002	1.000	489,764	N/A	489,764	0.324	0	0	
6/30/89-90	112,226	553,962	1.003	1.000	555,626	N/A	555,626	0.495	0	0	
6/30/90-91	112,428	301,697	1.004	1.000	302,906	N/A	302,906	0.269	0	0	
6/30/91-92	122,872	669,188	1.005	1.000	672,541	N/A	672,541	0.547	0	0	
6/30/92-93	129,919	395,196	1.006	1.000	397,515	N/A	397,515	0.306	0	0	
6/30/93-94	142,718	691,979	1.006	1.000	696,152	N/A	696,152	0.488	1	1	4,174
6/30/94-95	152,788	415,394	1.007	1.000	418,137	N/A	418,137	0.274	1	0	
6/30/95-96	164,973	382,952	1.008	1.000	385,867	N/A	385,867	0.234	0	0	
6/30/96-97	193,880	194,029	1.009	1.000	195,702	N/A	195,702	0.101	1	1	1,673
6/30/97-98	192,992	450,569	1.011	1.000	455,358	N/A	455,358	0.236	1	1	4,789
6/30/98-99	191,535	304,333	1.013	1.000	308,182	N/A	308,182	0.161	2	2	1,925
6/30/99-00	169,941	177,868	1.018	1.000	181,018	N/A	181,018	0.107	1	1	3,151
6/30/00-01	171,840	197,019	1.045	1.000	205,946	N/A	205,946	0.120	2	2	4,463
6/30/01-02	183,110	147,302	1.082	1.000	159,381	N/A	159,381	0.087	3	1	12,078
6/30/02-03	195,846	181,096	1.142	1.000	206,744	N/A	206,744	0.106	2	2	12,824
6/30/03-04	229,073	295,052	1.161	1.000	342,472	N/A	342,472	0.150	7	4	11,855
6/30/04-05	211,119	162,383	1.203	1.000	195,284	N/A	195,284	0.092	2	2	16,450
6/30/05-06	266,856	290,539	1.250	1.000	363,232	N/A	363,232	0.136	20	9	8,077
6/30/06-07	273,358	235,383	1.349	1.000	317,584	N/A	317,584	0.116	110	34	2,418
6/30/07-08	299,832	354,750	1.598	1.000	566,793	N/A	566,793	0.189	175	122	1,738
6/30/08-09	306,218	147,783	3.321	1.000	490,770	N/A	490,770	0.160		167	2,054
Total	4,405,899	8,349,587			9,093,238		9,093,238		329	351	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 6, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	90,571	0.195	162,725	1.000	162,725	N/A	162,725	0.180	0.180
6/30/85-86	97,399	0.239	215,355	1.000	215,355	N/A	215,355	0.221	0.221
6/30/86-87	111,929	0.383	397,356	1.000	397,356	N/A	397,356	0.355	0.355
6/30/87-88	131,134	0.281	338,304	1.001	338,672	N/A	338,672	0.258	0.258
6/30/88-89	151,343	0.349	488,786	1.002	489,841	N/A	489,841	0.324	0.324
6/30/89-90	112,226	0.565	553,962	1.003	555,860	N/A	555,860	0.495	0.495
6/30/90-91	112,428	0.268	301,697	1.004	302,900	N/A	302,900	0.269	0.269
6/30/91-92	122,872	0.539	669,188	1.005	672,491	N/A	672,491	0.547	0.547
6/30/92-93	129,919	0.301	395,196	1.006	397,477	N/A	397,477	0.306	0.306
6/30/93-94	142,718	0.474	691,979	1.006	696,033	N/A	696,033	0.488	0.488
6/30/94-95	152,788	0.267	415,394	1.007	418,070	N/A	418,070	0.274	0.274
6/30/95-96	164,973	0.228	382,952	1.008	385,797	N/A	385,797	0.234	0.234
6/30/96-97	193,880	0.104	194,029	1.009	195,747	N/A	195,747	0.101	0.101
6/30/97-98	192,992	0.228	450,569	1.011	455,202	N/A	455,202	0.236	0.236
6/30/98-99	191,535	0.159	304,333	1.013	308,137	N/A	308,137	0.161	0.161
6/30/99-00	169,941	0.110	177,868	1.018	181,117	N/A	181,117	0.107	0.107
6/30/00-01	171,840	0.122	197,019	1.045	206,096	N/A	206,096	0.120	0.120
6/30/01-02	183,110	0.092	147,302	1.082	160,116	N/A	160,116	0.087	0.087
6/30/02-03	195,846	0.109	181,096	1.142	207,580	N/A	207,580	0.106	0.106
6/30/03-04	229,073	0.149	295,052	1.161	342,170	N/A	342,170	0.149	0.149
6/30/04-05	211,119	0.140	162,383	1.203	212,179	N/A	212,179	0.101	0.101
6/30/05-06	266,856	0.140	290,539	1.250	365,306	N/A	365,306	0.137	0.137
6/30/06-07	273,358	0.140	235,383	1.349	334,438	N/A	334,438	0.122	0.122
6/30/07-08	299,832	0.140	354,750	1.598	511,788	N/A	511,788	0.171	0.171
6/30/08-09	306,218	0.140	147,783	3.321	447,395	N/A	447,395	0.146	0.146
Total	4,405,899		8,151,000		8,959,851		8,959,851		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 6, Exhibit 2, Page 4, Column 11
(4) From Section 6, Exhibit 2, Page 2, Column 3
(5) From Section 6, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.195	0.195
6/30/85-86									0.239	0.239
6/30/86-87									0.383	0.383
6/30/87-88									0.281	0.281
6/30/88-89									0.349	0.349
6/30/89-90									0.565	0.565
6/30/90-91	112,428	302,906	0.269	1.157	0.312	1.000	0.312	0.269	0.316	0.268
6/30/91-92	122,872	672,541	0.547	1.152	0.630	1.000	0.630	0.547	0.637	0.539
6/30/92-93	129,919	397,515	0.306	1.152	0.353	1.000	0.353	0.306	0.364	0.301
6/30/93-94	142,718	696,152	0.488	1.142	0.557	1.000	0.557	0.488	0.569	0.474
6/30/94-95	152,788	418,137	0.274	1.134	0.310	1.000	0.310	0.274	0.320	0.267
6/30/95-96	164,973	385,867	0.234	1.120	0.262	1.000	0.262	0.234	0.275	0.228
6/30/96-97	193,880	195,702	0.101	1.101	0.111	1.000	0.111	0.101	0.138	0.104
6/30/97-98	192,992	455,358	0.236	1.100	0.259	1.000	0.259	0.236	0.243	0.228
6/30/98-99	191,535	308,182	0.161	1.100	0.177	1.000	0.177	0.161	0.164	0.159
6/30/99-00	169,941	181,018	0.107	1.100	0.117	1.000	0.117	0.107	0.117	0.110
6/30/00-01	171,840	205,946	0.120	1.075	0.129	1.000	0.129	0.120	0.132	0.122
6/30/01-02	183,110	159,381	0.087	1.067	0.093	1.000	0.093	0.087	0.106	0.092
6/30/02-03	195,846	206,744	0.106	1.040	0.110	1.000	0.110	0.106	0.115	0.109
6/30/03-04	229,073	342,472	0.150	1.014	0.152	1.000	0.152	0.150	0.170	0.149
6/30/04-05	211,119	195,284	0.092	1.003	0.093	1.000	0.093	0.092	0.140	0.140
6/30/05-06	266,856	363,232	0.136	1.000	0.136	1.000	0.136	0.136	0.140	0.140
6/30/06-07	273,358	317,584	0.116	1.000	0.116	1.000	0.116	0.116	0.140	0.140
6/30/07-08	299,832	566,793	0.189	1.000	0.189	1.000	0.189	0.189	0.140	0.140
6/30/08-09	306,218	490,770	0.160	1.000	0.160	1.000	0.160	0.160		0.140
Total	3,711,297	6,861,583								

Trend Last 4 (ex 08-09):	21.8%	Avg 3 (x08-09):	0.147
Trend Last 8 (ex 08-09):	4.8%	Avg 5 (x08-09):	0.137
Trend Last 12 (ex 08-09):	-1.3%	Avg 10 (x08-09):	0.131
Prior Selected Trend:	0.0%	Prior Sel Avg:	0.140
Selected Trend:	0.0%	Sel. Loss Cost:	0.140

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 6, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.750	
(2)	Credibility		17%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.867	
		(Low)		(High)
(5)	Selected Range	0.858		0.875
(6)	Incremental Paid for 2009	0		0
(7)	Estimated Reserve	0		0
(8)	Paid to Date (82 & Prior)	126,400		126,400
(9)	Est Ult Paid for 1982 & Prior	126,400		126,400

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	0	0
(11)	Projected Number of Years	2	2
(12)	Estimated Reserve	0	0
(13)	Paid to Date (82 & Prior)	126,400	126,400
(14)	Est Ult Paid for 1982 & Prior	126,400	126,400
(14a)	Paid Counts During Fiscal Year	0	0

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	126,400	132,720
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**126,400**	**132,720**
(18)	Implied Tail	1.000	1.050
(19)	Ult Loss Inc Lump Sums @ 6/08	126,400	132,720

NOTES:

(1) From Section 6, Exhibit 2, Page 6
(2) = (Average of Section 6, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 6, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 6, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	1,277	7.152			
1993	2	1,933	7.567	1.514		
1994	3	2,959	7.993	1.531		
1995	4	30,696	10.332	10.374		
1996	5	1,619	7.390	0.053		
1997	6	7,074	8.864	4.369		
1998	7	5,136	8.544	0.726		
1999	8	26,679	10.192	5.195		
2000	9	8,683	9.069	0.325	n =	12
2001	10	453	6.116	0.052	S(x) =	23,970
2002	11	573	6.351	1.265	S(x-sq) =	47,880,218
2003	12	16	2.773	0.028	S(xy) =	184,417
2004	13	0	0.000	0.000	S(y) =	92
2005	14	0	0.000	0.000	D =	1,716
2006	15	0	0.000	0.000	slope =	-0.246
2007	16	0	0.000	0.000	Avg Trend =	0.754
2008	17	0	0.000	0.000		
2009	18	0	0.000	0.000		
					Selected Trend:	**0.750**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2005: 0.028 = 16 / 573

Commonwealth of Massachusetts Workers Compensation
University of Massachusetts (Medical Center) - Cluster 4
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	1,234	3,103	4,861	6,300	7,916	9,821	13,039	13,611	14,794	16,517	16,901	19,950	21,086	21,192	21,226	21,226	21,226	21,226	21,226	21,226	21,226	21,226	21,226	21,226	21,226	21,226	21,226
June-84	2,119	5,327	8,344	10,814	13,588	16,986	18,288	23,404	25,737	31,059	49,301	49,301	49,616	49,616	49,616	49,911	50,261	50,611	50,611	50,611	50,961	50,961	50,961	50,961	50,961	50,961	
June-85	12,116	30,459	47,713	61,836	82,871	90,557	102,192	116,196	126,162	134,269	144,586	146,053	155,423	156,868	159,570	160,025	160,725	160,725	162,725	162,725	162,725	162,725	162,725	162,725	162,725		
June-86	20,894	52,527	82,283	109,226	113,177	157,428	181,217	194,111	201,338	202,138	203,815	204,040	204,668	207,774	211,955	212,780	212,780	212,780	215,180	215,355	215,355	215,355	215,355	215,355			
June-87	31,042	78,039	128,883	164,579	225,534	253,273	269,701	290,822	307,535	321,418	343,535	347,855	391,585	394,847	396,769	397,163	397,163	397,163	397,163	397,163	397,356	397,356	397,356				
June-88	38,803	100,851	169,323	220,047	246,044	269,806	298,617	307,956	313,205	317,782	319,598	322,343	325,039	329,817	329,817	329,817	331,017	332,429	332,429	333,094	334,344	338,304					
June-89	23,530	123,605	224,861	257,852	314,169	363,076	415,231	428,349	431,502	433,102	439,481	459,235	462,320	479,638	484,373	488,387	488,786	488,786	488,786	488,786	488,786						
June-90	50,815	273,859	359,066	409,059	478,183	534,786	577,745	596,162	604,078	543,745	548,041	553,962	553,962	553,962	553,962	553,962	553,962	553,962	553,962	553,962							
June-91	100,348	235,116	278,654	299,094	305,642	311,577	324,200	331,771	300,441	301,585	301,697	301,697	301,697	301,697	301,697	301,697	301,697	301,697	301,697								
June-92	214,704	524,294	598,233	667,108	699,896	707,764	731,353	668,555	669,244	669,244	669,188	669,188	669,188	669,188	669,188	669,188	669,188	669,188									
June-93	170,873	375,060	420,253	430,949	444,131	448,308	394,918	395,196	395,196	395,196	395,196	395,196	395,196	395,196	395,196	395,196	395,196										
June-94	300,512	596,595	667,456	713,591	730,452	676,827	679,845	681,410	682,760	684,108	684,108	684,335	686,279	687,551	690,014	691,979											
June-95	224,267	378,724	433,955	457,533	409,745	410,858	411,003	411,481	412,287	412,616	413,407	414,199	414,911	415,394	415,394												
June-96	167,356	393,930	501,689	378,074	378,587	378,666	378,667	379,037	379,508	382,952	382,952	382,952	382,952	382,952													
June-97	130,080	273,734	170,451	178,673	186,292	189,102	189,531	190,062	190,753	191,531	192,270	193,209	194,029														
June-98	153,489	249,584	276,046	301,383	308,237	314,372	326,267	379,647	404,376	420,822	440,261	450,569															
June-99	74,009	144,825	187,509	205,821	213,634	225,729	262,895	277,050	296,551	301,615	304,333																
June-00	42,966	116,743	129,805	138,406	149,847	152,795	156,525	163,267	168,512	177,868																	
June-01	66,977	112,847	134,511	164,585	186,174	191,353	193,876	196,194	197,019																		
June-02	51,704	99,105	124,129	132,683	137,298	144,909	146,854	147,302																			
June-03	24,338	126,639	167,817	173,658	176,063	176,926	181,096																				
June-04	83,690	216,265	266,643	284,876	292,325	295,052																					
June-05	70,794	151,383	161,299	162,118	162,383																						
June-06	111,267	215,773	247,375	290,539																							
June-07	135,214	210,808	235,383																								
June-08	163,349	354,750																									
June-09	147,783																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.515	1.567	1.296	1.257	1.241	1.328	1.044	1.087	1.116	1.023	1.180	1.057	1.005	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
June-84	2.514	1.566	1.296	1.257	1.250	1.077	1.280	1.100	1.207	1.587	1.000	1.006	1.000	1.000	1.006	1.007	1.007	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	
June-85	2.514	1.566	1.296	1.340	1.093	1.128	1.137	1.086	1.064	1.077	1.010	1.064	1.009	1.017	1.003	1.004	1.000	1.012	1.000	1.000	1.000	1.000	1.000	1.000		
June-86	2.514	1.566	1.327	1.036	1.391	1.151	1.071	1.037	1.004	1.008	1.001	1.003	1.015	1.020	1.004	1.000	1.000	1.011	1.001	1.000	1.000	1.000	1.000			
June-87	2.514	1.652	1.277	1.370	1.123	1.065	1.078	1.057	1.045	1.069	1.013	1.126	1.008	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
June-88	2.599	1.679	1.300	1.118	1.097	1.107	1.031	1.017	1.015	1.006	1.009	1.008	1.015	1.000	1.000	1.004	1.004	1.000	1.002	1.004	1.012					
June-89	5.253	1.819	1.147	1.218	1.156	1.144	1.032	1.007	1.004	1.015	1.045	1.007	1.037	1.010	1.008	1.001	1.000	1.000	1.000	1.000						
June-90	5.389	1.311	1.139	1.169	1.118	1.080	1.032	1.013	0.900	1.008	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
June-91	2.343	1.185	1.073	1.022	1.019	1.041	1.023	0.906	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
June-92	2.442	1.141	1.115	1.049	1.011	1.033	0.914	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
June-93	2.195	1.120	1.025	1.031	1.009	0.881	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
June-94	1.985	1.119	1.069	1.024	0.927	1.004	1.002	1.002	1.002	1.000	1.000	1.003	1.002	1.004	1.003											
June-95	1.689	1.146	1.054	0.896	1.003	1.000	1.001	1.002	1.001	1.002	1.002	1.002	1.001	1.000												
June-96	2.354	1.274	0.754	1.001	1.000	1.000	1.001	1.001	1.009	1.000	1.000	1.000	1.000													
June-97	2.104	0.623	1.048	1.043	1.015	1.002	1.003	1.004	1.004	1.004	1.005	1.004														
June-98	1.626	1.106	1.092	1.023	1.020	1.038	1.164	1.065	1.041	1.046	1.023															
June-99	1.957	1.295	1.098	1.038	1.057	1.165	1.054	1.070	1.017	1.009																
June-00	2.717	1.112	1.066	1.083	1.020	1.024	1.043	1.032	1.056																	
June-01	1.685	1.192	1.224	1.131	1.028	1.013	1.012	1.004																		
June-02	1.917	1.252	1.069	1.035	1.055	1.013	1.003																			
June-03	5.203	1.325	1.035	1.014	1.005	1.024																				
June-04	2.584	1.233	1.068	1.026	1.009																					
June-05	2.138	1.066	1.005	1.002																						
June-06	1.939	1.146	1.174																							
June-07	1.559	1.117																								
June-08	2.172																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.555	1.287	1.127	1.095	1.075	1.063	1.046	1.026	1.027	1.050	1.019	1.019	1.007	1.004	1.002	1.001	1.001	1.003	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	
Latest 5	2.079	1.177	1.070	1.042	1.023	1.048	1.055	1.035	1.025	1.012	1.006	1.002	1.001	1.001	1.001	1.000	1.001	1.000	1.001	1.001	1.002	1.000					
Latest 3	1.890	1.110	1.083	1.014	1.023	1.017	1.019	1.036	1.038	1.020	1.009	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.001	1.001	1.004	1.000	1.000	1.000			
Volume Wtd																											
All Yrs	2.207	1.184	1.074	1.056	1.036	1.038	1.020	1.013	1.002	1.015	1.009	1.013	1.006	1.003	1.002	1.001	1.001	1.002	1.000	1.001	1.003	1.000	1.000	1.000	1.000		
Latest 5	2.036	1.171	1.079	1.040	1.021	1.056	1.071	1.042	1.024	1.014	1.006	1.002	1.001	1.001	1.001	1.000	1.001	1.000	1.000	1.001	1.003						
Latest 3	1.906	1.114	1.092	1.016	1.018	1.017	1.019	1.040	1.036	1.025	1.011	1.002	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.001	1.004	1.000	1.000				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.165*	*1.205*	*1.074*	*1.053*	*1.037*	*1.017*	*1.055*	*1.035*	*1.025*	*1.005*	*1.002*	*1.002*	*1.001*	*1.001*	*1.002*	*1.001*	*1.001*	*1.001*	*1.001*	*1.001*	*1.001*	*1.001*	*1.000*	*1.000*	*1.000*	*1.000*	
Selected	2.079	1.184	1.079	1.040	1.036	1.017	1.055	1.035	1.027	1.005	1.002	1.002	1.001	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000
FacToUlt	3.321	1.598	1.349	1.250	1.203	1.161	1.142	1.082	1.045	1.018	1.013	1.011	1.009	1.008	1.007	1.006	1.006	1.005	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000
Percent of Ult	30.1%	62.6%	74.1%	80.0%	83.2%	86.2%	87.6%	92.4%	95.7%	98.3%	98.8%	98.9%	99.1%	99.2%	99.3%	99.4%	99.4%	99.5%	99.6%	99.7%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	126,400	132,720	126,400	132,720	0	0.0%	0	0.0%
6/30/82-83	21,332	21,651	21,332	21,651	0	0.0%	0	0.0%
6/30/83-84	51,216	51,980	51,216	51,980	0	0.0%	0	0.0%
6/30/84-85	163,539	165,980	163,539	165,980	0	0.0%	0	0.0%
6/30/85-86	216,432	219,662	216,432	219,662	0	0.0%	0	0.0%
6/30/86-87	398,000	398,000	398,000	397,000	0	0.0%	(1,000)	-0.3%
6/30/87-88	335,000	335,000	339,000	339,000	4,000	1.2%	4,000	1.2%
6/30/88-89	491,230	513,225	491,230	513,225	0	0.0%	0	0.0%
6/30/89-90	556,732	581,660	556,732	581,660	0	0.0%	0	0.0%
6/30/90-91	303,205	316,782	303,205	316,782	0	0.0%	0	0.0%
6/30/91-92	672,534	702,647	672,534	702,647	0	0.0%	0	0.0%
6/30/92-93	397,172	414,956	397,172	414,956	0	0.0%	0	0.0%
6/30/93-94	696,000	697,000	696,000	696,000	0	0.0%	(1,000)	-0.1%
6/30/94-95	419,000	420,000	418,000	418,000	(1,000)	-0.2%	(2,000)	-0.5%
6/30/95-96	384,867	402,100	384,867	402,100	0	0.0%	0	0.0%
6/30/96-97	196,000	205,800	196,000	205,800	0	0.0%	0	0.0%
6/30/97-98	446,000	469,350	455,000	477,750	9,000	2.0%	8,400	1.8%
6/30/98-99	307,000	307,000	308,000	308,000	1,000	0.3%	1,000	0.3%
6/30/99-00	176,000	177,000	181,000	181,000	5,000	2.8%	4,000	2.3%
6/30/00-01	212,000	213,000	206,000	206,000	(6,000)	-2.8%	(7,000)	-3.3%
6/30/01-02	168,000	171,000	159,000	160,000	(9,000)	-5.4%	(11,000)	-6.4%
6/30/02-03	205,000	208,000	207,000	208,000	2,000	1.0%	0	0.0%
6/30/03-04	352,000	375,900	342,000	359,100	(10,000)	-2.8%	(16,800)	-4.5%
6/30/04-05	205,000	235,200	195,000	222,600	(10,000)	-4.9%	(12,600)	-5.4%
6/30/05-06	337,000	364,350	363,000	383,250	26,000	7.7%	18,900	5.2%
6/30/06-07	346,000	378,000	318,000	350,700	(28,000)	-8.1%	(27,300)	-7.2%
6/30/07-08	461,000	609,000	512,000	595,350	51,000	11.1%	(13,650)	-2.2%
6/30/08-09								
Total	8,643,658	9,086,962	8,677,658	9,030,912	34,000	0.4%	(56,050)	-0.6%

NOTES:
(2), (3) From Aon analysis as of June 30, 2008
(4), (5) From Section 6, Exhibit 2, Page 1, Columns 6, 7
(6) = (4) - (2)
(7) = (4) / (2) - 1
(8) = (5) - (3)
(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
324	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
312	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
300	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
288	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
276	100.0%	0.1%	0.0%	0.0%	0.0%	1.000	1.000
264	99.9%	0.1%	0.1%	0.0%	0.0%	0.981	0.971
252	99.8%	0.1%	0.2%	0.0%	0.0%	0.962	0.944
240	99.7%	0.1%	0.3%	0.0%	0.0%	0.943	0.917
228	99.6%	0.1%	0.4%	0.0%	0.0%	0.925	0.892
216	99.5%	0.1%	0.5%	0.0%	0.0%	0.908	0.867
204	99.4%	0.0%	0.6%	0.0%	0.0%	0.889	0.840
192	99.4%	0.1%	0.6%	0.0%	0.0%	0.858	0.798
180	99.3%	0.1%	0.7%	0.1%	0.0%	0.838	0.771
168	99.2%	0.1%	0.8%	0.1%	0.0%	0.829	0.760
156	99.1%	0.2%	0.9%	0.1%	0.1%	0.819	0.746
144	98.9%	0.2%	1.1%	0.1%	0.1%	0.823	0.754
132	98.8%	0.5%	1.2%	0.3%	0.3%	0.821	0.753
120	98.3%	2.6%	1.7%	1.8%	1.5%	0.844	0.784
108	95.7%	3.2%	4.3%	2.3%	2.0%	0.913	0.878
96	92.4%	4.8%	7.6%	3.6%	3.1%	0.922	0.890
84	87.6%	1.4%	12.4%	1.1%	1.0%	0.923	0.891
72	86.2%	3.0%	13.8%	2.4%	2.2%	0.897	0.854
60	83.2%	3.2%	16.8%	2.7%	2.4%	0.884	0.835
48	80.0%	5.9%	20.0%	5.1%	4.8%	0.870	0.817
36	74.1%	11.5%	25.9%	10.5%	10.0%	0.869	0.816
24	62.6%	32.5%	37.4%	30.6%	29.8%	0.881	0.832
12	30.1%	30.1%	69.9%	29.5%	29.2%	0.909	0.871
Total		100.0%					

NOTES:

(2) = 1 / Section 6, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	0	6,320		0	6,079
6/30/82-83	106	425	1.000	106	425
6/30/83-84	255	1,019	1.000	255	1,019
6/30/84-85	814	3,255	1.000	814	3,255
6/30/85-86	1,077	4,307	1.000	1,077	4,307
6/30/86-87	644	-356	1.000	644	-356
6/30/87-88	696	696	0.981	682	682
6/30/88-89	2,444	24,439	0.962	2,350	23,504
6/30/89-90	2,770	27,698	0.943	2,613	26,128
6/30/90-91	1,508	15,085	0.925	1,396	13,960
6/30/91-92	3,346	33,459	0.908	3,038	30,379
6/30/92-93	1,976	19,760	0.889	1,756	17,559
6/30/93-94	4,022	4,022	0.858	3,450	3,450
6/30/94-95	2,606	2,606	0.838	2,185	2,185
6/30/95-96	1,915	19,148	0.829	1,587	15,873
6/30/96-97	1,971	11,771	0.819	1,614	9,635
6/30/97-98	4,431	27,181	0.823	3,647	22,375
6/30/98-99	3,667	3,667	0.821	3,013	3,013
6/30/99-00	3,132	3,132	0.844	2,643	2,643
6/30/00-01	8,981	8,981	0.913	8,196	8,196
6/30/01-02	11,698	12,698	0.922	10,781	11,702
6/30/02-03	25,904	26,904	0.923	23,907	24,830
6/30/03-04	46,948	64,048	0.897	42,117	57,458
6/30/04-05	32,617	60,217	0.884	28,821	53,209
6/30/05-06	72,461	92,711	0.870	63,066	80,690
6/30/06-07	82,617	115,317	0.869	71,832	100,264
6/30/07-08	157,250	240,600	0.881	138,469	211,865
6/30/08-09	299,217	367,767	0.909	271,962	334,268
Total	775,072	1,196,876		692,019	1,068,594
			(7) Total Discount Factor:	0.893	0.893

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	0	6,320
(9) Projected Number of Years:	2	2
(10) Projected Paid Loss per Year:	0	3,160
(11) Discounted Value at 4%:	0	6,079

NOTES:
(2), (3) From Section 6, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 6, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

University of Massachusetts (Medical Center) - Cluster 4
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	0	6,320		0	5,967
6/30/82-83	106	425	1.000	106	425
6/30/83-84	255	1,019	1.000	255	1,019
6/30/84-85	814	3,255	1.000	814	3,255
6/30/85-86	1,077	4,307	1.000	1,077	4,307
6/30/86-87	644	-356	1.000	644	-356
6/30/87-88	696	696	0.971	676	676
6/30/88-89	2,444	24,439	0.944	2,307	23,065
6/30/89-90	2,770	27,698	0.917	2,541	25,408
6/30/90-91	1,508	15,085	0.892	1,345	13,453
6/30/91-92	3,346	33,459	0.867	2,902	29,019
6/30/92-93	1,976	19,760	0.840	1,661	16,607
6/30/93-94	4,022	4,022	0.798	3,208	3,208
6/30/94-95	2,606	2,606	0.771	2,010	2,010
6/30/95-96	1,915	19,148	0.760	1,455	14,547
6/30/96-97	1,971	11,771	0.746	1,472	8,787
6/30/97-98	4,431	27,181	0.754	3,341	20,497
6/30/98-99	3,667	3,667	0.753	2,760	2,760
6/30/99-00	3,132	3,132	0.784	2,455	2,455
6/30/00-01	8,981	8,981	0.878	7,886	7,886
6/30/01-02	11,698	12,698	0.890	10,406	11,296
6/30/02-03	25,904	26,904	0.891	23,070	23,961
6/30/03-04	46,948	64,048	0.854	40,086	54,687
6/30/04-05	32,617	60,217	0.835	27,236	50,284
6/30/05-06	72,461	92,711	0.817	59,186	75,726
6/30/06-07	82,617	115,317	0.816	67,423	94,109
6/30/07-08	157,250	240,600	0.832	130,825	200,168
6/30/08-09	299,217	367,767	0.871	260,765	320,506
Total	775,072	1,196,876		657,911	1,015,731
			(7) Total Discount Factor:	0.849	0.849

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	0	6,320
(9) Projected Number of Years:	2	2
(10) Projected Paid Loss per Year:	0	3,160
(11) Discounted Value at 6%:	0	5,967

NOTES:
(2), (3) From Section 6, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 6, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		2,783,743			3,864,927	4,360,976	1,081,185	1,577,233		
6/30/82-83		743,272	745,103		758,137	773,003	14,865	29,731		
6/30/83-84		917,731	919,872		936,086	954,440	18,355	36,709		
6/30/84-85	249,035	1,492,038	1,495,599	1,495,758	1,521,879	1,551,720	29,841	59,682	0.611	0.623
6/30/85-86	267,811	1,868,908	1,875,434	1,875,071	1,875,000	1,875,000	6,092	6,092	0.700	0.700
6/30/86-87	307,762	2,390,657	2,628,960	2,399,644	2,400,000	2,629,000	9,343	238,343	0.780	0.854
6/30/87-88	360,569	3,835,974	4,567,855	3,852,800	3,912,693	4,027,773	76,719	191,799	1.085	1.117
6/30/88-89	371,471	1,515,210	1,525,083	1,526,860	1,545,514	1,590,971	30,304	75,761	0.416	0.428
6/30/89-90	374,816	3,178,473	3,219,771	3,210,681	3,211,000	3,220,000	32,527	41,527	0.857	0.859
6/30/90-91	350,048	1,393,607	1,424,600	1,424,518	1,425,000	1,425,000	31,393	31,393	0.407	0.407
6/30/91-92	356,084	1,390,036	1,909,015	1,454,871	1,513,749	1,681,943	123,713	291,908	0.425	0.472
6/30/92-93	383,583	1,147,496	1,205,294	1,205,153	1,170,446	1,204,871	22,950	57,375	0.305	0.314
6/30/93-94	439,244	1,000,452	1,431,286	1,094,206	1,094,000	1,431,000	93,548	430,548	0.249	0.326
6/30/94-95	437,287	1,370,728	1,474,931	1,474,886	1,475,000	1,475,000	104,273	104,273	0.337	0.337
6/30/95-96	459,490	1,269,047	1,388,190	1,388,891	1,294,428	1,332,499	25,381	63,452	0.282	0.290
6/30/96-97	540,181	1,030,087	1,157,400	1,161,349	1,157,000	1,161,000	126,913	130,913	0.214	0.215
6/30/97-98	518,613	1,638,390	1,877,436	1,873,745	1,874,000	1,877,000	235,610	238,610	0.361	0.362
6/30/98-99	536,523	1,184,506	1,383,504	1,386,000	1,384,000	1,455,000	199,494	270,494	0.258	0.271
6/30/99-00	583,551	1,182,336	1,394,784	1,402,756	1,395,000	1,403,000	212,664	220,664	0.239	0.240
6/30/00-01	628,836	1,427,324	1,774,189	1,776,112	1,774,000	1,776,000	346,676	348,676	0.282	0.282
6/30/01-02	646,243	2,022,242	2,599,076	2,586,305	2,586,000	2,599,000	563,758	576,758	0.400	0.402
6/30/02-03	630,315	1,085,956	1,501,558	1,509,540	1,502,000	1,510,000	416,044	424,044	0.238	0.240
6/30/03-04	647,755	1,209,009	1,788,237	1,789,573	1,788,000	1,879,000	578,991	669,991	0.276	0.290
6/30/04-05	784,398	928,914	1,488,041	1,754,565	1,488,000	1,755,000	559,086	826,086	0.190	0.224
6/30/05-06	747,901	1,085,239	2,065,694	2,109,773	2,066,000	2,215,000	980,761	1,129,761	0.276	0.296
6/30/06-07	810,859	746,652	1,671,381	2,023,233	1,671,000	2,023,000	924,348	1,276,348	0.206	0.249
6/30/07-08	834,198	716,370	2,354,250	2,403,107	2,354,000	2,403,000	1,637,630	1,686,630	0.282	0.288
6/30/08-09	836,836	286,738	2,086,352	2,354,325	2,086,000	2,354,000	1,799,262	2,067,262	0.249	0.281
Total	13,103,412	40,841,132	48,952,894	46,533,721	51,122,860	53,943,195	10,281,728	13,102,063		
Tot 6/30/84-09	13,103,412	36,396,386	47,287,919	46,533,721	45,563,709	47,854,776	9,167,323	11,458,390	0.348	0.365

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) Sum of Section 7, Exhibit 1, Page 2, Column 3 and Section 7, Exhibit 1, Page 9, Column 8
(4) From Section 7, Exhibit 1, Page 2, Column 8
(5) From Section 7, Exhibit 1, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		2,767,993							3	3		76
6/30/82-83		716,272	1.003	1.000	718,103	27,000	745,103		0	0		
6/30/83-84		837,731	1.003	1.000	839,872	80,000	919,872		0	0		
6/30/84-85	249,035	1,393,062	1.003	1.000	1,396,623	98,976	1,495,599	0.601	0	0		
6/30/85-86	267,811	1,833,907	1.004	1.000	1,840,433	35,001	1,875,434	0.700	0	0		
6/30/86-87	307,762	2,269,157	1.005	1.100	2,507,460	121,500	2,628,960	0.854	1	1	238,303	83
6/30/87-88	360,569	3,541,131	1.006	1.200	4,273,012	294,843	4,567,855	1.267	2	2	365,940	69
6/30/88-89	371,471	1,302,910	1.008	1.000	1,312,783	212,300	1,525,083	0.411	0	0		
6/30/89-90	374,816	2,928,761	1.014	1.000	2,970,059	249,712	3,219,771	0.859	4	4	10,324	78
6/30/90-91	350,048	1,160,107	1.027	1.000	1,191,100	233,500	1,424,600	0.407	0	0		
6/30/91-92	356,084	1,133,853	1.041	1.400	1,652,704	256,311	1,909,015	0.536	1	1	518,851	49
6/30/92-93	383,583	986,496	1.058	1.000	1,044,133	161,161	1,205,294	0.314	0	0		
6/30/93-94	439,244	841,452	1.078	1.400	1,270,190	161,096	1,431,286	0.326	1	1	428,739	50
6/30/94-95	437,287	1,001,523	1.101	1.000	1,103,073	371,859	1,474,931	0.337	2	1	101,550	72
6/30/95-96	459,490	927,586	1.125	1.000	1,043,898	344,292	1,388,190	0.302	0	0		
6/30/96-97	540,181	805,205	1.155	1.000	929,974	227,426	1,157,400	0.214	3	1	124,769	61
6/30/97-98	518,613	1,378,390	1.170	1.000	1,613,347	264,088	1,877,436	0.362	4	3	78,319	72
6/30/98-99	536,523	979,256	1.199	1.000	1,174,520	208,984	1,383,504	0.258	2	2	97,632	60
6/30/99-00	583,551	844,236	1.240	1.000	1,046,589	348,195	1,394,784	0.239	0	0		
6/30/00-01	628,836	1,153,822	1.288	1.000	1,486,100	288,090	1,774,189	0.282	2	1	332,278	63
6/30/01-02	646,243	1,578,992	1.341	1.000	2,117,668	481,408	2,599,076	0.402	3	2	269,338	54
6/30/02-03	630,315	923,456	1.408	1.000	1,300,426	201,131	1,501,558	0.238	2	1	376,970	59
6/30/03-04	647,755	1,060,509	1.489	1.000	1,578,683	209,554	1,788,237	0.276	11	6	86,362	56
6/30/04-05	784,398	780,814	1.616	1.000	1,261,894	226,148	1,488,041	0.190	8	7	68,726	48
6/30/05-06	747,901	960,239	1.847	1.000	1,773,637	292,057	2,065,694	0.276	13	12	67,783	53
6/30/06-07	810,859	631,652	2.180	1.000	1,377,193	294,188	1,671,381	0.206	37	8	93,193	57
6/30/07-08	834,198	683,370	2.944	1.000	2,011,500	342,750	2,354,250	0.282	82	46	28,872	52
6/30/08-09	836,836	286,738	6.181	1.000	1,772,396	313,956	2,086,352	0.249		88	16,882	52
Total	13,103,412	35,708,617			42,607,371	6,345,523	48,952,894		181	190		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 7, Exhibit 1, Page 7
(5) Based on information from the MA WCRIB
(6) = (3) x (4) x (5)
(7) From Section 7, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	249,035	0.586	1,393,062	1.003	1,396,782	98,976	1,495,758	0.601	0.561
6/30/85-86	267,811	0.649	1,833,907	1.004	1,840,070	35,001	1,875,071	0.700	0.687
6/30/86-87	307,762	0.643	2,269,157	1.005	2,278,144	121,500	2,399,644	0.780	0.740
6/30/87-88	360,569	0.843	3,541,131	1.006	3,557,957	294,843	3,852,800	1.069	0.987
6/30/88-89	371,471	0.417	1,302,910	1.008	1,314,560	212,300	1,526,860	0.411	0.354
6/30/89-90	374,816	0.618	2,928,761	1.014	2,960,969	249,712	3,210,681	0.857	0.790
6/30/90-91	350,048	0.339	1,160,107	1.027	1,191,018	233,500	1,424,518	0.407	0.340
6/30/91-92	356,084	0.460	1,133,853	1.041	1,198,560	256,311	1,454,871	0.409	0.337
6/30/92-93	383,583	0.272	986,496	1.058	1,043,992	161,161	1,205,153	0.314	0.272
6/30/93-94	439,244	0.288	841,452	1.078	933,110	161,096	1,094,206	0.249	0.212
6/30/94-95	437,287	0.252	1,001,523	1.101	1,103,027	371,859	1,474,886	0.337	0.252
6/30/95-96	459,490	0.229	927,586	1.125	1,044,599	344,292	1,388,891	0.302	0.227
6/30/96-97	540,181	0.178	805,205	1.155	933,923	227,426	1,161,349	0.215	0.173
6/30/97-98	518,613	0.306	1,378,390	1.170	1,609,656	264,088	1,873,745	0.361	0.310
6/30/98-99	536,523	0.222	979,256	1.199	1,177,016	208,984	1,386,000	0.258	0.219
6/30/99-00	583,551	0.186	844,236	1.240	1,054,561	348,195	1,402,756	0.240	0.181
6/30/00-01	628,836	0.238	1,153,822	1.288	1,488,022	288,090	1,776,112	0.282	0.237
6/30/01-02	646,243	0.320	1,578,992	1.341	2,104,897	481,408	2,586,305	0.400	0.326
6/30/02-03	630,315	0.211	923,456	1.408	1,308,409	201,131	1,509,540	0.239	0.208
6/30/03-04	647,755	0.244	1,060,509	1.489	1,580,019	209,554	1,789,573	0.276	0.244
6/30/04-05	784,398	0.250	780,814	1.616	1,528,417	226,148	1,754,565	0.224	0.195
6/30/05-06	747,901	0.250	960,239	1.847	1,817,717	292,057	2,109,773	0.282	0.243
6/30/06-07	810,859	0.250	631,652	2.180	1,729,045	294,188	2,023,233	0.250	0.213
6/30/07-08	834,198	0.250	683,370	2.944	2,060,357	342,750	2,403,107	0.288	0.247
6/30/08-09	836,836	0.250	286,738	6.181	2,040,369	313,956	2,354,325	0.281	0.244
Total	13,103,412		31,386,621		40,295,198	6,238,523	46,533,721		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 7, Exhibit 1, Page 4, Column 11
(4) From Section 7, Exhibit 1, Page 2, Column 3
(5) From Section 7, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 7, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.586	0.586
6/30/85-86									0.649	0.649
6/30/86-87									0.643	0.643
6/30/87-88									0.843	0.843
6/30/88-89									0.417	0.417
6/30/89-90									0.618	0.618
6/30/90-91	350,048	1,191,100	0.340	0.937	0.319	1.208	0.385	0.340	0.342	0.339
6/30/91-92	356,084	1,652,704	0.464	1.028	0.477	1.196	0.571	0.464	0.453	0.460
6/30/92-93	383,583	1,044,133	0.272	1.198	0.326	1.184	0.386	0.272	0.334	0.272
6/30/93-94	439,244	1,270,190	0.289	1.183	0.342	1.173	0.401	0.289	0.314	0.288
6/30/94-95	437,287	1,103,073	0.252	1.172	0.296	1.161	0.343	0.252	0.275	0.252
6/30/95-96	459,490	1,043,898	0.227	1.163	0.264	1.149	0.304	0.227	0.266	0.229
6/30/96-97	540,181	929,974	0.172	1.151	0.198	1.138	0.226	0.172	0.207	0.178
6/30/97-98	518,613	1,613,347	0.311	1.136	0.354	1.127	0.398	0.311	0.310	0.306
6/30/98-99	536,523	1,174,520	0.219	1.121	0.246	1.116	0.274	0.219	0.248	0.222
6/30/99-00	583,551	1,046,589	0.179	1.103	0.198	1.105	0.219	0.179	0.225	0.186
6/30/00-01	628,836	1,486,100	0.236	1.075	0.254	1.094	0.278	0.236	0.262	0.238
6/30/01-02	646,243	2,117,668	0.328	1.054	0.346	1.083	0.374	0.328	0.328	0.320
6/30/02-03	630,315	1,300,426	0.206	1.051	0.217	1.072	0.232	0.206	0.220	0.211
6/30/03-04	647,755	1,578,683	0.244	1.051	0.256	1.062	0.272	0.244	0.220	0.244
6/30/04-05	784,398	1,261,894	0.161	1.044	0.168	1.051	0.177	0.161	0.220	0.250
6/30/05-06	747,901	1,773,637	0.237	1.033	0.245	1.041	0.255	0.237	0.250	0.250
6/30/06-07	810,859	1,377,193	0.170	1.022	0.174	1.030	0.179	0.170	0.250	0.250
6/30/07-08	834,198	2,011,500	0.241	1.011	0.244	1.020	0.249	0.241	0.250	0.250
6/30/08-09	836,836	1,772,396	0.212	1.000	0.212	1.010	0.214	0.212		0.250
Total	11,171,948	26,749,027								

Trend Last 4 (ex 08-09):	8.0%	Avg 3 (x08-09):	0.228
Trend Last 8 (ex 08-09):	-4.4%	Avg 5 (x08-09):	0.226
Trend Last 12 (ex 08-09):	-1.9%	Avg 10 (x08-09):	0.251
Prior Selected Trend:	1.0%	Prior Sel Avg:	0.250
Selected Trend:	1.0%	Sel. Loss Cost:	0.250

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 7, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
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Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		1.015	
(2)	Credibility		18%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.970	
		(Low)		(High)
(5)	Selected Range	0.960		0.980
(6)	Incremental Paid for 2009	85,560		85,560
(7)	Estimated Reserve	2,070,489		4,132,674
(8)	Paid to Date (82 & Prior)	2,767,993		2,767,993
(9)	Est Ult Paid for 1982 & Prior	4,838,482		6,900,666

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	107,345	115,854
(11)	Projected Number of Years	7	7
(12)	Estimated Reserve	751,417	810,979
(13)	Paid to Date (82 & Prior)	2,767,993	2,682,433
(14)	Est Ult Paid for 1982 & Prior	3,519,409	3,493,412
(14a)	Paid Counts During Fiscal Year	3	3

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	3,849,177	4,345,226
(16)	Lump Sum Ultimates	15,750	15,750
(17)	Ult Loss Including Lump Sums	**3,864,927**	**4,360,976**
(18)	Implied Tail	1.391	1.570
(19)	Ult Loss Inc Lump Sums @ 6/08	4,038,076	4,652,245

NOTES:

(1) From Section 7, Exhibit 1, Page 6
(2) = (Average of Section 7, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 7, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 7, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 7, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	96,383	11.476			
1993	2	98,686	11.500	1.024		
1994	3	90,507	11.413	0.917		
1995	4	91,599	11.425	1.012		
1996	5	82,524	11.321	0.901		
1997	6	95,179	11.464	1.153		
1998	7	100,117	11.514	1.052		
1999	8	101,445	11.527	1.013		
2000	9	91,541	11.425	0.902	n =	18
2001	10	95,087	11.463	1.039	S(x) =	36,009
2002	11	101,860	11.531	1.071	S(x-sq) =	72,036,489
2003	12	103,466	11.547	1.016	S(xy) =	414,226
2004	13	103,217	11.545	0.998	S(y) =	207
2005	14	106,270	11.574	1.030	D =	8,721
2006	15	111,087	11.618	1.045	slope =	0.010
2007	16	115,666	11.658	1.041	Avg Trend =	1.010
2008	17	120,810	11.702	1.044		
2009	18	85,560	11.357	0.708		
					Selected Trend:	**1.015**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 0.708 = 85560 / 120810

Commonwealth of Massachusetts Workers Compensation
Massachusetts Colleges & Universities - Cluster 4
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	54,010	142,576	208,148	264,888	314,931	357,219	371,053	469,928	488,830	527,760	553,935	571,859	597,183	632,418	652,652	668,547	668,547	676,026	716,272	716,272	716,272	716,272	716,272	716,272	716,272	716,272	716,272
June-84	99,917	266,707	383,604	485,764	576,711	646,670	708,919	756,240	783,256	798,348	807,607	799,910	809,636	819,761	830,411	841,202	837,731	837,731	837,731	837,731	837,731	837,731	837,731	837,731	837,731	837,731	
June-85	145,363	376,000	561,409	702,017	806,337	944,094	1,041,045	1,113,616	1,165,340	1,204,638	1,251,307	1,274,495	1,298,633	1,324,024	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062	1,393,062		
June-86	146,844	393,892	560,427	714,824	852,275	1,013,300	1,126,822	1,223,737	1,303,796	1,350,669	1,397,048	1,447,454	1,502,391	1,555,201	1,632,671	1,697,735	1,756,102	1,781,294	1,805,911	1,830,855	1,833,907	1,833,907	1,833,907	1,833,907			
June-87	205,350	542,065	782,031	964,915	1,140,809	1,261,213	1,366,787	1,443,695	1,510,844	1,568,560	1,627,834	1,689,585	1,754,007	1,801,170	1,862,691	1,928,482	1,995,204	2,043,636	2,086,293	2,127,530	2,170,638	2,215,734	2,269,157				
June-88	264,730	647,871	957,840	1,332,415	1,600,031	1,789,064	2,016,553	2,143,780	2,273,154	2,384,070	2,485,765	2,581,511	2,687,118	2,803,766	2,927,359	3,052,144	3,156,171	3,229,466	3,302,225	3,377,918	3,456,925	3,541,131					
June-89	203,700	458,930	663,759	873,071	1,047,827	1,143,271	1,198,464	1,232,178	1,250,874	1,282,165	1,292,717	1,298,047	1,302,239	1,302,910	1,302,910	1,302,910	1,302,910	1,302,910	1,302,910	1,302,910	1,302,910						
June-90	251,034	593,345	877,389	1,070,415	1,170,169	1,310,507	1,405,772	1,541,316	1,646,975	1,785,002	1,902,032	2,022,921	2,130,629	2,240,435	2,354,155	2,465,796	2,583,494	2,694,389	2,807,976	2,928,761							
June-91	210,725	476,992	661,310	747,971	826,820	877,501	964,982	1,043,288	1,062,987	1,078,493	1,092,473	1,107,416	1,121,900	1,136,365	1,154,741	1,159,007	1,160,107	1,160,107	1,160,107								
June-92	230,185	473,793	612,524	709,857	752,262	788,923	831,701	862,151	886,987	914,044	968,299	997,727	1,032,093	1,067,423	1,093,472	1,120,923	1,133,758	1,133,853									
June-93	250,714	541,198	609,220	695,349	761,795	896,967	969,498	986,209	986,209	986,209	986,496	986,496	986,496	986,496	986,496	986,496	986,496										
June-94	142,078	335,638	434,332	540,452	602,360	665,759	700,338	683,894	702,764	722,297	742,006	760,225	779,419	799,569	819,773	841,452											
June-95	115,982	327,962	450,743	510,570	656,919	704,734	751,757	811,410	863,231	899,192	899,252	902,615	916,017	958,344	1,001,523												
June-96	206,256	426,449	543,267	632,734	711,202	763,750	825,421	867,895	906,744	927,586	927,586	927,586	927,586	927,586													
June-97	184,229	328,446	444,786	555,024	612,566	653,987	680,550	699,551	720,522	739,692	759,525	784,015	805,205														
June-98	204,733	326,969	438,428	556,503	656,266	750,818	946,526	1,035,878	1,116,871	1,200,899	1,288,861	1,378,390															
June-99	178,965	393,824	642,327	727,290	775,010	801,143	828,610	857,804	888,093	943,651	979,256																
June-00	277,497	570,937	719,211	779,101	816,241	839,009	844,236	844,236	844,236	844,236																	
June-01	211,269	540,991	786,054	907,942	982,546	1,034,355	1,086,105	1,123,788	1,153,822																		
June-02	189,348	645,495	949,546	1,190,744	1,315,603	1,438,839	1,509,596	1,578,992																			
June-03	291,166	554,149	689,280	758,177	839,325	895,935	923,456																				
June-04	217,692	446,380	618,082	776,430	967,736	1,060,509																					
June-05	230,521	418,799	624,539	726,139	780,814																						
June-06	295,643	638,840	855,565	960,239																							
June-07	271,385	517,910	631,652																								
June-08	266,597	683,370																									
June-09	286,738																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.640	1.460	1.273	1.189	1.134	1.039	1.266	1.040	1.080	1.050	1.032	1.044	1.059	1.032	1.024	1.000	1.011	1.060	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
June-84	2.669	1.438	1.266	1.187	1.121	1.096	1.067	1.036	1.019	1.012	0.990	1.012	1.013	1.013	1.013	0.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
June-85	2.587	1.493	1.250	1.149	1.171	1.103	1.070	1.046	1.034	1.039	1.019	1.019	1.020	1.052	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
June-86	2.682	1.423	1.275	1.192	1.189	1.112	1.086	1.065	1.036	1.034	1.036	1.038	1.035	1.050	1.040	1.034	1.014	1.014	1.014	1.002	1.000	1.000	1.000			
June-87	2.640	1.443	1.234	1.182	1.106	1.084	1.056	1.047	1.038	1.038	1.038	1.038	1.027	1.034	1.035	1.035	1.024	1.021	1.020	1.020	1.021	1.024				
June-88	2.447	1.478	1.391	1.201	1.118	1.127	1.063	1.060	1.049	1.043	1.039	1.041	1.043	1.044	1.043	1.034	1.023	1.023	1.023	1.023	1.024					
June-89	2.253	1.446	1.315	1.200	1.091	1.048	1.028	1.015	1.025	1.008	1.004	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
June-90	2.364	1.479	1.220	1.093	1.120	1.073	1.096	1.069	1.084	1.066	1.064	1.053	1.052	1.051	1.047	1.048	1.043	1.042	1.043							
June-91	2.264	1.386	1.131	1.105	1.061	1.100	1.081	1.019	1.015	1.013	1.014	1.013	1.013	1.016	1.004	1.001	1.000	1.000								
June-92	2.058	1.293	1.159	1.060	1.049	1.054	1.037	1.029	1.031	1.059	1.030	1.034	1.034	1.024	1.025	1.011	1.000									
June-93	2.159	1.126	1.141	1.096	1.177	1.081	1.017	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
June-94	2.362	1.294	1.244	1.115	1.105	1.052	0.977	1.028	1.028	1.027	1.025	1.025	1.026	1.025	1.026											
June-95	2.828	1.374	1.133	1.287	1.073	1.067	1.079	1.064	1.042	1.000	1.004	1.015	1.046	1.045												
June-96	2.068	1.274	1.165	1.124	1.074	1.081	1.051	1.045	1.023	1.000	1.000	1.000	1.000													
June-97	1.783	1.354	1.248	1.104	1.068	1.041	1.028	1.030	1.027	1.027	1.032	1.027														
June-98	1.597	1.341	1.269	1.179	1.144	1.261	1.094	1.078	1.075	1.073	1.069															
June-99	2.201	1.631	1.132	1.066	1.034	1.034	1.035	1.035	1.063	1.038																
June-00	2.057	1.260	1.083	1.048	1.028	1.006	1.000	1.000	1.000																	
June-01	2.561	1.453	1.155	1.082	1.053	1.050	1.035	1.027																		
June-02	3.409	1.471	1.254	1.105	1.094	1.049	1.046																			
June-03	1.903	1.244	1.100	1.107	1.067	1.031																				
June-04	2.051	1.385	1.256	1.246	1.096																					
June-05	1.817	1.491	1.163	1.075																						
June-06	2.161	1.339	1.122																							
June-07	1.908	1.220																								
June-08	2.563																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.309	1.384	1.208	1.139	1.099	1.076	1.061	1.039	1.037	1.031	1.025	1.024	1.026	1.030	1.021	1.014	1.012	1.018	1.012	1.006	1.008	1.005	1.000	1.000	1.000	1.000	
Latest 5	2.100	1.336	1.179	1.123	1.068	1.034	1.042	1.034	1.037	1.028	1.026	1.013	1.021	1.022	1.021	1.012	1.013	1.017	1.020	1.009	1.009	1.005					
Latest 3	2.211	1.350	1.180	1.143	1.086	1.043	1.027	1.021	1.046	1.046	1.034	1.014	1.024	1.023	1.017	1.004	1.014	1.014	1.022	1.015	1.015	1.008	1.000	1.000			
Volume Wtd																											
All Yrs	2.258	1.379	1.206	1.136	1.099	1.078	1.057	1.041	1.039	1.034	1.029	1.027	1.029	1.034	1.026	1.022	1.017	1.019	1.018	1.011	1.012	1.008	1.000	1.000	1.000		
Latest 5	2.110	1.327	1.181	1.121	1.071	1.036	1.043	1.036	1.040	1.030	1.029	1.012	1.021	1.022	1.026	1.019	1.020	1.022	1.023	1.012	1.013						
Latest 3	2.207	1.340	1.174	1.145	1.087	1.045	1.031	1.021	1.049	1.050	1.038	1.013	1.024	1.023	1.017	1.004	1.023	1.022	1.027	1.018	1.017	1.010	1.000				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	*1.962*	*1.405*	*1.173*	*1.153*	*1.071*	*1.072*	*1.040*	*1.038*	*1.055*	*1.033*	*1.022*	*1.015*	*1.024*	*1.029*	*1.010*	*1.023*	*1.014*	*1.020*	*1.008*	*1.008*	*1.002*	*1.001*	*1.001*	*1.001*	*1.000*	*1.003*	
Selected	2.100	1.350	1.180	1.143	1.086	1.057	1.050	1.041	1.039	1.034	1.025	1.013	1.026	1.022	1.021	1.019	1.017	1.014	1.012	1.006	1.002	1.001	1.001	1.001	1.000	1.000	1.003
FacToUlt	6.181	2.944	2.180	1.847	1.616	1.489	1.408	1.341	1.288	1.240	1.199	1.170	1.155	1.125	1.101	1.078	1.058	1.041	1.027	1.014	1.008	1.006	1.005	1.004	1.003	1.003	1.003
Percent of Ult	16.2%	34.0%	45.9%	54.1%	61.9%	67.2%	71.0%	74.6%	77.6%	80.7%	83.4%	85.4%	86.6%	88.9%	90.8%	92.7%	94.5%	96.0%	97.4%	98.6%	99.2%	99.4%	99.5%	99.6%	99.7%	99.7%	99.7%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	4,038,076	4,652,245	3,864,927	4,360,976	(173,148)	-4.3%	(291,270)	-6.3%
6/30/82-83	758,137	773,003	758,137	773,003	0	0.0%	0	0.0%
6/30/83-84	936,086	954,440	936,086	954,440	0	0.0%	0	0.0%
6/30/84-85	1,521,879	1,551,720	1,521,879	1,551,720	0	0.0%	0	0.0%
6/30/85-86	1,878,000	1,917,000	1,875,000	1,875,000	(3,000)	-0.2%	(42,000)	-2.2%
6/30/86-87	2,349,000	2,587,000	2,400,000	2,629,000	51,000	2.2%	42,000	1.6%
6/30/87-88	3,714,210	4,126,900	3,912,693	4,027,773	198,483	5.3%	(99,128)	-2.4%
6/30/88-89	1,545,514	1,590,971	1,545,514	1,590,971	0	0.0%	0	0.0%
6/30/89-90	3,112,000	3,125,000	3,211,000	3,220,000	99,000	3.2%	95,000	3.0%
6/30/90-91	1,445,000	1,445,000	1,425,000	1,425,000	(20,000)	-1.4%	(20,000)	-1.4%
6/30/91-92	1,506,710	1,674,122	1,513,749	1,681,943	7,039	0.5%	7,821	0.5%
6/30/92-93	1,170,446	1,204,871	1,170,446	1,204,871	0	0.0%	0	0.0%
6/30/93-94	1,098,000	1,415,000	1,094,000	1,431,000	(4,000)	-0.4%	16,000	1.1%
6/30/94-95	1,449,000	1,463,000	1,475,000	1,475,000	26,000	1.8%	12,000	0.8%
6/30/95-96	1,294,428	1,332,499	1,294,428	1,332,499	0	0.0%	0	0.0%
6/30/96-97	1,143,000	1,172,000	1,157,000	1,161,000	14,000	1.2%	(11,000)	-0.9%
6/30/97-98	1,802,000	1,813,000	1,874,000	1,877,000	72,000	4.0%	64,000	3.5%
6/30/98-99	1,344,000	1,444,000	1,384,000	1,455,000	40,000	3.0%	11,000	0.8%
6/30/99-00	1,458,000	1,507,000	1,395,000	1,403,000	(63,000)	-4.3%	(104,000)	-6.9%
6/30/00-01	1,824,000	1,857,000	1,774,000	1,776,000	(50,000)	-2.7%	(81,000)	-4.4%
6/30/01-02	2,631,000	2,632,000	2,586,000	2,599,000	(45,000)	-1.7%	(33,000)	-1.3%
6/30/02-03	1,575,000	1,587,000	1,502,000	1,510,000	(73,000)	-4.6%	(77,000)	-4.9%
6/30/03-04	1,731,000	1,872,000	1,788,000	1,879,000	57,000	3.3%	7,000	0.4%
6/30/04-05	1,590,000	1,763,000	1,488,000	1,755,000	(102,000)	-6.4%	(8,000)	-0.5%
6/30/05-06	2,179,000	2,289,000	2,066,000	2,215,000	(113,000)	-5.2%	(74,000)	-3.2%
6/30/06-07	1,880,000	2,176,000	1,671,000	2,023,000	(209,000)	-11.1%	(153,000)	-7.0%
6/30/07-08	1,779,000	2,143,000	2,354,000	2,403,000	575,000	32.3%	260,000	12.1%
6/30/08-09								
Total	48,752,486	52,067,771	49,036,860	51,589,195	284,374	0.6%	(478,576)	-0.9%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 7, Exhibit 1, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	2,767,993	1.480	4,097,202	0.0%	0.0%	0	15,750	15,750	0.4%	1.000	15,750	15,750	15,750
6/30/82-83	716,272	1.003	718,103	0.0%	0.0%	0	27,000	27,000	3.8%	1.000	27,000	27,000	27,000
6/30/83-84	837,731	1.003	839,872	0.0%	0.0%	0	80,000	80,000	9.5%	1.000	80,000	80,000	80,000
6/30/84-85	1,393,062	1.003	1,396,623	0.0%	0.0%	0	98,976	98,976	7.1%	1.000	98,976	98,976	98,976
6/30/85-86	1,833,907	1.004	1,840,433	0.0%	0.0%	0	35,001	35,001	1.9%	1.000	35,001	35,001	35,001
6/30/86-87	2,269,157	1.105	2,507,460	0.0%	0.0%	0	121,500	121,500	4.8%	1.000	121,500	121,500	121,500
6/30/87-88	3,541,131	1.207	4,273,012	0.0%	0.0%	0	294,843	294,843	6.9%	1.000	294,843	294,843	294,843
6/30/88-89	1,302,910	1.008	1,312,783	0.0%	0.0%	0	212,300	212,300	16.2%	1.000	212,300	212,300	212,300
6/30/89-90	2,928,761	1.014	2,970,059	0.0%	0.0%	0	249,712	249,712	8.4%	1.000	249,712	249,712	249,712
6/30/90-91	1,160,107	1.027	1,191,100	0.0%	0.0%	0	233,500	233,500	19.6%	1.000	233,500	233,500	233,617
6/30/91-92	1,133,853	1.458	1,652,704	0.0%	0.0%	0	256,183	256,183	15.5%	1.001	256,439	256,311	221,404
6/30/92-93	986,496	1.058	1,044,133	0.0%	0.0%	0	161,000	161,000	15.4%	1.002	161,322	161,161	161,322
6/30/93-94	841,452	1.510	1,270,190	0.3%	0.3%	3,555	159,000	162,555	12.8%	1.004	159,637	161,096	159,478
6/30/94-95	1,001,523	1.101	1,103,073	0.0%	0.3%	3,087	369,205	372,292	33.8%	1.006	371,425	371,859	370,686
6/30/95-96	927,586	1.125	1,043,898	0.0%	0.3%	2,921	341,461	344,382	33.0%	1.008	344,201	344,292	343,347
6/30/96-97	805,205	1.155	929,974	0.0%	0.3%	2,603	224,882	227,485	24.5%	1.011	227,367	227,426	226,465
6/30/97-98	1,378,390	1.170	1,613,347	0.0%	0.3%	4,515	260,000	264,515	16.4%	1.014	263,661	264,088	262,730
6/30/98-99	979,256	1.199	1,174,520	0.0%	0.3%	3,287	205,250	208,537	17.8%	1.020	209,430	208,984	179,111
6/30/99-00	844,236	1.240	1,046,589	0.2%	0.5%	5,239	338,100	343,339	32.8%	1.044	353,051	348,195	358,763
6/30/00-01	1,153,822	1.288	1,486,100	0.5%	1.0%	14,588	273,502	288,090	19.4%	1.084	296,492	288,090	304,856
6/30/01-02	1,578,992	1.341	2,117,668	0.8%	1.8%	38,158	443,250	481,408	22.7%	1.125	498,870	481,408	510,334
6/30/02-03	923,456	1.408	1,300,426	1.2%	3.0%	38,631	162,500	201,131	15.5%	1.181	191,991	201,131	224,672
6/30/03-04	1,060,509	1.489	1,578,683	0.9%	3.9%	61,054	148,500	209,554	13.3%	1.237	183,708	209,554	220,839
6/30/04-05	780,814	1.616	1,261,894	2.3%	6.2%	78,048	148,100	226,148	17.9%	1.566	231,931	226,148	238,487
6/30/05-06	960,239	1.847	1,773,637	3.2%	9.4%	167,057	125,000	292,057	16.5%	2.570	321,309	292,057	311,474
6/30/06-07	631,652	2.180	1,377,193	3.6%	13.0%	179,188	115,000	294,188	21.4%	5.409	622,058	294,188	291,587
6/30/07-08	683,370	2.944	2,011,500	2.4%	15.4%	309,750	33,000	342,750	17.0%	11.561	381,513	342,750	175,000
6/30/08-09	286,738	6.181	1,772,396	2.3%	17.7%	313,956	0	313,956	17.7%	25.383	0	313,956	
Total	35,708,617		46,704,573			1,225,635	5,132,515	6,358,150	13.6%		6,442,989	6,361,273	5,929,255

NOTES:
(2) From Section 7, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 7, Exhibit 1, Page 2, Column 6
(5) From Section 7, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 7, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 7, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensation
Massachusetts Colleges & Universities - Cluster 4
INDEMNITY
Lump Sum Development
Incremental Lump Sum Payments

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	2,750	13,000	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-83	0	0	0	0	0	0	0	0	12,000	0	0	0	0	0	15,000	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	0	46,500	16,000	0	0	17,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Jun-85	0	0	0	19,976	0	5,000	0	7,500	15,000	51,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Jun-86	0	0	0	0	0	0	1	0	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Jun-87	0	0	0	0	0	27,500	0	20,000	30,000	0	0	0	0	44,000	0	0	0	0	0	0	0	0	0					
Jun-88	0	0	22,500	0	37,000	30,000	82,000	43,343	15,000	31,000	0	0	0	0	0	0	0	17,000	17,000	0	0	0						
Jun-89	0	33,000	0	6,800	0	67,500	0	30,000	0	0	75,000	0	0	0	0	0	0	0	0	0	0							
Jun-90	0	0	25,211	30,000	35,001	76,500	30,000	0	53,000	0	0	0	0	0	0	0	0	0	0	0								
Jun-91	0	0	48,000	32,500	0	0	0	73,000	0	0	0	0	0	0	0	25,000	30,000	25,000	0									
Jun-92	0	0	15,000	89,500	0	0	0	12,000	0	20,000	9,683	0	0	0	0	0	75,000	35,000										
Jun-93	0	62,500	18,000	31,500	37,000	0	0	12,000	0	0	0	0	0	0	0	0	0											
Jun-94	3,000	0	25,000	15,000	16,000	65,000	0	35,000	0	0	0	0	0	0	0	0												
Jun-95	0	105,500	102,500	54,800	40,405	22,500	0	0	20,625	22,875	0	0	0	0	0													
Jun-96	22,500	97,000	10,000	15,500	70,461	20,000	0	0	40,000	66,000	0	0	0	0														
Jun-97	0	49,500	113,000	12,382	20,000	30,000	0	0	0	0	0	0	0															
Jun-98	0	80,000	90,000	25,000	25,000	0	0	40,000	0	0	0	0																
Jun-99	0	6,250	10,000	92,000	65,000	0	0	0	0	0	32,000																	
Jun-00	0	95,000	136,850	12,000	44,250	20,000	30,000	0	0	0																		
Jun-01	27,500	2,500	62,500	74,001	47,000	0	10,001	50,000	0																			
Jun-02	48,000	18,250	64,500	112,500	75,000	105,000	20,000	0																				
Jun-03	0	52,500	30,000	45,000	0	35,000	0																					
Jun-04	0	7,000	0	22,000	87,500	32,000																						
Jun-05	0	15,000	38,600	45,000	49,500																							
Jun-06	0	30,000	20,000	75,000																								
Jun-07	0	40,000	75,000																									
Jun-08	0	33,000																										
Jun-09	0																											

Cumulative Lump Sum Payments

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	2,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750
Jun-83	0	0	0	0	0	0	0	0	12,000	12,000	12,000	12,000	12,000	12,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	
Jun-84	0	0	0	0	0	0	0	46,500	62,500	62,500	62,500	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000		
Jun-85	0	0	0	19,976	19,976	24,976	24,976	32,476	47,476	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976			
Jun-86	0	0	0	0	0	0	1	1	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001				
Jun-87	0	0	0	0	0	27,500	27,500	47,500	77,500	77,500	77,500	77,500	77,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500					
Jun-88	0	0	22,500	22,500	59,500	89,500	171,500	214,843	229,843	260,843	260,843	260,843	260,843	260,843	260,843	260,843	260,843	277,843	294,843	294,843	294,843	294,843						
Jun-89	0	33,000	33,000	39,800	39,800	107,300	107,300	137,300	137,300	137,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300							
Jun-90	0	0	25,211	55,211	90,212	166,712	196,712	196,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712								
Jun-91	0	0	48,000	80,500	80,500	80,500	80,500	153,500	153,500	153,500	153,500	153,500	153,500	153,500	153,500	178,500	208,500	233,500	233,500									
Jun-92	0	0	15,000	104,500	104,500	104,500	104,500	116,500	116,500	136,500	146,183	146,183	146,183	146,183	146,183	146,183	221,183	256,183										
Jun-93	0	62,500	80,500	112,000	149,000	149,000	149,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000											
Jun-94	3,000	3,000	28,000	43,000	59,000	124,000	124,000	159,000	159,000	159,000	159,000	159,000	159,000	159,000	159,000	159,000												
Jun-95	0	105,500	208,000	262,800	303,205	325,705	325,705	325,705	346,330	369,205	369,205	369,205	369,205	369,205	369,205													
Jun-96	22,500	119,500	129,500	145,000	215,461	235,461	235,461	235,461	275,461	341,461	341,461	341,461	341,461	341,461														
Jun-97	0	49,500	162,500	174,882	194,882	224,882	224,882	224,882	224,882	224,882	224,882	224,882	224,882															
Jun-98	0	80,000	170,000	195,000	220,000	220,000	220,000	260,000	260,000	260,000	260,000	260,000																
Jun-99	0	6,250	16,250	108,250	173,250	173,250	173,250	173,250	173,250	173,250	205,250																	
Jun-00	0	95,000	231,850	243,850	288,100	308,100	338,100	338,100	338,100	338,100																		
Jun-01	27,500	30,000	92,500	166,501	213,501	213,501	223,502	273,502	273,502																			
Jun-02	48,000	66,250	130,750	243,250	318,250	423,250	443,250	443,250																				
Jun-03	0	52,500	82,500	127,500	127,500	162,500	162,500																					
Jun-04	0	7,000	7,000	29,000	116,500	148,500																						
Jun-05	0	15,000	53,600	98,600	148,100																							
Jun-06	0	30,000	50,000	125,000																								
Jun-07	0	40,000	115,000																									
Jun-08	0	33,000																										
Jun-09	0																											

Commonwealth of Massachusetts Workers Compensation
Massachusetts Colleges & Universities - Cluster 4
INDEMNITY
Lump Sum Developmen
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sum

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.019	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.014	0.000	0.004	0.000	0.005	0.011	0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
Jun-87	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.008	0.012	0.000	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.000	0.005	0.000	0.009	0.007	0.019	0.010	0.004	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.000	0.000	0.000						
Jun-89	0.000	0.025	0.000	0.005	0.000	0.051	0.000	0.023	0.000	0.000	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
Jun-90	0.000	0.000	0.008	0.010	0.012	0.026	0.010	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000								
Jun-91	0.000	0.000	0.040	0.027	0.000	0.000	0.000	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.025	0.021	0.000									
Jun-92	0.000	0.000	0.009	0.054	0.000	0.000	0.000	0.007	0.000	0.012	0.006	0.000	0.000	0.000	0.000	0.000	0.045	0.021										
Jun-93	0.000	0.060	0.017	0.030	0.035	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000											
Jun-94	0.002	0.000	0.020	0.012	0.013	0.051	0.000	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000												
Jun-95	0.000	0.096	0.093	0.050	0.037	0.020	0.000	0.000	0.019	0.021	0.000	0.000	0.000	0.000	0.000													
Jun-96	0.022	0.093	0.010	0.015	0.067	0.019	0.000	0.000	0.038	0.063	0.000	0.000	0.000	0.000														
Jun-97	0.000	0.053	0.122	0.013	0.022	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000															
Jun-98	0.000	0.050	0.056	0.015	0.015	0.000	0.000	0.025	0.000	0.000	0.000	0.000																
Jun-99	0.000	0.005	0.009	0.078	0.055	0.000	0.000	0.000	0.000	0.000	0.027																	
Jun-00	0.000	0.091	0.131	0.011	0.042	0.019	0.029	0.000	0.000	0.000																		
Jun-01	0.019	0.002	0.042	0.050	0.032	0.000	0.007	0.034	0.000																			
Jun-02	0.023	0.009	0.030	0.053	0.035	0.050	0.009	0.000																				
Jun-03	0.000	0.040	0.023	0.035	0.000	0.027	0.000																					
Jun-04	0.000	0.004	0.000	0.014	0.055	0.020																						
Jun-05	0.000	0.012	0.031	0.036	0.039																							
Jun-06	0.000	0.017	0.011	0.042																								
Jun-07	0.000	0.029	0.054																									
Jun-08	0.000	0.016																										
Jun-09	0.000																											

Averages		*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
Simple Avg																												
All Yrs (ex P)	0.002	0.023	0.028	0.024	0.020	0.015	0.004	0.013	0.008	0.008	0.005	0.001	0.000	0.001	0.002	0.002	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Latest 5	0.000	0.016	0.024	0.036	0.032	0.023	0.009	0.012	0.000	0.013	0.005	0.000	0.000	0.000	0.000	0.004	0.014	0.009	0.001	0.000	0.000	0.000	0.000					
Latest 3	0.000	0.021	0.032	0.031	0.032	0.032	0.005	0.011	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.024	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Olympic Avg																												
All Yrs (ex P)	0.002	0.021	0.025	0.022	0.019	0.014	0.002	0.011	0.007	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Latest 10	0.002	0.017	0.032	0.032	0.037	0.017	0.002	0.008	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.003	0.003										
Latest 5	0.000	0.015	0.022	0.038	0.035	0.022	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.008	0.000	0.000	0.000	0.000	0.000					

Dev Factor Selection																												
Prior	*NA*	*0.023*	*0.018*	*0.036*	*0.037*	*0.021*	*0.014*	*0.011*	*0.009*	*0.008*	*0.004*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*		*0.000*
Selected	NA	0.023	0.024	0.036	0.032	0.023	0.009	0.012	0.008	0.005	0.002	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FacToUlt	NA	0.177	0.154	0.130	0.094	0.062	0.039	0.030	0.018	0.010	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Commonwealth of Massachusetts Workers Compensation
Massachusetts Colleges & Universities - Cluster 4
INDEMNITY
Paid Loss Development
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	2,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750	15,750
Jun-83	0	0	0	0	0	0	0	0	12,000	12,000	12,000	12,000	12,000	12,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	
Jun-84	0	0	0	0	0	0	0	46,500	62,500	62,500	62,500	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000		
Jun-85	0	0	0	19,976	19,976	24,976	24,976	32,476	47,476	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976	98,976			
Jun-86	0	0	0	0	0	0	1	1	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001	35,001				
Jun-87	0	0	0	0	0	27,500	27,500	47,500	77,500	77,500	77,500	77,500	77,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500	121,500					
Jun-88	0	0	22,500	22,500	59,500	89,500	171,500	214,843	229,843	260,843	260,843	260,843	260,843	260,843	260,843	260,843	260,843	277,843	294,843	294,843	294,843	294,843						
Jun-89	0	33,000	33,000	39,800	39,800	107,300	107,300	137,300	137,300	137,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300	212,300							
Jun-90	0	0	25,211	55,211	90,212	166,712	196,712	196,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712	249,712								
Jun-91	0	0	48,000	80,500	80,500	80,500	80,500	153,500	153,500	153,500	153,500	153,500	153,500	153,500	153,500	178,500	208,500	233,500	233,500									
Jun-92	0	0	15,000	104,500	104,500	104,500	104,500	116,500	116,500	136,500	146,183	146,183	146,183	146,183	146,183	146,183	221,183	256,183										
Jun-93	0	62,500	80,500	112,000	149,000	149,000	149,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000	161,000											
Jun-94	3,000	3,000	28,000	43,000	59,000	124,000	124,000	159,000	159,000	159,000	159,000	159,000	159,000	159,000	159,000	159,000												
Jun-95	0	105,500	208,000	262,800	303,205	325,705	325,705	325,705	346,330	369,205	369,205	369,205	369,205	369,205	369,205													
Jun-96	22,500	119,500	129,500	145,000	215,461	235,461	235,461	235,461	275,461	341,461	341,461	341,461	341,461	341,461														
Jun-97	0	49,500	162,500	174,882	194,882	224,882	224,882	224,882	224,882	224,882	224,882	224,882	224,882															
Jun-98	0	80,000	170,000	195,000	220,000	220,000	220,000	260,000	260,000	260,000	260,000	260,000																
Jun-99	0	6,250	16,250	108,250	173,250	173,250	173,250	173,250	173,250	173,250	205,250																	
Jun-00	0	95,000	231,850	243,850	288,100	308,100	338,100	338,100	338,100	338,100																		
Jun-01	27,500	30,000	92,500	166,501	213,501	213,501	223,502	273,502	273,502																			
Jun-02	48,000	66,250	130,750	243,250	318,250	423,250	443,250	443,250																				
Jun-03	0	52,500	82,500	127,500	127,500	162,500	162,500																					
Jun-04	0	7,000	7,000	29,000	116,500	148,500																						
Jun-05	0	15,000	53,600	98,600	148,100																							
Jun-06	0	30,000	50,000	125,000																								
Jun-07	0	40,000	115,000																									
Jun-08	0	33,000																										
Jun-09	0																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs														5.727	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Jun-83									1.000	1.000	1.000	1.000	1.000	2.250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84								1.344	1.000	1.000	1.280	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Jun-85				1.000	1.250	1.000	1.300	1.462	2.085	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Jun-86							1.000	35001.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Jun-87						1.000	1.727	1.632	1.000	1.000	1.000	1.000	1.568	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
Jun-88			1.000	2.644	1.504	1.916	1.253	1.070	1.135	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.065	1.061	1.000	1.000	1.000							
Jun-89		1.000	1.206	1.000	2.696	1.000	1.280	1.000	1.000	1.546	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
Jun-90			2.190	1.634	1.848	1.180	1.000	1.269	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
Jun-91			1.677	1.000	1.000	1.000	1.907	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.163	1.168	1.120	1.000										
Jun-92			6.967	1.000	1.000	1.000	1.115	1.000	1.172	1.071	1.000	1.000	1.000	1.000	1.000	1.513	1.158											
Jun-93		1.288	1.391	1.330	1.000	1.000	1.081	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
Jun-94	1.000	9.333	1.536	1.372	2.102	1.000	1.282	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
Jun-95		1.972	1.263	1.154	1.074	1.000	1.000	1.063	1.066	1.000	1.000	1.000	1.000	1.000														
Jun-96	5.311	1.084	1.120	1.486	1.093	1.000	1.000	1.170	1.240	1.000	1.000	1.000	1.000															
Jun-97		3.283	1.076	1.114	1.154	1.000	1.000	1.000	1.000	1.000	1.000	1.000																
Jun-98		2.125	1.147	1.128	1.000	1.000	1.182	1.000	1.000	1.000	1.000																	
Jun-99		2.600	6.662	1.600	1.000	1.000	1.000	1.000	1.000	1.185																		
Jun-00		2.441	1.052	1.181	1.069	1.097	1.000	1.000	1.000																			
Jun-01	1.091	3.083	1.800	1.282	1.000	1.047	1.224	1.000																				
Jun-02	1.380	1.974	1.860	1.308	1.330	1.047	1.000																					
Jun-03		1.571	1.545	1.000	1.275	1.000																						
Jun-04		1.000	4.143	4.017	1.275																							
Jun-05		3.573	1.840	1.502																								
Jun-06		1.667	2.500																									
Jun-07		2.875																										
Jun-08																												

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	2.196	2.554	2.209	1.461	1.315	1.072	1.186	1945.556	1.094	1.047	1.018	1.000	1.041	1.096	1.014	1.062	1.034	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Latest 5		2.137	2.378	1.822	1.190	1.038	1.081	1.000	1.048	1.037	1.000	1.000	1.000	1.000	1.033	1.136	1.069	1.012	1.000	1.000	1.000	1.000	1.000					
Latest 3		2.705	2.827	2.173	1.293	1.031	1.075	1.000	1.000	1.062	1.000	1.000	1.000	1.000	1.000	1.227	1.093	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
Volume Wtd																												
All Yrs (ex P)	8.198	2.140	1.511	1.286	1.193	1.054	1.117	1.076	1.063	1.040	1.006	1.000	1.019	1.007	1.015	1.067	1.051	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Latest 5		2.132	1.925	1.390	1.180	1.047	1.064	1.000	1.052	1.023	1.000	1.000	1.000	1.000	1.029	1.111	1.067	1.016	1.000	1.000	1.000							
Latest 3		2.572	2.284	1.537	1.306	1.038	1.050	1.000	1.000	1.049	1.000	1.000	1.000	1.000	1.000	1.216	1.088	1.000	1.000	1.000	1.000	1.000	1.000					

Dev Factor Selection																												
Prior	2.594	1.957	2.238	1.758	1.060	1.038	1.076	1.034	1.040	1.020	1.007	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	2.196	2.137	2.104	1.641	1.266	1.047	1.050	1.038	1.038	1.023	1.006	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
FacToUlt	25.383	11.561	5.409	2.570	1.566	1.237	1.181	1.125	1.084	1.044	1.020	1.014	1.011	1.008	1.006	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent of Ult	3.9%	8.6%	18.5%	38.9%	63.9%	80.8%	84.6%	88.9%	92.2%	95.8%	98.0%	98.6%	98.9%	99.2%	99.4%	99.6%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	0.3%	0.0%	0.1%	0.1%	1.000	1.000
324	99.7%	0.0%	0.3%	0.0%	0.0%	0.981	0.971
312	99.7%	0.0%	0.3%	0.0%	0.0%	0.943	0.916
300	99.7%	0.1%	0.3%	0.0%	0.0%	0.907	0.864
288	99.6%	0.1%	0.4%	0.0%	0.0%	0.902	0.859
276	99.5%	0.1%	0.5%	0.0%	0.0%	0.892	0.846
264	99.4%	0.2%	0.6%	0.1%	0.1%	0.880	0.829
252	99.2%	0.6%	0.8%	0.3%	0.2%	0.882	0.832
240	98.6%	1.2%	1.4%	0.6%	0.4%	0.909	0.871
228	97.4%	1.3%	2.6%	0.7%	0.5%	0.924	0.891
216	96.0%	1.6%	4.0%	0.8%	0.6%	0.920	0.885
204	94.5%	1.7%	5.5%	0.9%	0.7%	0.912	0.874
192	92.7%	2.0%	7.3%	1.1%	0.8%	0.901	0.860
180	90.8%	1.9%	9.2%	1.1%	0.8%	0.891	0.845
168	88.9%	2.3%	11.1%	1.3%	1.0%	0.878	0.827
156	86.6%	1.1%	13.4%	0.7%	0.6%	0.867	0.813
144	85.4%	2.1%	14.6%	1.3%	1.1%	0.846	0.783
132	83.4%	2.7%	16.6%	1.8%	1.5%	0.834	0.767
120	80.7%	3.0%	19.3%	2.1%	1.7%	0.827	0.759
108	77.6%	3.1%	22.4%	2.2%	1.9%	0.820	0.750
96	74.6%	3.6%	25.4%	2.6%	2.3%	0.812	0.740
84	71.0%	3.8%	29.0%	3.0%	2.6%	0.805	0.731
72	67.2%	5.3%	32.8%	4.3%	3.8%	0.798	0.723
60	61.9%	7.7%	38.1%	6.5%	6.0%	0.797	0.722
48	54.1%	8.3%	45.9%	7.2%	6.7%	0.803	0.730
36	45.9%	11.9%	54.1%	10.8%	10.3%	0.804	0.732
24	34.0%	17.8%	66.0%	16.8%	16.3%	0.810	0.741
12	16.2%	16.2%	83.8%	15.9%	15.7%	0.822	0.757
Total		100.0%					

NOTES:

(2) = 1 / Section 7, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	1,081,185	1,577,233		945,588	1,379,425
6/30/82-83	14,865	29,731	0.981	14,577	29,154
6/30/83-84	18,355	36,709	0.943	17,306	34,612
6/30/84-85	29,841	59,682	0.907	27,054	54,107
6/30/85-86	6,092	6,092	0.902	5,497	5,497
6/30/86-87	9,343	238,343	0.892	8,337	212,692
6/30/87-88	76,719	191,799	0.880	67,518	168,796
6/30/88-89	30,304	75,761	0.882	26,719	66,797
6/30/89-90	32,527	41,527	0.909	29,559	37,737
6/30/90-91	31,393	31,393	0.924	28,992	28,992
6/30/91-92	123,713	291,908	0.920	113,769	268,444
6/30/92-93	22,950	57,375	0.912	20,922	52,304
6/30/93-94	93,548	430,548	0.901	84,328	388,112
6/30/94-95	104,273	104,273	0.891	92,894	92,894
6/30/95-96	25,381	63,452	0.878	22,288	55,721
6/30/96-97	126,913	130,913	0.867	110,093	113,563
6/30/97-98	235,610	238,610	0.846	199,242	201,779
6/30/98-99	199,494	270,494	0.834	166,355	225,561
6/30/99-00	212,664	220,664	0.827	175,844	182,459
6/30/00-01	346,676	348,676	0.820	284,329	285,969
6/30/01-02	563,758	576,758	0.812	457,682	468,236
6/30/02-03	416,044	424,044	0.805	334,962	341,403
6/30/03-04	578,991	669,991	0.798	462,189	534,831
6/30/04-05	559,086	826,086	0.797	445,692	658,539
6/30/05-06	980,761	1,129,761	0.803	787,191	906,783
6/30/06-07	924,348	1,276,348	0.804	742,879	1,025,774
6/30/07-08	1,637,630	1,686,630	0.810	1,326,803	1,366,503
6/30/08-09	1,799,262	2,067,262	0.822	1,478,675	1,698,924
Total	10,281,728	13,102,063		8,477,284	10,885,606
			(7) Total Discount Factor:	0.824	0.831

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	1,081,185	1,577,233
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	154,455	225,319
(11) Discounted Value at 4%:	945,588	1,379,425

NOTES:
(2), (3) From Section 7, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 7, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Indemnity

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	1,081,185	1,577,233		888,093	1,295,551
6/30/82-83	14,865	29,731	0.971	14,439	28,877
6/30/83-84	18,355	36,709	0.916	16,818	33,637
6/30/84-85	29,841	59,682	0.864	25,796	51,591
6/30/85-86	6,092	6,092	0.859	5,235	5,235
6/30/86-87	9,343	238,343	0.846	7,903	201,605
6/30/87-88	76,719	191,799	0.829	63,609	159,023
6/30/88-89	30,304	75,761	0.832	25,216	63,040
6/30/89-90	32,527	41,527	0.871	28,315	36,150
6/30/90-91	31,393	31,393	0.891	27,974	27,974
6/30/91-92	123,713	291,908	0.885	109,521	258,420
6/30/92-93	22,950	57,375	0.874	20,055	50,137
6/30/93-94	93,548	430,548	0.860	80,406	370,064
6/30/94-95	104,273	104,273	0.845	88,095	88,095
6/30/95-96	25,381	63,452	0.827	20,998	52,495
6/30/96-97	126,913	130,913	0.813	103,159	106,410
6/30/97-98	235,610	238,610	0.783	184,464	186,813
6/30/98-99	199,494	270,494	0.767	153,104	207,593
6/30/99-00	212,664	220,664	0.759	161,342	167,411
6/30/00-01	346,676	348,676	0.750	260,110	261,611
6/30/01-02	563,758	576,758	0.740	417,016	426,632
6/30/02-03	416,044	424,044	0.731	304,267	310,117
6/30/03-04	578,991	669,991	0.723	418,501	484,276
6/30/04-05	559,086	826,086	0.722	403,733	596,542
6/30/05-06	980,761	1,129,761	0.730	716,137	824,935
6/30/06-07	924,348	1,276,348	0.732	676,644	934,316
6/30/07-08	1,637,630	1,686,630	0.741	1,213,719	1,250,035
6/30/08-09	1,799,262	2,067,262	0.757	1,361,964	1,564,828
Total	10,281,728	13,102,063		7,796,632	10,043,414
			(7) Total Discount Factor:	0.758	0.767

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	1,081,185	1,577,233
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	154,455	225,319
(11) Discounted Value at 6%:	888,093	1,295,551

NOTES:
(2), (3) From Section 7, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 7, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior yrs	4,259,502	4,794,952	3,099,642	1,159,860	1,695,311				96,276	105,903	8.3%	6.2%
6/30/82-83	811,448	826,578	796,317	15,131	30,261	97.2%	0.5%	18.0%	2,730	5,460	18.0%	18.0%
6/30/83-84	963,997	982,491	945,504	18,493	36,987	97.1%	0.5%	17.5%	3,244	6,488	17.5%	17.5%
6/30/84-85	1,635,334	1,665,739	1,604,929	30,405	60,810	97.2%	0.5%	18.1%	5,502	11,004	18.1%	18.1%
6/30/85-86	2,261,269	2,263,190	2,253,255	8,014	9,935	99.6%	0.5%	126.0%	10,100	12,522	126.0%	126.0%
6/30/86-87	2,639,246	2,869,437	2,628,713	10,533	240,723	95.4%	0.5%	11.0%	1,155	26,389	11.0%	11.0%
6/30/87-88	4,540,693	4,655,773	4,463,214	77,479	192,559	97.1%	1.0%	34.1%	26,387	65,578	34.1%	34.1%
6/30/88-89	1,971,514	2,016,971	1,940,364	31,150	76,607	97.3%	1.0%	37.0%	11,530	28,355	37.0%	37.0%
6/30/89-90	3,751,000	3,760,000	3,716,110	34,890	43,890	99.0%	2.0%	190.7%	66,529	83,691	190.7%	190.7%
6/30/90-91	1,901,000	1,901,000	1,866,079	34,921	34,921	98.2%	2.0%	108.9%	38,020	38,020	108.9%	108.9%
6/30/91-92	2,249,749	2,417,943	2,118,566	131,183	299,377	90.8%	2.0%	21.7%	28,443	64,911	21.7%	21.7%
6/30/92-93	1,679,326	1,716,282	1,653,844	25,482	62,438	97.4%	2.0%	77.2%	19,683	48,229	77.2%	77.2%
6/30/93-94	1,632,000	1,969,000	1,529,149	102,851	439,851	84.9%	2.0%	13.3%	13,649	58,371	13.3%	13.3%
6/30/94-95	2,014,000	2,014,000	1,897,317	116,683	116,683	94.2%	3.0%	51.8%	60,420	60,420	51.8%	51.8%
6/30/95-96	1,894,428	1,932,499	1,850,889	43,539	81,610	96.7%	3.0%	91.7%	39,941	74,867	91.7%	91.7%
6/30/96-97	1,762,000	1,766,000	1,609,062	152,938	156,938	91.2%	3.0%	34.2%	52,237	53,603	34.2%	34.2%
6/30/97-98	2,331,000	2,335,000	2,065,700	265,300	269,300	88.5%	3.0%	26.2%	69,466	70,514	26.2%	26.2%
6/30/98-99	1,748,000	1,821,000	1,518,747	229,253	302,253	85.1%	3.0%	20.1%	46,182	60,888	20.1%	20.1%
6/30/99-00	1,929,000	1,939,000	1,664,483	264,517	274,517	86.1%	3.0%	21.5%	56,944	59,096	21.5%	21.5%
6/30/00-01	2,410,000	2,414,000	1,989,472	420,528	424,528	82.5%	4.0%	22.8%	96,023	96,937	22.8%	22.8%
6/30/01-02	3,186,000	3,202,000	2,551,118	634,882	650,882	79.9%	4.0%	19.9%	126,170	129,350	19.9%	19.9%
6/30/02-03	2,097,000	2,107,000	1,606,351	490,649	500,649	76.4%	3.5%	14.6%	71,830	73,294	14.6%	14.6%
6/30/03-04	2,593,000	2,685,000	1,893,798	699,202	791,202	71.8%	4.7%	16.5%	115,341	130,517	16.5%	16.5%
6/30/04-05	2,246,000	2,556,000	1,563,467	682,533	992,533	65.1%	6.6%	19.0%	130,013	189,063	19.0%	19.0%
6/30/05-06	2,913,000	3,085,000	1,773,475	1,139,525	1,311,525	59.1%	6.0%	14.6%	166,805	191,982	14.6%	14.6%
6/30/06-07	2,487,000	2,908,000	1,326,670	1,160,330	1,581,330	49.2%	10.0%	19.6%	227,280	309,743	19.6%	19.6%
6/30/07-08	3,354,000	3,436,000	1,325,906	2,028,094	2,110,094	39.1%	10.1%	16.6%	336,992	350,617	16.6%	16.6%
6/30/08-09	3,192,000	3,512,000	581,844	2,610,156	2,930,156	17.4%	21.7%	26.3%	685,263	769,275	26.3%	26.3%
Total	66,452,507	69,551,856	53,833,986	12,618,521	15,717,870				2,604,153	3,175,087	20.6%	20.2%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		315,899			394,575	433,977	78,676	118,078		
6/30/82-83		53,045	53,045		53,310	53,575	265	530		
6/30/83-84		27,773	27,773		27,912	28,051	139	278		
6/30/84-85	249,035	112,891	112,891	112,891	113,455	114,020	564	1,129	0.046	0.046
6/30/85-86	267,811	384,347	384,347	384,347	386,269	388,190	1,922	3,843	0.144	0.145
6/30/86-87	307,762	238,056	238,056	238,056	239,246	240,437	1,190	2,381	0.078	0.078
6/30/87-88	360,569	627,240	627,867	627,860	628,000	628,000	760	760	0.174	0.174
6/30/88-89	371,471	425,154	426,005	426,052	426,000	426,000	846	846	0.115	0.115
6/30/89-90	374,816	537,636	539,790	539,894	540,000	540,000	2,364	2,364	0.144	0.144
6/30/90-91	350,048	472,472	475,787	475,786	476,000	476,000	3,528	3,528	0.136	0.136
6/30/91-92	356,084	728,531	735,844	735,790	736,000	736,000	7,469	7,469	0.207	0.207
6/30/92-93	383,583	506,348	512,965	512,960	508,880	511,411	2,532	5,063	0.133	0.133
6/30/93-94	439,244	528,697	538,321	538,344	538,000	538,000	9,303	9,303	0.122	0.122
6/30/94-95	437,287	526,590	538,907	538,941	539,000	539,000	12,410	12,410	0.123	0.123
6/30/95-96	459,490	581,842	600,209	600,204	600,000	600,000	18,158	18,158	0.131	0.131
6/30/96-97	540,181	578,975	605,008	605,300	605,000	605,000	26,025	26,025	0.112	0.112
6/30/97-98	518,613	427,310	456,583	457,699	457,000	458,000	29,690	30,690	0.088	0.088
6/30/98-99	536,523	334,241	364,017	366,471	364,000	366,000	29,759	31,759	0.068	0.068
6/30/99-00	583,551	482,147	533,937	536,116	534,000	536,000	51,853	53,853	0.092	0.092
6/30/00-01	628,836	562,148	635,550	637,652	636,000	638,000	73,852	75,852	0.101	0.101
6/30/01-02	646,243	528,876	600,242	603,094	600,000	603,000	71,124	74,124	0.093	0.093
6/30/02-03	630,315	520,395	594,581	597,386	595,000	597,000	74,605	76,605	0.094	0.095
6/30/03-04	647,755	684,790	805,040	805,593	805,000	806,000	120,210	121,210	0.124	0.124
6/30/04-05	784,398	634,553	758,292	800,951	758,000	801,000	123,447	166,447	0.097	0.102
6/30/05-06	747,901	688,237	846,726	870,225	847,000	870,000	158,763	181,763	0.113	0.116
6/30/06-07	810,859	580,019	816,123	884,975	816,000	885,000	235,982	304,982	0.101	0.109
6/30/07-08	834,198	609,536	1,000,330	1,033,195	1,000,000	1,033,000	390,464	423,464	0.120	0.124
6/30/08-09	836,836	295,106	1,158,217	1,105,806	1,106,000	1,158,000	810,894	862,894	0.132	0.138
Total	13,103,412	12,992,854	14,986,451	15,035,588	15,329,647	15,608,661	2,336,793	2,615,808		
Tot 6/30/84-09	13,103,412	12,596,137	14,905,633	15,035,588	14,853,850	15,093,058	2,257,714	2,496,922	0.113	0.115

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 7, Exhibit 2, Page 2, Column 3
(4) From Section 7, Exhibit 2, Page 2, Column 8
(5) From Section 7, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		315,899							4	1	
6/30/82-83		53,045	1.000	1.000	53,045	N/A	53,045		0	0	
6/30/83-84		27,773	1.000	1.000	27,773	N/A	27,773		0	0	
6/30/84-85	249,035	112,891	1.000	1.000	112,891	N/A	112,891	0.045	0	0	
6/30/85-86	267,811	384,347	1.000	1.000	384,347	N/A	384,347	0.144	0	0	
6/30/86-87	307,762	238,056	1.000	1.000	238,056	N/A	238,056	0.077	0	1	0
6/30/87-88	360,569	627,240	1.001	1.000	627,867	N/A	627,867	0.174	2	2	314
6/30/88-89	371,471	425,154	1.002	1.000	426,005	N/A	426,005	0.115	0	0	
6/30/89-90	374,816	537,636	1.004	1.000	539,790	N/A	539,790	0.144	2	3	718
6/30/90-91	350,048	472,472	1.007	1.000	475,787	N/A	475,787	0.136	0	0	
6/30/91-92	356,084	728,531	1.010	1.000	735,844	N/A	735,844	0.207	1	1	7,313
6/30/92-93	383,583	506,348	1.013	1.000	512,965	N/A	512,965	0.134	0	0	
6/30/93-94	439,244	528,697	1.018	1.000	538,321	N/A	538,321	0.123	2	2	4,812
6/30/94-95	437,287	526,590	1.023	1.000	538,907	N/A	538,907	0.123	2	2	6,159
6/30/95-96	459,490	581,842	1.032	1.000	600,209	N/A	600,209	0.131	1	0	
6/30/96-97	540,181	578,975	1.045	1.000	605,008	N/A	605,008	0.112	3	2	13,016
6/30/97-98	518,613	427,310	1.069	1.000	456,583	N/A	456,583	0.088	3	5	5,855
6/30/98-99	536,523	334,241	1.089	1.000	364,017	N/A	364,017	0.068	2	2	14,888
6/30/99-00	583,551	482,147	1.107	1.000	533,937	N/A	533,937	0.091	3	2	25,895
6/30/00-01	628,836	562,148	1.131	1.000	635,550	N/A	635,550	0.101	5	3	24,467
6/30/01-02	646,243	528,876	1.135	1.000	600,242	N/A	600,242	0.093	7	5	14,273
6/30/02-03	630,315	520,395	1.143	1.000	594,581	N/A	594,581	0.094	6	4	18,546
6/30/03-04	647,755	684,790	1.176	1.000	805,040	N/A	805,040	0.124	16	9	13,361
6/30/04-05	784,398	634,553	1.195	1.000	758,292	N/A	758,292	0.097	20	7	17,677
6/30/05-06	747,901	688,237	1.230	1.000	846,726	N/A	846,726	0.113	48	25	6,340
6/30/06-07	810,859	580,019	1.407	1.000	816,123	N/A	816,123	0.101	146	38	6,213
6/30/07-08	834,198	609,536	1.641	1.000	1,000,330	N/A	1,000,330	0.120	250	168	2,326
6/30/08-09	836,836	295,106	3.925	1.000	1,158,217	N/A	1,158,217	0.138		255	3,385
Total	13,103,412	12,992,854			14,986,451		14,986,451		523	537	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 7, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	249,035	0.049	112,891	1.000	112,891	N/A	112,891	0.045	0.045
6/30/85-86	267,811	0.135	384,347	1.000	384,347	N/A	384,347	0.144	0.144
6/30/86-87	307,762	0.082	238,056	1.000	238,056	N/A	238,056	0.077	0.077
6/30/87-88	360,569	0.172	627,240	1.001	627,860	N/A	627,860	0.174	0.174
6/30/88-89	371,471	0.121	425,154	1.002	426,052	N/A	426,052	0.115	0.115
6/30/89-90	374,816	0.151	537,636	1.004	539,894	N/A	539,894	0.144	0.144
6/30/90-91	350,048	0.136	472,472	1.007	475,786	N/A	475,786	0.136	0.136
6/30/91-92	356,084	0.205	728,531	1.010	735,790	N/A	735,790	0.207	0.207
6/30/92-93	383,583	0.134	506,348	1.013	512,960	N/A	512,960	0.134	0.134
6/30/93-94	439,244	0.123	528,697	1.018	538,344	N/A	538,344	0.123	0.123
6/30/94-95	437,287	0.124	526,590	1.023	538,941	N/A	538,941	0.123	0.123
6/30/95-96	459,490	0.131	581,842	1.032	600,204	N/A	600,204	0.131	0.131
6/30/96-97	540,181	0.113	578,975	1.045	605,300	N/A	605,300	0.112	0.112
6/30/97-98	518,613	0.091	427,310	1.069	457,699	N/A	457,699	0.088	0.088
6/30/98-99	536,523	0.073	334,241	1.089	366,471	N/A	366,471	0.068	0.068
6/30/99-00	583,551	0.095	482,147	1.107	536,116	N/A	536,116	0.092	0.092
6/30/00-01	628,836	0.104	562,148	1.131	637,652	N/A	637,652	0.101	0.101
6/30/01-02	646,243	0.097	528,876	1.135	603,094	N/A	603,094	0.093	0.093
6/30/02-03	630,315	0.098	520,395	1.143	597,386	N/A	597,386	0.095	0.095
6/30/03-04	647,755	0.125	684,790	1.176	805,593	N/A	805,593	0.124	0.124
6/30/04-05	784,398	0.130	634,553	1.195	800,951	N/A	800,951	0.102	0.102
6/30/05-06	747,901	0.130	688,237	1.230	870,225	N/A	870,225	0.116	0.116
6/30/06-07	810,859	0.130	580,019	1.407	884,975	N/A	884,975	0.109	0.109
6/30/07-08	834,198	0.130	609,536	1.641	1,033,195	N/A	1,033,195	0.124	0.124
6/30/08-09	836,836	0.130	295,106	3.925	1,105,806	N/A	1,105,806	0.132	0.132
Total	13,103,412		12,596,137		15,035,588		15,035,588		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 7, Exhibit 2, Page 4, Column 11
(4) From Section 7, Exhibit 2, Page 2, Column 3
(5) From Section 7, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.049	0.049
6/30/85-86									0.135	0.135
6/30/86-87									0.082	0.082
6/30/87-88									0.172	0.172
6/30/88-89									0.121	0.121
6/30/89-90									0.151	0.151
6/30/90-91	350,048	475,787	0.136	1.157	0.157	1.208	0.190	0.136	0.155	0.136
6/30/91-92	356,084	735,844	0.207	1.152	0.238	1.196	0.285	0.207	0.227	0.205
6/30/92-93	383,583	512,965	0.134	1.152	0.154	1.184	0.182	0.134	0.152	0.134
6/30/93-94	439,244	538,321	0.123	1.142	0.140	1.173	0.164	0.123	0.133	0.123
6/30/94-95	437,287	538,907	0.123	1.134	0.140	1.161	0.162	0.123	0.125	0.124
6/30/95-96	459,490	600,209	0.131	1.120	0.146	1.149	0.168	0.131	0.145	0.131
6/30/96-97	540,181	605,008	0.112	1.101	0.123	1.138	0.140	0.112	0.111	0.113
6/30/97-98	518,613	456,583	0.088	1.100	0.097	1.127	0.109	0.088	0.094	0.091
6/30/98-99	536,523	364,017	0.068	1.100	0.075	1.116	0.083	0.068	0.078	0.073
6/30/99-00	583,551	533,937	0.091	1.100	0.101	1.105	0.111	0.091	0.104	0.095
6/30/00-01	628,836	635,550	0.101	1.075	0.109	1.094	0.119	0.101	0.109	0.104
6/30/01-02	646,243	600,242	0.093	1.067	0.099	1.083	0.107	0.093	0.102	0.097
6/30/02-03	630,315	594,581	0.094	1.040	0.098	1.072	0.105	0.094	0.099	0.098
6/30/03-04	647,755	805,040	0.124	1.014	0.126	1.062	0.134	0.124	0.150	0.125
6/30/04-05	784,398	758,292	0.097	1.003	0.097	1.051	0.102	0.097	0.150	0.130
6/30/05-06	747,901	846,726	0.113	1.000	0.113	1.041	0.118	0.113	0.150	0.130
6/30/06-07	810,859	816,123	0.101	1.000	0.101	1.030	0.104	0.101	0.150	0.130
6/30/07-08	834,198	1,000,330	0.120	1.000	0.120	1.020	0.122	0.120	0.130	0.130
6/30/08-09	836,836	1,158,217	0.138	1.000	0.138	1.010	0.140	0.138		0.130
Total	11,171,948	12,576,677								

Trend Last 4 (ex 08-09):	5.3%	Avg 3 (x08-09):	0.115
Trend Last 8 (ex 08-09):	1.1%	Avg 5 (x08-09):	0.116
Trend Last 12 (ex 08-09):	1.1%	Avg 10 (x08-09):	0.111
Prior Selected Trend:	1.0%	Prior Sel Avg:	0.130
Selected Trend:	1.0%	Sel. Loss Cost:	0.130

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 7, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		1.000	
(2)	Credibility		24%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.917	
		(Low)		(High)
(5)	Selected Range	0.908		0.926
(6)	Incremental Paid for 2009	9,432		9,432
(7)	Estimated Reserve	92,748		118,078
(8)	Paid to Date (82 & Prior)	315,899		315,899
(9)	Est Ult Paid for 1982 & Prior	408,647		433,977

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	9,229	9,909
(11)	Projected Number of Years	7	7
(12)	Estimated Reserve	64,603	69,361
(13)	Paid to Date (82 & Prior)	315,899	306,467
(14)	Est Ult Paid for 1982 & Prior	380,502	375,828
(14a)	Paid Counts During Fiscal Year	1	4

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	394,575	433,977
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**394,575**	**433,977**
(18)	Implied Tail	1.249	1.374
(19)	Ult Loss Inc Lump Sums @ 6/08	381,565	409,401

NOTES:

(1) From Section 7, Exhibit 2, Page 6
(2) = (Average of Section 7, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 7, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 7, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	31,197	10.348			
1993	2	17,697	9.781	0.567		
1994	3	8,752	9.077	0.495		
1995	4	6,932	8.844	0.792		
1996	5	3,727	8.223	0.538		
1997	6	2,222	7.706	0.596		
1998	7	9,087	9.115	4.090		
1999	8	5,853	8.675	0.644		
2000	9	12,069	9.398	2.062	n =	18
2001	10	7,279	8.893	0.603	S(x) =	36,009
2002	11	8,308	9.025	1.141	S(x-sq) =	72,036,489
2003	12	8,142	9.005	0.980	S(xy) =	327,416
2004	13	19,519	9.879	2.397	S(y) =	164
2005	14	7,873	8.971	0.403	D =	8,721
2006	15	11,471	9.348	1.457	slope =	-0.003
2007	16	10,042	9.215	0.875	Avg Trend =	0.997
2008	17	8,213	9.014	0.818		
2009	18	9,432	9.152	1.148		
					Selected Trend:	**1.000**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 1.148 = 9432 / 8213

Commonwealth of Massachusetts Workers Compensation
Massachusetts Colleges & Universities - Cluster 4
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	5,425	13,479	21,113	27,654	30,220	32,596	38,756	40,003	49,390	49,452	49,902	49,902	49,902	52,680	52,680	52,680	52,680	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045
June-84	3,642	9,520	14,025	17,952	20,550	23,119	24,788	27,281	27,458	27,458	27,458	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773	
June-85	13,476	35,975	51,552	65,364	72,959	79,579	86,331	95,092	106,398	110,557	111,969	111,969	112,255	112,573	112,891	112,891	112,891	112,891	112,891	112,891	112,891	112,891	112,891	112,891	112,891		
June-86	33,919	90,663	130,143	159,111	250,739	286,799	294,926	297,883	299,398	302,212	307,822	320,541	325,361	342,239	344,332	347,860	364,047	376,849	380,765	383,694	384,347	384,347	384,347	384,347			
June-87	33,322	88,558	133,068	167,433	202,414	217,655	221,836	226,928	230,316	231,634	233,141	233,163	235,329	236,440	236,440	236,440	236,440	237,211	237,211	237,211	237,211	237,211	238,056				
June-88	59,518	204,414	290,147	350,533	381,836	423,661	513,908	554,667	558,927	578,241	580,791	582,947	585,666	587,383	588,760	590,429	611,904	620,480	621,465	623,581	623,951	627,240					
June-89	62,198	211,475	294,554	322,576	356,178	387,366	391,897	394,643	397,103	398,291	400,332	413,505	414,824	415,958	415,958	424,869	425,154	425,154	425,154	425,154	425,154						
June-90	50,219	295,860	408,825	438,277	465,544	487,856	501,254	508,956	511,410	519,157	521,054	521,523	523,073	526,415	531,243	532,370	532,613	534,177	535,910	537,636							
June-91	73,392	311,241	360,552	400,955	419,114	437,552	445,905	451,717	456,911	463,872	466,034	467,206	468,330	470,247	472,258	472,472	472,472	472,472	472,472								
June-92	221,188	477,478	560,364	598,339	631,891	641,232	646,926	650,216	653,117	658,289	666,600	671,991	681,366	690,612	701,403	710,623	719,185	728,531									
June-93	150,073	407,193	449,884	478,264	489,794	496,554	498,030	498,889	501,701	503,184	504,152	505,509	506,348	506,348	506,348	506,348	506,348										
June-94	156,060	302,215	335,354	369,121	403,159	421,734	441,218	452,877	461,708	470,189	479,925	489,958	504,404	513,367	522,984	528,697											
June-95	109,792	244,835	298,417	304,966	313,919	317,775	323,966	336,940	345,737	404,548	417,872	419,186	507,915	517,682	526,590												
June-96	187,362	423,531	463,708	493,442	512,072	523,060	559,979	563,249	572,255	575,372	578,197	581,714	581,842	581,842													
June-97	169,255	306,866	359,926	403,511	440,040	450,988	458,674	483,346	503,475	519,848	535,734	556,260	578,975														
June-98	130,372	302,957	339,295	363,480	383,927	388,726	391,919	417,459	417,733	418,585	421,666	427,310															
June-99	97,937	205,527	246,679	296,667	310,533	318,692	324,215	326,063	327,858	331,461	334,241																
June-00	149,711	324,594	408,387	446,980	464,695	474,595	478,979	480,612	480,853	482,147																	
June-01	146,796	329,001	398,588	483,338	524,021	540,381	553,789	559,032	562,148																		
June-02	113,531	244,127	383,389	485,433	511,686	522,029	525,064	528,876																			
June-03	68,006	374,633	451,946	472,102	486,597	492,733	520,395																				
June-04	226,665	540,314	610,680	654,910	673,555	684,790																					
June-05	267,264	502,730	569,792	616,429	634,553																						
June-06	266,086	533,067	604,845	688,237																							
June-07	237,774	472,669	580,019																								
June-08	254,702	609,536																									
June-09	295,106																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.485	1.566	1.310	1.093	1.079	1.189	1.032	1.235	1.001	1.009	1.000	1.000	1.056	1.000	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
June-84	2.614	1.473	1.280	1.145	1.125	1.072	1.101	1.006	1.000	1.000	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
June-85	2.670	1.433	1.268	1.116	1.091	1.085	1.101	1.119	1.039	1.013	1.000	1.003	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
June-86	2.673	1.435	1.223	1.576	1.144	1.028	1.010	1.005	1.009	1.019	1.041	1.015	1.052	1.006	1.010	1.047	1.035	1.010	1.008	1.002	1.000	1.000	1.000			
June-87	2.658	1.503	1.258	1.209	1.075	1.019	1.023	1.015	1.006	1.007	1.000	1.009	1.005	1.000	1.000	1.000	1.003	1.000	1.000	1.000	1.000	1.004				
June-88	3.434	1.419	1.208	1.089	1.110	1.213	1.079	1.008	1.035	1.004	1.004	1.005	1.003	1.002	1.003	1.036	1.014	1.002	1.003	1.001	1.005					
June-89	3.400	1.393	1.095	1.104	1.088	1.012	1.007	1.006	1.003	1.005	1.033	1.003	1.003	1.000	1.021	1.001	1.000	1.000	1.000	1.000						
June-90	5.891	1.382	1.072	1.062	1.048	1.027	1.015	1.005	1.015	1.004	1.001	1.003	1.006	1.009	1.002	1.000	1.003	1.003	1.003							
June-91	4.241	1.158	1.112	1.045	1.044	1.019	1.013	1.011	1.015	1.005	1.003	1.002	1.004	1.004	1.000	1.000	1.000	1.000								
June-92	2.159	1.174	1.068	1.056	1.015	1.009	1.005	1.004	1.008	1.013	1.008	1.014	1.014	1.016	1.013	1.012	1.013									
June-93	2.713	1.105	1.063	1.024	1.014	1.003	1.002	1.006	1.003	1.002	1.003	1.002	1.000	1.000	1.000	1.000										
June-94	1.937	1.110	1.101	1.092	1.046	1.046	1.026	1.019	1.018	1.021	1.021	1.029	1.018	1.019	1.011											
June-95	2.230	1.219	1.022	1.029	1.012	1.019	1.040	1.026	1.170	1.033	1.003	1.212	1.019	1.017												
June-96	2.260	1.095	1.064	1.038	1.021	1.071	1.006	1.016	1.005	1.005	1.006	1.000	1.000													
June-97	1.813	1.173	1.121	1.091	1.025	1.017	1.054	1.042	1.033	1.031	1.038	1.041														
June-98	2.324	1.120	1.071	1.056	1.012	1.008	1.065	1.001	1.002	1.007	1.013															
June-99	2.099	1.200	1.203	1.047	1.026	1.017	1.006	1.006	1.011	1.008																
June-00	2.168	1.258	1.095	1.040	1.021	1.009	1.003	1.001	1.003																	
June-01	2.241	1.212	1.213	1.084	1.031	1.025	1.009	1.006																		
June-02	2.150	1.570	1.266	1.054	1.020	1.006	1.007																			
June-03	5.509	1.206	1.045	1.031	1.013	1.056																				
June-04	2.384	1.130	1.072	1.028	1.017																					
June-05	1.881	1.133	1.082	1.029																						
June-06	2.003	1.135	1.138																							
June-07	1.988	1.227																								
June-08	2.393																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.705	1.273	1.144	1.093	1.049	1.045	1.030	1.028	1.021	1.011	1.012	1.023	1.013	1.006	1.005	1.009	1.008	1.002	1.002	1.000	1.001	1.001	1.000	1.000	1.000	1.000	
Latest 5	2.130	1.166	1.121	1.045	1.020	1.023	1.018	1.011	1.011	1.017	1.016	1.057	1.010	1.011	1.005	1.003	1.006	1.001	1.003	1.000	1.001	1.001					
Latest 3	2.128	1.165	1.097	1.030	1.017	1.029	1.007	1.004	1.005	1.015	1.019	1.084	1.012	1.012	1.008	1.004	1.005	1.001	1.002	1.000	1.002	1.001	1.000	1.000			
Volume Wtd																											
All Yrs	2.391	1.209	1.112	1.067	1.036	1.035	1.022	1.013	1.021	1.011	1.012	1.025	1.010	1.008	1.007	1.012	1.009	1.002	1.003	1.001	1.002	1.001	1.000	1.000	1.000		
Latest 5	2.122	1.163	1.113	1.044	1.020	1.023	1.017	1.011	1.011	1.017	1.017	1.050	1.010	1.012	1.006	1.003	1.007	1.001	1.003	1.001	1.002						
Latest 3	2.129	1.163	1.098	1.029	1.017	1.028	1.007	1.004	1.005	1.017	1.019	1.072	1.012	1.012	1.009	1.005	1.006	1.001	1.002	1.000	1.003	1.001	1.000				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.391*	*1.235*	*1.144*	*1.038*	*1.021*	*1.013*	*1.006*	*1.002*	*1.022*	*1.019*	*1.016*	*1.021*	*1.014*	*1.007*	*1.005*	*1.005*	*1.003*	*1.003*	*1.003*	*1.002*	*1.001*	*1.001*	*1.000*	*1.000*	*1.000*	*1.000*	
Selected	2.391	1.166	1.144	1.030	1.017	1.029	1.007	1.004	1.021	1.017	1.019	1.023	1.013	1.008	1.005	1.005	1.003	1.003	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000
FacToUlt	3.925	1.641	1.407	1.230	1.195	1.176	1.143	1.135	1.131	1.107	1.089	1.069	1.045	1.032	1.023	1.018	1.013	1.010	1.007	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000
Percent of Ult	25.5%	60.9%	71.1%	81.3%	83.7%	85.1%	87.5%	88.1%	88.5%	90.3%	91.8%	93.6%	95.7%	96.9%	97.7%	98.2%	98.7%	99.0%	99.3%	99.6%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/07		As of 6/08		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	381,565	409,401	394,575	433,977	13,010	3.4%	24,576	6.0%
6/30/82-83	53,310	53,575	53,310	53,575	0	0.0%	0	0.0%
6/30/83-84	27,912	28,051	27,912	28,051	0	0.0%	0	0.0%
6/30/84-85	113,455	114,020	113,455	114,020	0	0.0%	0	0.0%
6/30/85-86	385,000	384,000	386,269	388,190	1,269	0.3%	4,190	1.1%
6/30/86-87	238,397	239,583	239,246	240,437	849	0.4%	853	0.4%
6/30/87-88	625,000	625,000	628,000	628,000	3,000	0.5%	3,000	0.5%
6/30/88-89	427,000	427,000	426,000	426,000	(1,000)	-0.2%	(1,000)	-0.2%
6/30/89-90	540,000	540,000	540,000	540,000	0	0.0%	0	0.0%
6/30/90-91	477,000	478,000	476,000	476,000	(1,000)	-0.2%	(2,000)	-0.4%
6/30/91-92	729,000	730,000	736,000	736,000	7,000	1.0%	6,000	0.8%
6/30/92-93	508,880	511,411	508,880	511,411	0	0.0%	0	0.0%
6/30/93-94	535,000	536,000	538,000	538,000	3,000	0.6%	2,000	0.4%
6/30/94-95	533,000	534,000	539,000	539,000	6,000	1.1%	5,000	0.9%
6/30/95-96	608,000	610,000	600,000	600,000	(8,000)	-1.3%	(10,000)	-1.6%
6/30/96-97	593,000	594,000	605,000	605,000	12,000	2.0%	11,000	1.9%
6/30/97-98	457,000	459,000	457,000	458,000	0	0.0%	(1,000)	-0.2%
6/30/98-99	366,000	371,000	364,000	366,000	(2,000)	-0.5%	(5,000)	-1.3%
6/30/99-00	543,000	550,000	534,000	536,000	(9,000)	-1.7%	(14,000)	-2.5%
6/30/00-01	632,000	639,000	636,000	638,000	4,000	0.6%	(1,000)	-0.2%
6/30/01-02	598,000	605,000	600,000	603,000	2,000	0.3%	(2,000)	-0.3%
6/30/02-03	568,000	575,000	595,000	597,000	27,000	4.8%	22,000	3.8%
6/30/03-04	793,000	820,000	805,000	806,000	12,000	1.5%	(14,000)	-1.7%
6/30/04-05	754,000	830,000	758,000	801,000	4,000	0.5%	(29,000)	-3.5%
6/30/05-06	846,000	924,000	847,000	870,000	1,000	0.1%	(54,000)	-5.8%
6/30/06-07	816,000	985,000	816,000	885,000	0	0.0%	(100,000)	-10.2%
6/30/07-08	1,052,000	1,059,000	1,000,000	1,033,000	(52,000)	-4.9%	(26,000)	-2.5%
6/30/08-09								
Total	14,200,519	14,631,042	14,223,647	14,450,661	23,128	0.2%	(180,380)	-1.2%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 7, Exhibit 2, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
324	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
312	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
300	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
288	100.0%	0.0%	0.0%	0.0%	0.0%	1.000	1.000
276	100.0%	0.1%	0.0%	0.0%	0.0%	1.000	1.000
264	99.9%	0.1%	0.1%	0.0%	0.0%	0.981	0.971
252	99.8%	0.2%	0.2%	0.1%	0.1%	0.962	0.944
240	99.6%	0.3%	0.4%	0.1%	0.1%	0.953	0.931
228	99.3%	0.3%	0.7%	0.1%	0.1%	0.944	0.918
216	99.0%	0.3%	1.0%	0.1%	0.1%	0.929	0.897
204	98.7%	0.5%	1.3%	0.3%	0.2%	0.913	0.875
192	98.2%	0.5%	1.8%	0.3%	0.2%	0.907	0.866
180	97.7%	0.8%	2.3%	0.4%	0.3%	0.896	0.851
168	96.9%	1.2%	3.1%	0.7%	0.6%	0.891	0.845
156	95.7%	2.1%	4.3%	1.3%	1.0%	0.893	0.848
144	93.6%	1.8%	6.4%	1.1%	0.9%	0.899	0.856
132	91.8%	1.5%	8.2%	1.0%	0.8%	0.889	0.843
120	90.3%	1.8%	9.7%	1.3%	1.1%	0.875	0.823
108	88.5%	0.3%	11.5%	0.2%	0.2%	0.863	0.808
96	88.1%	0.6%	11.9%	0.4%	0.4%	0.834	0.768
84	87.5%	2.5%	12.5%	1.9%	1.7%	0.811	0.736
72	85.1%	1.4%	14.9%	1.1%	1.0%	0.813	0.740
60	83.7%	2.4%	16.3%	2.0%	1.8%	0.798	0.721
48	81.3%	10.2%	18.7%	8.9%	8.3%	0.795	0.718
36	71.1%	10.1%	28.9%	9.2%	8.8%	0.841	0.781
24	60.9%	35.5%	39.1%	33.4%	32.5%	0.853	0.798
12	25.5%	25.5%	74.5%	25.0%	24.7%	0.897	0.857
Total		100.0%					

NOTES:

(2) = 1 / Section 7, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	78,676	118,078		68,808	103,269
6/30/82-83	265	530	1.000	265	530
6/30/83-84	139	278	1.000	139	278
6/30/84-85	564	1,129	1.000	564	1,129
6/30/85-86	1,922	3,843	1.000	1,922	3,843
6/30/86-87	1,190	2,381	1.000	1,190	2,381
6/30/87-88	760	760	0.981	745	745
6/30/88-89	846	846	0.962	814	814
6/30/89-90	2,364	2,364	0.953	2,252	2,252
6/30/90-91	3,528	3,528	0.944	3,329	3,329
6/30/91-92	7,469	7,469	0.929	6,940	6,940
6/30/92-93	2,532	5,063	0.913	2,313	4,625
6/30/93-94	9,303	9,303	0.907	8,436	8,436
6/30/94-95	12,410	12,410	0.896	11,115	11,115
6/30/95-96	18,158	18,158	0.891	16,185	16,185
6/30/96-97	26,025	26,025	0.893	23,234	23,234
6/30/97-98	29,690	30,690	0.899	26,679	27,578
6/30/98-99	29,759	31,759	0.889	26,463	28,241
6/30/99-00	51,853	53,853	0.875	45,356	47,105
6/30/00-01	73,852	75,852	0.863	63,764	65,491
6/30/01-02	71,124	74,124	0.834	59,353	61,857
6/30/02-03	74,605	76,605	0.811	60,489	62,111
6/30/03-04	120,210	121,210	0.813	97,696	98,509
6/30/04-05	123,447	166,447	0.798	98,548	132,875
6/30/05-06	158,763	181,763	0.795	126,202	144,484
6/30/06-07	235,982	304,982	0.841	198,382	256,388
6/30/07-08	390,464	423,464	0.853	333,075	361,225
6/30/08-09	810,894	862,894	0.897	726,976	773,595
Total	2,336,793	2,615,808		2,011,234	2,248,563
			(7) Total Discount Factor:	0.861	0.860

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	78,676	118,078
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	11,239	16,868
(11) Discounted Value at 4%:	68,808	103,269

NOTES:
(2), (3) From Section 7, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 7, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

Massachusetts Colleges & Universities - Cluster 4
Medical

Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	78,676	118,078		64,625	96,990
6/30/82-83	265	530	1.000	265	530
6/30/83-84	139	278	1.000	139	278
6/30/84-85	564	1,129	1.000	564	1,129
6/30/85-86	1,922	3,843	1.000	1,922	3,843
6/30/86-87	1,190	2,381	1.000	1,190	2,381
6/30/87-88	760	760	0.971	738	738
6/30/88-89	846	846	0.944	798	798
6/30/89-90	2,364	2,364	0.931	2,200	2,200
6/30/90-91	3,528	3,528	0.918	3,238	3,238
6/30/91-92	7,469	7,469	0.897	6,703	6,703
6/30/92-93	2,532	5,063	0.875	2,216	4,432
6/30/93-94	9,303	9,303	0.866	8,059	8,059
6/30/94-95	12,410	12,410	0.851	10,558	10,558
6/30/95-96	18,158	18,158	0.845	15,349	15,349
6/30/96-97	26,025	26,025	0.848	22,061	22,061
6/30/97-98	29,690	30,690	0.856	25,418	26,274
6/30/98-99	29,759	31,759	0.843	25,088	26,774
6/30/99-00	51,853	53,853	0.823	42,669	44,315
6/30/00-01	73,852	75,852	0.808	59,638	61,253
6/30/01-02	71,124	74,124	0.768	54,611	56,914
6/30/02-03	74,605	76,605	0.736	54,908	56,380
6/30/03-04	120,210	121,210	0.740	88,949	89,689
6/30/04-05	123,447	166,447	0.721	89,027	120,038
6/30/05-06	158,763	181,763	0.718	113,938	130,444
6/30/06-07	235,982	304,982	0.781	184,279	238,161
6/30/07-08	390,464	423,464	0.798	311,422	337,741
6/30/08-09	810,894	862,894	0.857	694,571	739,112
Total	2,336,793	2,615,808		1,885,143	2,106,383
			(7) Total Discount Factor:	0.807	0.805

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	78,676	118,078
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	11,239	16,868
(11) Discounted Value at 6%:	64,625	96,990

NOTES:
(2), (3) From Section 7, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 7, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Pd Loss Including Lump Sum	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		40,410,604			47,914,267	53,340,699	7,503,662	12,930,094		
6/30/82-83		5,169,348	5,857,436		5,711,000	6,150,308	541,652	980,960		
6/30/83-84		7,788,719	8,941,420		8,717,885	9,388,491	929,166	1,599,773		
6/30/84-85	714,731	15,887,739	18,625,308	17,367,168	17,367,000	18,625,000	1,479,261	2,737,261	2.430	2.606
6/30/85-86	768,615	18,537,221	21,707,689	20,591,169	20,591,000	21,708,000	2,053,779	3,170,779	2.679	2.824
6/30/86-87	883,277	18,647,611	22,195,154	21,117,433	21,117,000	22,195,000	2,469,389	3,547,389	2.391	2.513
6/30/87-88	1,346,746	25,716,775	30,359,568	30,066,646	30,067,000	31,878,000	4,350,225	6,161,225	2.233	2.367
6/30/88-89	1,465,984	23,328,903	27,856,795	27,093,774	27,094,000	27,857,000	3,765,097	4,528,097	1.848	1.900
6/30/89-90	1,473,293	22,160,742	27,013,981	26,694,069	26,694,000	27,014,000	4,533,258	4,853,258	1.812	1.834
6/30/90-91	1,383,691	19,627,547	24,419,590	24,391,181	24,391,000	24,420,000	4,763,453	4,792,453	1.763	1.765
6/30/91-92	1,341,919	11,366,655	14,488,577	14,465,878	14,466,000	15,213,000	3,099,345	3,846,345	1.078	1.134
6/30/92-93	1,324,022	8,436,287	12,008,927	11,255,035	11,255,000	12,009,000	2,818,713	3,572,713	0.850	0.907
6/30/93-94	1,400,303	9,514,580	12,806,568	12,775,987	12,776,000	12,807,000	3,261,420	3,292,420	0.912	0.915
6/30/94-95	1,472,926	8,543,602	11,727,394	11,711,766	11,712,000	11,727,000	3,168,398	3,183,398	0.795	0.796
6/30/95-96	1,556,911	8,644,853	12,295,610	12,268,386	12,268,000	12,910,000	3,623,147	4,265,147	0.788	0.829
6/30/96-97	1,953,175	9,302,701	13,447,716	13,459,328	13,448,000	14,132,000	4,145,299	4,829,299	0.689	0.724
6/30/97-98	1,890,544	8,098,257	11,832,715	11,894,382	11,833,000	12,489,000	3,734,743	4,390,743	0.626	0.661
6/30/98-99	2,053,169	8,223,937	12,560,246	12,637,839	12,560,000	13,270,000	4,336,063	5,046,063	0.612	0.646
6/30/99-00	2,177,952	9,499,291	15,177,427	15,191,532	15,177,000	15,951,000	5,677,709	6,451,709	0.697	0.732
6/30/00-01	2,170,750	8,613,073	14,202,516	14,236,784	14,203,000	14,949,000	5,589,927	6,335,927	0.654	0.689
6/30/01-02	2,261,335	9,349,044	15,819,976	15,827,317	15,820,000	16,619,000	6,470,956	7,269,956	0.700	0.735
6/30/02-03	2,228,246	9,112,847	16,411,610	16,381,316	16,381,000	17,232,000	7,268,153	8,119,153	0.735	0.773
6/30/03-04	2,222,588	7,753,070	14,709,659	14,752,154	14,710,000	15,490,000	6,956,930	7,736,930	0.662	0.697
6/30/04-05	2,274,629	8,130,964	16,163,126	16,366,377	16,163,000	16,366,000	8,032,036	8,235,036	0.711	0.720
6/30/05-06	2,445,102	6,688,147	14,970,033	16,225,265	14,970,000	16,225,000	8,281,853	9,536,853	0.612	0.664
6/30/06-07	2,575,811	4,929,682	12,962,308	15,945,861	12,962,000	15,946,000	8,032,318	11,016,318	0.503	0.619
6/30/07-08	2,745,738	4,787,931	18,200,890	19,076,978	17,291,000	20,031,000	12,503,069	15,243,069	0.630	0.730
6/30/08-09	2,711,675	2,202,179	17,188,968	18,960,810	17,189,000	18,961,000	14,986,821	16,758,821	0.634	0.699
Total	44,843,132	340,472,310	443,951,208	430,754,430	484,848,152	514,903,498	144,375,842	174,431,188		
Tot 6/30/84-09	44,843,132	287,103,639	429,152,352	430,754,430	422,505,000	446,024,000	135,401,361	158,920,361	0.942	0.995

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) Sum of Section 8, Exhibit 1, Page 2, Column 3 and Section 8, Exhibit 1, Page 9, Column 8
(4) From Section 8, Exhibit 1, Page 2, Column 8
(5) From Section 8, Exhibit 1, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Accident Year	Payroll (000's)	Paid Loss Excluding Lump Sum	Paid LDF	Adjstmnt for Extra Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim	Average Age
All Prior Yrs		38,765,390							24	19		76
6/30/82-83		5,125,598	1.080	1.050	5,813,030	44,406	5,857,436		4	4	171,858	79
6/30/83-84		7,305,169	1.102	1.050	8,450,617	490,803	8,941,420		2	2	572,724	74
6/30/84-85	714,731	15,141,235	1.124	1.050	17,865,684	759,624	18,625,308	2.606	6	4	681,112	80
6/30/85-86	768,615	17,430,688	1.146	1.030	20,578,844	1,128,845	21,707,689	2.824	9	8	393,520	75
6/30/86-87	883,277	17,127,747	1.169	1.030	20,630,377	1,564,777	22,195,154	2.513	6	8	437,829	70
6/30/87-88	1,346,746	23,645,371	1.193	1.000	28,207,389	2,152,178	30,359,568	2.254	12	12	380,168	70
6/30/88-89	1,465,984	20,402,670	1.216	1.000	24,815,006	3,041,789	27,856,795	1.900	12	11	401,121	71
6/30/89-90	1,473,293	19,445,117	1.242	1.000	24,153,132	2,860,849	27,013,981	1.834	9	9	523,113	64
6/30/90-91	1,383,691	17,129,945	1.268	1.000	21,727,694	2,691,896	24,419,590	1.765	12	9	510,861	67
6/30/91-92	1,341,919	10,024,920	1.297	1.000	13,004,808	1,483,770	14,488,577	1.080	12	9	331,099	67
6/30/92-93	1,324,022	7,331,914	1.330	1.100	10,725,818	1,283,109	12,008,927	0.907	7	6	565,651	66
6/30/93-94	1,400,303	8,208,058	1.369	1.000	11,237,695	1,568,874	12,806,568	0.915	8	7	432,805	65
6/30/94-95	1,472,926	7,023,885	1.411	1.000	9,910,616	1,816,778	11,727,394	0.796	8	6	481,122	70
6/30/95-96	1,556,911	7,415,770	1.455	1.000	10,791,872	1,503,738	12,295,610	0.790	8	6	562,684	68
6/30/96-97	1,953,175	7,473,882	1.502	1.000	11,222,421	2,225,295	13,447,716	0.689	5	3	1,249,513	67
6/30/97-98	1,890,544	5,909,062	1.554	1.000	9,179,793	2,652,922	11,832,715	0.626	6	6	545,122	56
6/30/98-99	2,053,169	6,235,873	1.611	1.000	10,045,746	2,514,500	12,560,246	0.612	9	6	634,979	54
6/30/99-00	2,177,952	7,629,742	1.667	1.000	12,715,043	2,462,384	15,177,427	0.697	15	6	847,550	59
6/30/00-01	2,170,750	7,073,145	1.726	1.000	12,209,989	1,992,528	14,202,516	0.654	11	9	570,760	56
6/30/01-02	2,261,335	7,488,627	1.790	1.000	13,401,641	2,418,336	15,819,976	0.700	14	10	591,301	50
6/30/02-03	2,228,246	7,459,850	1.879	1.000	14,017,065	2,394,545	16,411,610	0.737	22	17	385,719	49
6/30/03-04	2,222,588	6,318,306	1.974	1.000	12,474,427	2,235,232	14,709,659	0.662	26	15	410,408	51
6/30/04-05	2,274,629	6,318,763	2.098	1.000	13,259,485	2,903,641	16,163,126	0.711	52	29	239,335	53
6/30/05-06	2,445,102	5,443,647	2.285	1.000	12,438,516	2,531,516	14,970,033	0.612	68	45	155,442	51
6/30/06-07	2,575,811	4,091,097	2.590	1.000	10,594,431	2,367,877	12,962,308	0.503	188	82	79,309	51
6/30/07-08	2,745,738	4,505,431	3.380	1.000	15,230,303	2,970,586	18,200,890	0.663	453	220	48,749	49
6/30/08-09	2,711,675	1,952,179	7.282	1.000	14,216,166	2,972,802	17,188,968	0.634		417	29,410	46
Total	44,843,132	299,423,080			388,917,607	55,033,602	443,951,208		1,008	985		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 8, Exhibit 1, Page 7
(5) Based on information from the MA WCRIB
(6) = (3) x (4) x (5)
(7) From Section 8, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss Excluding Lump Sum	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	714,731	1.863	15,141,235	1.124	16,607,544	759,624	17,367,168	2.430	2.324
6/30/85-86	768,615	2.072	17,430,688	1.146	19,462,324	1,128,845	20,591,169	2.679	2.532
6/30/86-87	883,277	1.895	17,127,747	1.169	19,552,656	1,564,777	21,117,433	2.391	2.214
6/30/87-88	1,346,746	1.960	23,645,371	1.193	27,914,467	2,152,178	30,066,646	2.233	2.073
6/30/88-89	1,465,984	1.400	20,402,670	1.216	24,051,985	3,041,789	27,093,774	1.848	1.641
6/30/89-90	1,473,293	1.528	19,445,117	1.242	23,833,220	2,860,849	26,694,069	1.812	1.618
6/30/90-91	1,383,691	1.561	17,129,945	1.268	21,699,285	2,691,896	24,391,181	1.763	1.568
6/30/91-92	1,341,919	0.962	10,024,920	1.297	12,982,108	1,483,770	14,465,878	1.078	0.967
6/30/92-93	1,324,022	0.804	7,331,914	1.330	9,971,925	1,283,109	11,255,035	0.850	0.753
6/30/93-94	1,400,303	0.794	8,208,058	1.369	11,207,113	1,568,874	12,775,987	0.912	0.800
6/30/94-95	1,472,926	0.669	7,023,885	1.411	9,894,988	1,816,778	11,711,766	0.795	0.672
6/30/95-96	1,556,911	0.688	7,415,770	1.455	10,764,647	1,503,738	12,268,386	0.788	0.691
6/30/96-97	1,953,175	0.576	7,473,882	1.502	11,234,033	2,225,295	13,459,328	0.689	0.575
6/30/97-98	1,890,544	0.495	5,909,062	1.554	9,241,460	2,652,922	11,894,382	0.629	0.489
6/30/98-99	2,053,169	0.499	6,235,873	1.611	10,123,339	2,514,500	12,637,839	0.616	0.493
6/30/99-00	2,177,952	0.585	7,629,742	1.667	12,729,148	2,462,384	15,191,532	0.698	0.584
6/30/00-01	2,170,750	0.566	7,073,145	1.726	12,244,256	1,992,528	14,236,784	0.656	0.564
6/30/01-02	2,261,335	0.593	7,488,627	1.790	13,408,981	2,418,336	15,827,317	0.700	0.593
6/30/02-03	2,228,246	0.626	7,459,850	1.879	13,986,771	2,394,545	16,381,316	0.735	0.628
6/30/03-04	2,222,588	0.565	6,318,306	1.974	12,516,922	2,235,232	14,752,154	0.664	0.563
6/30/04-05	2,274,629	0.600	6,318,763	2.098	13,462,736	2,903,641	16,366,377	0.720	0.592
6/30/05-06	2,445,102	0.600	5,443,647	2.285	13,693,749	2,531,516	16,225,265	0.664	0.560
6/30/06-07	2,575,811	0.600	4,091,097	2.590	13,577,983	2,367,877	15,945,861	0.619	0.527
6/30/07-08	2,745,738	0.600	4,505,431	3.380	16,106,391	2,970,586	19,076,978	0.695	0.587
6/30/08-09	2,711,675	0.600	1,952,179	7.282	15,988,008	2,972,802	18,960,810	0.699	0.590
Total	44,843,132		248,226,923		376,256,038	54,498,392	430,754,430		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 8, Exhibit 1, Page 4, Column 11
(4) From Section 8, Exhibit 1, Page 2, Column 3
(5) From Section 8, Exhibit 1, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) From Section 8, Exhibit 1, Page 9, Column 13
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Exp Ult Loss Excluding Lump Sum	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									1.863	1.863
6/30/85-86									2.072	2.072
6/30/86-87									1.895	1.895
6/30/87-88									1.960	1.960
6/30/88-89									1.400	1.400
6/30/89-90									1.528	1.528
6/30/90-91	1,383,691	21,727,694	1.570	0.937	1.471	1.208	1.777	1.570	1.438	1.561
6/30/91-92	1,341,919	13,004,808	0.969	1.028	0.996	1.196	1.191	0.969	0.971	0.962
6/30/92-93	1,324,022	10,725,818	0.810	1.198	0.971	1.184	1.150	0.810	0.952	0.804
6/30/93-94	1,400,303	11,237,695	0.803	1.183	0.949	1.173	1.113	0.803	0.951	0.794
6/30/94-95	1,472,926	9,910,616	0.673	1.172	0.789	1.161	0.916	0.673	0.793	0.669
6/30/95-96	1,556,911	10,791,872	0.693	1.163	0.806	1.149	0.926	0.693	0.774	0.688
6/30/96-97	1,953,175	11,222,421	0.575	1.151	0.661	1.138	0.753	0.575	0.679	0.576
6/30/97-98	1,890,544	9,179,793	0.486	1.136	0.552	1.127	0.622	0.486	0.596	0.495
6/30/98-99	2,053,169	10,045,746	0.489	1.121	0.549	1.116	0.612	0.489	0.587	0.499
6/30/99-00	2,177,952	12,715,043	0.584	1.103	0.644	1.105	0.712	0.584	0.675	0.585
6/30/00-01	2,170,750	12,209,989	0.562	1.075	0.605	1.094	0.662	0.562	0.651	0.566
6/30/01-02	2,261,335	13,401,641	0.593	1.054	0.625	1.083	0.677	0.593	0.667	0.593
6/30/02-03	2,228,246	14,017,065	0.629	1.051	0.661	1.072	0.709	0.629	0.696	0.626
6/30/03-04	2,222,588	12,474,427	0.561	1.051	0.590	1.062	0.626	0.561	0.700	0.565
6/30/04-05	2,274,629	13,259,485	0.583	1.044	0.609	1.051	0.640	0.583	0.700	0.600
6/30/05-06	2,445,102	12,438,516	0.509	1.033	0.526	1.041	0.547	0.509	0.600	0.600
6/30/06-07	2,575,811	10,594,431	0.411	1.022	0.420	1.030	0.433	0.411	0.600	0.600
6/30/07-08	2,745,738	15,230,303	0.555	1.011	0.561	1.020	0.572	0.555	0.600	0.600
6/30/08-09	2,711,675	14,216,166	0.524	1.000	0.524	1.010	0.530	0.524		0.600
Total	38,190,487	238,403,527								

Trend Last 4 (ex 08-09):	-4.6%	Avg 3 (x08-09):	0.517
Trend Last 8 (ex 08-09):	-3.7%	Avg 5 (x08-09):	0.564
Trend Last 12 (ex 08-09):	-1.7%	Avg 10 (x08-09):	0.619
Prior Selected Trend:	1.0%	Prior Sel Avg:	0.600
Selected Trend:	1.0%	Sel. Loss Cost:	0.600

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 8, Exhibit 1, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.950	
(2)	Credibility		64%	
(3)	Average Pmt Trend Statewide		0.960	
(4)	Credibility Weighted Trend		0.954	
		(Low)		(High)
(5)	Selected Range	0.949		0.973
(6)	Incremental Paid for 2009	716,898		716,898
(7)	Estimated Reserve	13,286,825		25,834,885
(8)	Paid to Date (82 & Prior)	38,765,390		38,765,390
(9)	Est Ult Paid for 1982 & Prior	52,052,215		64,600,275

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	791,862	837,805
(11)	Projected Number of Years	7	7
(12)	Estimated Reserve	5,543,037	5,864,633
(13)	Paid to Date (82 & Prior)	38,765,390	38,048,492
(14)	Est Ult Paid for 1982 & Prior	44,308,428	43,913,125
(14a)	Paid Counts During Fiscal Year	19	24

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	46,244,374	51,670,807
(16)	Lump Sum Ultimates	1,669,892	1,669,892
(17)	Ult Loss Including Lump Sums	**47,914,267**	**53,340,699**
(18)	Implied Tail	1.193	1.333
(19)	Ult Loss Inc Lump Sums @ 6/08	47,621,831	53,342,343

NOTES:

(1) From Section 8, Exhibit 1, Page 6
(2) = (Average of Section 8, Exhibit 1, Page 6, Column 3 / 3,000,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 8, Exhibit 1, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 8, Exhibit 1, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) From Section 8, Exhibit 1, Page 9, Column 13
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	1,836,769	14.424			
1993	2	1,798,132	14.402	0.979		
1994	3	1,805,622	14.406	1.004		
1995	4	1,547,567	14.252	0.857		
1996	5	1,421,249	14.167	0.918		
1997	6	1,347,840	14.114	0.948		
1998	7	1,296,821	14.075	0.962		
1999	8	1,188,256	13.988	0.916		
2000	9	1,366,125	14.127	1.150	n =	18
2001	10	1,385,608	14.142	1.014	S(x) =	36,009
2002	11	1,127,515	13.936	0.814	S(x-sq) =	72,036,489
2003	12	1,046,115	13.861	0.928	S(xy) =	503,713
2004	13	1,007,259	13.823	0.963	S(y) =	252
2005	14	889,985	13.699	0.884	D =	8,721
2006	15	854,725	13.659	0.960	slope =	-0.054
2007	16	901,012	13.711	1.054	Avg Trend =	0.946
2008	17	757,677	13.538	0.841		
2009	18	716,898	13.483	0.946		
					Selected Trend:	**0.950**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 0.946 = 716898 / 757677

Commonwealth of Massachusetts Workers Compensation
All Other - Clusters 5-17 & 95
INDEMNITY
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324
June-83	231,024	575,253	850,794	1,079,038	1,313,630	1,547,045	1,752,282	2,008,011	2,253,139	2,495,680	2,697,289	2,900,500	3,128,719	3,307,827	3,431,589	3,539,243	3,710,205	3,863,378	3,993,953	4,130,963	4,277,923	4,408,084	4,548,681	4,684,745	4,831,991	4,987,790	5,125,598
June-84	474,232	1,177,837	1,738,838	2,206,285	2,688,699	3,194,391	3,593,923	3,979,171	4,253,324	4,483,497	4,692,563	4,887,962	5,105,946	5,268,212	5,510,171	5,713,715	5,953,029	6,114,581	6,330,589	6,551,091	6,749,135	6,911,821	7,056,179	7,158,846	7,234,716	7,305,169	
June-85	977,090	2,372,578	3,464,586	4,349,747	5,275,439	6,134,761	6,920,369	7,655,499	8,408,427	8,983,219	9,607,477	10,145,930	10,640,204	11,178,862	11,641,664	12,100,236	12,599,733	13,016,766	13,426,358	13,778,892	14,131,892	14,427,029	14,710,082	14,949,032	15,141,235		
June-86	1,346,949	3,307,907	4,829,702	6,090,487	7,340,375	8,352,083	9,113,471	9,830,455	10,384,747	11,054,823	11,652,485	12,298,057	12,995,823	13,464,328	13,904,681	14,437,279	14,899,857	15,315,399	15,687,156	16,043,093	16,396,498	16,749,018	17,081,069	17,430,688			
June-87	1,601,233	3,880,011	5,503,885	7,082,566	8,405,662	9,270,533	9,956,299	10,556,456	11,085,673	11,623,420	12,106,294	12,632,595	13,327,657	13,820,597	14,335,672	14,795,690	15,267,959	15,661,703	15,953,801	16,321,920	16,607,046	16,861,857	17,127,747				
June-88	2,137,513	5,007,777	7,745,041	10,041,912	12,075,717	13,478,064	14,314,633	15,200,521	15,990,897	16,687,795	17,326,343	17,991,163	18,710,472	19,340,236	19,962,128	20,594,429	21,200,720	21,738,131	22,267,656	22,756,365	23,248,699	23,645,371					
June-89	1,712,857	5,080,303	7,663,780	9,679,037	11,203,387	12,173,513	13,105,806	13,862,567	14,433,962	15,035,025	15,605,979	16,156,892	16,752,699	17,314,807	17,864,824	18,333,675	18,761,144	19,180,530	19,588,446	20,011,654	20,402,670						
June-90	2,296,897	5,721,042	8,298,538	10,219,139	11,305,744	12,281,818	13,134,163	13,878,235	14,556,408	15,345,419	15,898,180	16,435,568	16,919,598	17,383,167	17,777,202	18,153,288	18,514,019	18,829,999	19,129,560	19,445,117							
June-91	1,963,238	4,739,981	6,742,583	8,047,589	9,308,882	10,318,373	10,933,284	11,411,152	12,022,048	12,546,665	13,141,453	13,738,283	14,329,913	14,888,135	15,354,127	15,837,750	16,311,134	16,689,475	17,129,945								
June-92	1,567,027	3,199,073	4,248,177	5,126,895	5,548,304	5,823,625	6,278,092	6,617,495	6,955,659	7,247,236	7,617,889	7,987,140	8,298,781	8,572,496	8,940,354	9,365,337	9,715,209	10,024,920									
June-93	1,093,248	2,645,187	3,492,766	4,149,352	4,610,531	4,966,351	5,148,147	5,423,620	5,783,566	6,064,338	6,275,882	6,484,665	6,664,357	6,833,263	7,010,090	7,177,333	7,331,914										
June-94	1,108,341	2,442,329	3,499,107	4,117,213	4,786,813	5,345,023	5,784,388	6,350,297	6,596,878	6,855,808	7,108,040	7,401,172	7,629,538	7,841,336	8,036,532	8,208,058											
June-95	1,320,706	2,682,119	3,617,627	4,377,145	4,799,858	5,146,590	5,470,951	5,690,639	5,928,230	6,125,266	6,322,277	6,510,106	6,695,050	6,862,701	7,023,885												
June-96	1,108,821	2,267,039	3,245,140	3,817,977	4,427,598	4,928,644	5,324,160	5,709,230	6,066,925	6,359,154	6,633,555	6,919,769	7,184,823	7,415,770													
June-97	1,085,126	2,350,834	3,458,998	4,440,774	5,289,243	5,991,102	6,443,225	6,730,818	6,877,491	7,036,406	7,147,793	7,354,650	7,473,882														
June-98	760,353	2,208,225	3,319,672	3,933,784	4,535,498	4,913,580	5,187,189	5,377,292	5,538,593	5,683,480	5,803,895	5,909,062															
June-99	1,160,394	2,519,810	3,441,432	4,263,196	4,763,871	5,080,496	5,423,838	5,694,351	5,858,839	6,093,043	6,235,873																
June-00	1,478,087	3,369,760	4,601,283	5,433,894	6,170,827	6,679,071	7,051,320	7,313,676	7,476,289	7,629,742																	
June-01	1,609,875	3,605,278	4,700,879	5,525,999	6,126,399	6,527,511	6,768,096	7,002,422	7,073,145																		
June-02	1,821,131	4,134,238	5,441,659	6,321,376	6,748,539	7,056,349	7,305,019	7,488,627																			
June-03	2,185,619	4,646,586	6,055,662	6,651,765	7,013,996	7,231,292	7,459,850																				
June-04	1,753,076	3,756,461	4,930,176	5,714,500	6,081,077	6,318,306																					
June-05	1,819,778	3,933,297	5,289,170	6,002,168	6,318,763																						
June-06	1,788,326	3,829,026	4,910,437	5,443,647																							
June-07	1,734,963	3,632,388	4,091,097																								
June-08	2,020,827	4,505,431																									
June-09	1,952,179																										

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324
June-83	2.490	1.479	1.268	1.217	1.178	1.133	1.146	1.122	1.108	1.081	1.075	1.079	1.057	1.037	1.031	1.048	1.041	1.034	1.034	1.036	1.030	1.032	1.030	1.031	1.032	1.028
June-84	2.484	1.476	1.269	1.219	1.188	1.125	1.107	1.069	1.054	1.047	1.042	1.045	1.032	1.046	1.037	1.042	1.027	1.035	1.035	1.030	1.024	1.021	1.015	1.011	1.010	
June-85	2.428	1.460	1.255	1.213	1.163	1.128	1.106	1.098	1.068	1.069	1.056	1.049	1.051	1.041	1.039	1.041	1.033	1.031	1.026	1.026	1.021	1.020	1.016	1.013		
June-86	2.456	1.460	1.261	1.205	1.138	1.091	1.079	1.056	1.065	1.054	1.055	1.057	1.036	1.033	1.038	1.032	1.028	1.024	1.023	1.022	1.021	1.020	1.020			
June-87	2.423	1.419	1.287	1.187	1.103	1.074	1.060	1.050	1.049	1.042	1.043	1.055	1.037	1.037	1.032	1.032	1.026	1.019	1.023	1.017	1.015	1.016				
June-88	2.343	1.547	1.297	1.203	1.116	1.062	1.062	1.052	1.044	1.038	1.038	1.040	1.034	1.032	1.032	1.029	1.025	1.024	1.022	1.022	1.017					
June-89	2.966	1.509	1.263	1.157	1.087	1.077	1.058	1.041	1.042	1.038	1.035	1.037	1.034	1.032	1.026	1.023	1.022	1.021	1.022	1.020						
June-90	2.491	1.451	1.231	1.106	1.086	1.069	1.057	1.049	1.054	1.036	1.034	1.029	1.027	1.023	1.021	1.020	1.017	1.016	1.016							
June-91	2.414	1.422	1.194	1.157	1.108	1.060	1.044	1.054	1.044	1.047	1.045	1.043	1.039	1.031	1.031	1.030	1.023	1.026								
June-92	2.041	1.328	1.207	1.082	1.050	1.078	1.054	1.051	1.042	1.051	1.048	1.039	1.033	1.043	1.048	1.037	1.032									
June-93	2.420	1.320	1.188	1.111	1.077	1.037	1.054	1.066	1.049	1.035	1.033	1.028	1.025	1.026	1.024	1.022										
June-94	2.204	1.433	1.177	1.163	1.117	1.082	1.098	1.039	1.039	1.037	1.041	1.031	1.028	1.025	1.021											
June-95	2.031	1.349	1.210	1.097	1.072	1.063	1.040	1.042	1.033	1.032	1.030	1.028	1.025	1.023												
June-96	2.045	1.431	1.177	1.160	1.113	1.080	1.072	1.063	1.048	1.043	1.043	1.038	1.032													
June-97	2.166	1.471	1.284	1.191	1.133	1.075	1.045	1.022	1.023	1.016	1.029	1.016														
June-98	2.904	1.503	1.185	1.153	1.083	1.056	1.037	1.030	1.026	1.021	1.018															
June-99	2.172	1.366	1.239	1.117	1.066	1.068	1.050	1.029	1.040	1.023																
June-00	2.280	1.365	1.181	1.136	1.082	1.056	1.037	1.022	1.021																	
June-01	2.239	1.304	1.176	1.109	1.065	1.037	1.035	1.010																		
June-02	2.270	1.316	1.162	1.068	1.046	1.035	1.025																			
June-03	2.126	1.303	1.098	1.054	1.031	1.032																				
June-04	2.143	1.312	1.159	1.064	1.039																					
June-05	2.161	1.345	1.135	1.053																						
June-06	2.141	1.282	1.109																							
June-07	2.094	1.126																								
June-08	2.229																									

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	To Ult
Simple Avg																											
All Yrs	2.314	1.391	1.209	1.140	1.097	1.072	1.063	1.051	1.047	1.042	1.042	1.041	1.035	1.033	1.032	1.032	1.028	1.026	1.025	1.025	1.022	1.022	1.020	1.018	1.021	1.028	
Latest 5	2.154	1.274	1.133	1.070	1.053	1.045	1.037	1.023	1.032	1.027	1.032	1.028	1.029	1.030	1.029	1.026	1.024	1.021	1.021	1.021	1.020	1.022					
Latest 3	2.155	1.251	1.134	1.057	1.039	1.035	1.032	1.020	1.029	1.020	1.030	1.028	1.028	1.025	1.031	1.030	1.024	1.021	1.020	1.020	1.018	1.018	1.017	1.018			
Volume Wtd																											
All Yrs	2.296	1.386	1.207	1.136	1.093	1.068	1.059	1.048	1.046	1.041	1.041	1.040	1.034	1.032	1.031	1.030	1.026	1.024	1.023	1.022	1.020	1.020	1.019	1.016	1.019		
Latest 5	2.156	1.277	1.132	1.069	1.052	1.044	1.036	1.022	1.031	1.027	1.033	1.028	1.029	1.030	1.028	1.026	1.023	1.021	1.021	1.021	1.019						
Latest 3	2.158	1.254	1.134	1.057	1.038	1.034	1.032	1.020	1.028	1.020	1.031	1.027	1.028	1.025	1.032	1.030	1.023	1.021	1.020	1.020	1.018	1.018	1.018				

Dev Factor Selection																											
Industry 1	2.761	1.550	1.215	1.105	1.052	1.023	1.016																				
Industry 2		1.806	1.309	1.145	1.069	1.033	1.019	1.015	1.011	1.004	1.011	1.005	1.004	1.003	1.003	1.002	1.004	1.003	1.002	1.003							
Prior	2.133	1.313	1.146	1.084	1.057	1.054	1.050	1.033	1.034	1.030	1.037	1.038	1.030	1.031	1.030	1.029	1.023	1.023	1.023	1.023	1.019	1.020	1.020	1.020	1.020	1.110	
Selected	2.154	1.305	1.133	1.089	1.063	1.051	1.050	1.037	1.036	1.034	1.037	1.035	1.032	1.031	1.031	1.029	1.025	1.023	1.021	1.021	1.020	1.020	1.020	1.020	1.020	1.020	1.080
FacToUlt	7.282	3.380	2.590	2.285	2.098	1.974	1.879	1.790	1.726	1.667	1.611	1.554	1.502	1.455	1.411	1.369	1.330	1.297	1.268	1.242	1.216	1.193	1.169	1.146	1.124	1.102	1.080
Percent of Ult	13.7%	29.6%	38.6%	43.8%	47.7%	50.7%	53.2%	55.9%	57.9%	60.0%	62.1%	64.4%	66.6%	68.7%	70.9%	73.0%	75.2%	77.1%	78.8%	80.5%	82.2%	83.8%	85.5%	87.2%	89.0%	90.8%	92.6%

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	47,621,831	53,342,343	47,914,267	53,340,699	292,436	0.6%	(1,644)	0.0%
6/30/82-83	5,823,369	6,271,320	5,711,000	6,150,308	(112,369)	-1.9%	(121,012)	-1.9%
6/30/83-84	9,034,932	9,729,927	8,717,885	9,388,491	(317,048)	-3.5%	(341,436)	-3.5%
6/30/84-85	17,506,000	19,272,000	17,367,000	18,625,000	(139,000)	-0.8%	(647,000)	-3.4%
6/30/85-86	20,554,000	22,228,000	20,591,000	21,708,000	37,000	0.2%	(520,000)	-2.3%
6/30/86-87	21,264,000	22,577,000	21,117,000	22,195,000	(147,000)	-0.7%	(382,000)	-1.7%
6/30/87-88	30,281,000	32,197,000	30,067,000	31,878,000	(214,000)	-0.7%	(319,000)	-1.0%
6/30/88-89	27,195,000	28,115,000	27,094,000	27,857,000	(101,000)	-0.4%	(258,000)	-0.9%
6/30/89-90	27,020,000	27,463,000	26,694,000	27,014,000	(326,000)	-1.2%	(449,000)	-1.6%
6/30/90-91	24,024,000	24,500,000	24,391,000	24,420,000	367,000	1.5%	(80,000)	-0.3%
6/30/91-92	14,559,000	15,288,000	14,466,000	15,213,000	(93,000)	-0.6%	(75,000)	-0.5%
6/30/92-93	11,934,000	12,181,000	11,255,000	12,009,000	(679,000)	-5.7%	(172,000)	-1.4%
6/30/93-94	13,029,000	13,587,000	12,776,000	12,807,000	(253,000)	-1.9%	(780,000)	-5.7%
6/30/94-95	11,896,000	12,410,000	11,712,000	11,727,000	(184,000)	-1.5%	(683,000)	-5.5%
6/30/95-96	12,370,000	13,412,000	12,268,000	12,910,000	(102,000)	-0.8%	(502,000)	-3.7%
6/30/96-97	13,795,000	14,423,000	13,448,000	14,132,000	(347,000)	-2.5%	(291,000)	-2.0%
6/30/97-98	11,931,000	12,637,000	11,833,000	12,489,000	(98,000)	-0.8%	(148,000)	-1.2%
6/30/98-99	12,739,000	13,483,000	12,560,000	13,270,000	(179,000)	-1.4%	(213,000)	-1.6%
6/30/99-00	15,392,000	16,138,000	15,177,000	15,951,000	(215,000)	-1.4%	(187,000)	-1.2%
6/30/00-01	14,518,000	15,226,000	14,203,000	14,949,000	(315,000)	-2.2%	(277,000)	-1.8%
6/30/01-02	16,060,000	16,691,000	15,820,000	16,619,000	(240,000)	-1.5%	(72,000)	-0.4%
6/30/02-03	16,831,000	17,942,000	16,381,000	17,232,000	(450,000)	-2.7%	(710,000)	-4.0%
6/30/03-04	15,031,000	16,509,000	14,710,000	15,490,000	(321,000)	-2.1%	(1,019,000)	-6.2%
6/30/04-05	16,527,000	18,349,000	16,163,000	16,366,000	(364,000)	-2.2%	(1,983,000)	-10.8%
6/30/05-06	15,278,000	16,449,000	14,970,000	16,225,000	(308,000)	-2.0%	(224,000)	-1.4%
6/30/06-07	14,965,000	17,123,000	12,962,000	15,946,000	(2,003,000)	-13.4%	(1,177,000)	-6.9%
6/30/07-08	16,747,000	19,688,000	17,291,000	20,031,000	544,000	3.2%	343,000	1.7%
6/30/08-09								
Total	473,926,132	507,231,590	467,659,152	495,942,498	(6,266,980)	-1.3%	(11,289,092)	-2.2%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 8, Exhibit 1, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Indemnity

Calculation of Ultimate Lump Sum Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Accident Year	Paid Loss Excluding Lump Sum	Implied Cumulative LDF	Ult Loss Excluding Lump Sum	Selected Incr Lump Sum % Outstdg	Cumulative Lump Sum % Outstdg	Total Lump Sum Outstdg	Paid Lump Sum to Date	Est Ult Lump Sum - Incr Method	Ultimate Lump Sum Percentage	Lump Sum LDF	Est Ult Lump Sum - Paid Method	Selected Est Ultimate Lump Sums	Prior Est Ultimate Lump Sums
All Prior Yrs	38,765,390	1.263	48,957,591	0.0%	0.0%	0	1,645,214	1,645,214	3.4%	1.030	1,694,570	1,669,892	1,669,892
6/30/82-83	5,125,598	1.134	5,813,030	0.0%	0.0%	0	43,750	43,750	0.8%	1.030	45,063	44,406	44,429
6/30/83-84	7,305,169	1.157	8,450,617	0.0%	0.0%	0	483,550	483,550	5.7%	1.030	498,057	490,803	492,299
6/30/84-85	15,141,235	1.180	17,865,684	0.0%	0.0%	0	746,504	746,504	4.2%	1.035	772,744	759,624	771,194
6/30/85-86	17,430,688	1.181	20,578,844	0.0%	0.0%	0	1,106,534	1,106,534	5.4%	1.040	1,151,155	1,128,845	1,063,620
6/30/86-87	17,127,747	1.205	20,630,377	0.1%	0.1%	20,630	1,519,864	1,540,494	7.5%	1.046	1,589,059	1,564,777	1,590,712
6/30/87-88	23,645,371	1.193	28,207,389	0.1%	0.2%	56,415	2,071,404	2,127,819	7.5%	1.051	2,176,538	2,152,178	2,183,319
6/30/88-89	20,402,670	1.216	24,815,006	0.1%	0.3%	67,217	2,926,233	2,993,450	12.1%	1.056	3,090,128	3,041,789	3,036,377
6/30/89-90	19,445,117	1.242	24,153,132	0.1%	0.4%	89,578	2,715,625	2,805,203	11.6%	1.074	2,916,496	2,860,849	2,936,444
6/30/90-91	17,129,945	1.268	21,727,694	0.3%	0.7%	142,861	2,497,602	2,640,463	12.2%	1.098	2,743,329	2,691,896	2,601,744
6/30/91-92	10,024,920	1.297	13,004,808	0.3%	0.9%	118,183	1,341,736	1,459,919	11.2%	1.124	1,507,621	1,483,770	1,522,318
6/30/92-93	7,331,914	1.463	10,725,818	0.6%	1.5%	157,936	1,104,373	1,262,309	11.8%	1.181	1,303,909	1,283,109	1,278,877
6/30/93-94	8,208,058	1.369	11,237,695	0.5%	2.0%	220,350	1,306,522	1,526,872	13.6%	1.233	1,610,875	1,568,874	1,597,575
6/30/94-95	7,023,885	1.411	9,910,616	0.1%	2.0%	199,629	1,519,717	1,719,346	17.3%	1.260	1,914,209	1,816,778	1,829,482
6/30/95-96	7,415,770	1.455	10,791,872	0.1%	2.1%	223,138	1,229,083	1,452,221	13.5%	1.265	1,555,255	1,503,738	1,514,934
6/30/96-97	7,473,882	1.502	11,222,421	0.2%	2.3%	253,036	1,828,819	2,081,855	18.6%	1.295	2,368,734	2,225,295	2,263,544
6/30/97-98	5,909,062	1.554	9,179,793	0.2%	2.4%	224,379	2,189,195	2,413,574	26.3%	1.321	2,892,271	2,652,922	2,493,759
6/30/98-99	6,235,873	1.611	10,045,746	0.4%	2.9%	289,919	1,988,064	2,277,983	22.7%	1.384	2,751,016	2,514,500	2,536,930
6/30/99-00	7,629,742	1.667	12,715,043	0.4%	3.3%	416,828	1,869,548	2,286,376	18.0%	1.411	2,638,392	2,462,384	2,446,111
6/30/00-01	7,073,145	1.726	12,209,989	0.4%	3.7%	452,600	1,539,928	1,992,528	16.3%	1.460	2,248,198	1,992,528	1,991,625
6/30/01-02	7,488,627	1.790	13,401,641	0.5%	4.2%	557,919	1,860,417	2,418,336	18.0%	1.520	2,827,229	2,418,336	2,332,828
6/30/02-03	7,459,850	1.879	14,017,065	1.1%	5.3%	741,548	1,652,998	2,394,545	17.1%	1.617	2,672,788	2,394,545	2,508,674
6/30/03-04	6,318,306	1.974	12,474,427	1.1%	6.4%	800,468	1,434,764	2,235,232	17.9%	1.770	2,539,308	2,235,232	2,303,282
6/30/04-05	6,318,763	2.098	13,259,485	1.8%	8.2%	1,091,440	1,812,201	2,903,641	21.9%	2.181	3,951,551	2,903,641	2,907,455
6/30/05-06	5,443,647	2.285	12,438,516	2.1%	10.3%	1,287,016	1,244,500	2,531,516	20.4%	2.873	3,575,258	2,531,516	2,509,733
6/30/06-07	4,091,097	2.590	10,594,431	4.1%	14.4%	1,529,292	838,585	2,367,877	22.4%	5.422	4,546,471	2,367,877	2,562,409
6/30/07-08	4,505,431	3.380	15,230,303	3.2%	17.6%	2,688,086	282,500	2,970,586	19.5%	19.447	5,493,868	2,970,586	2,910,000
6/30/08-09	1,952,179	7.282	14,216,166	1.5%	19.2%	2,722,802	250,000	2,972,802	20.9%	80.104	20,025,878	2,972,802	
Total	299,423,080		437,875,197			14,351,272	41,049,230	55,400,502	12.7%		83,099,971	56,703,494	53,899,568

NOTES:
(2) From Section 8, Exhibit 1, Page 2, Column 3
(3) = (4) / (2)
(4) From Section 8, Exhibit 1, Page 2, Column 6
(5) From Section 8, Exhibit 1, Page 11
(6) Downward sum of (5)
(7) = (6) x (4)
(8) From Section 8, Exhibit 1, Page 10
(9) = (7) + (8)
(10) = (9) / (4)
(11) From Section 8, Exhibit 1, Page 12
(12) = (8) x (11)
(13) Selected based on (9) and (12)
(14) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts Workers Compensation
All Other - Clusters 5-17 & 95
INDEMNITY
Lump Sum Development
Incremental Lump Sum Payments

Acc Yr Ending	*0-12*	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*324-336*
All Prior Yrs	0	0	0	0	0	0	0	22,500	0	0	137,500	40,000	80,500	250,234	367,000	139,604	85,000	0	57,500	55,001	30,000	12,250	84,000	140,000	66,000	0	78,125	0
Jun-83	0	0	0	0	0	0	0	0	0	0	35,000	7,750	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jun-84	0	0	0	0	0	0	91,600	53,250	15,000	55,000	59,700	57,000	0	57,000	0	0	0	85,000	0	0	0	0	0	10,000	0	0		
Jun-85	0	0	0	30,000	3,000	52,500	34,554	34,000	58,000	215,750	30,200	92,500	50,000	40,000	0	49,000	32,000	0	25,000	0	0	0	0	0	0			
Jun-86	0	0	12,000	40,559	73,500	32,500	75,000	175,399	179,500	0	92,000	20,000	50,000	0	0	0	0	30,000	55,000	64,000	16,000	45,000	58,275	87,801				
Jun-87	0	25,000	130,000	100,666	150,501	60,866	192,525	168,500	91,501	59,806	28,000	0	12,500	65,000	50,000	164,999	50,000	80,000	80,000	10,000	0	0	0					
Jun-88	0	49,000	40,808	39,958	205,752	408,847	243,000	223,039	268,000	62,000	75,000	30,000	61,000	0	0	0	155,000	20,000	0	100,000	90,000	0						
Jun-89	0	69,855	143,500	275,776	374,100	341,500	255,000	238,502	222,500	170,500	146,000	30,000	123,000	40,000	25,000	0	63,500	185,000	50,000	110,000	62,500							
Jun-90	0	114,301	281,968	342,440	535,751	231,565	150,800	494,500	46,300	140,000	0	157,000	0	15,000	0	25,000	106,000	60,000	0	15,000								
Jun-91	3,500	73,750	373,500	399,501	281,850	319,500	203,500	25,001	143,000	0	10,000	54,000	0	0	10,000	153,000	72,500	255,000	120,000									
Jun-92	12,000	110,012	182,635	135,586	76,000	151,001	0	112,000	76,500	98,000	105,000	20,000	13,500	86,268	20,867	20,867	86,500	35,000										
Jun-93	6,000	137,948	181,424	231,001	158,000	58,000	49,000	16,000	77,000	85,000	0	55,000	0	0	0	0	50,000											
Jun-94	9,500	273,155	204,001	189,365	168,500	29,001	28,000	96,000	0	14,000	0	230,000	65,000	0	0	0												
Jun-95	185,350	223,402	371,000	281,000	90,965	116,600	17,000	0	0	62,000	58,400	34,000	0	80,000	0													
Jun-96	6,000	246,050	463,500	224,701	104,430	25,501	3,000	40,000	0	1	35,000	62,500	0	18,400														
Jun-97	23,365	498,701	322,500	317,501	204,000	108,251	0	105,000	106,501	60,000	83,000	0	0															
Jun-98	287,037	356,948	285,460	504,000	281,500	83,000	69,535	88,965	20,000	0	10,000	202,750																
Jun-99	203,500	124,500	487,181	242,900	185,982	168,001	201,000	120,000	65,000	170,000	20,000																	
Jun-00	97,731	486,478	307,037	269,800	93,500	190,999	184,884	110,118	53,001	76,000																		
Jun-01	10,000	182,428	335,500	71,500	244,500	251,000	145,000	220,000	80,000																			
Jun-02	0	114,545	362,081	283,539	440,001	286,251	109,000	265,000																				
Jun-03	0	77,201	596,801	430,835	218,160	255,001	75,000																					
Jun-04	47,500	25,277	294,987	520,000	358,000	189,000																						
Jun-05	6,157	60,866	417,500	949,001	378,677																							
Jun-06	0	159,500	370,000	715,000																								
Jun-07	26,000	238,583	574,002																									
Jun-08	0	282,500																										
Jun-09	250,000																											

Cumulative Lump Sum Payments

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*	*336*
All Prior Yrs	0	0	0	0	0	0	0	22,500	22,500	22,500	160,000	200,000	280,500	530,734	897,734	1,037,338	1,122,338	1,122,338	1,179,838	1,234,839	1,264,839	1,277,089	1,361,089	1,501,089	1,567,089	1,567,089	1,645,214	1,645,214
Jun-83	0	0	0	0	0	0	0	0	0	0	35,000	42,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	
Jun-84	0	0	0	0	0	0	91,600	144,850	159,850	214,850	274,550	331,550	331,550	388,550	388,550	388,550	388,550	473,550	473,550	473,550	473,550	473,550	473,550	483,550	483,550	483,550		
Jun-85	0	0	0	30,000	33,000	85,500	120,054	154,054	212,054	427,804	458,004	550,504	600,504	640,504	640,504	689,504	721,504	721,504	746,504	746,504	746,504	746,504	746,504	746,504	746,504			
Jun-86	0	0	12,000	52,559	126,059	158,559	233,559	408,958	588,458	588,458	680,458	700,458	750,458	750,458	750,458	750,458	750,458	780,458	835,458	899,458	915,458	960,458	1,018,733	1,106,534				
Jun-87	0	25,000	155,000	255,666	406,167	467,033	659,558	828,058	919,559	979,365	1,007,365	1,007,365	1,019,865	1,084,865	1,134,865	1,299,864	1,349,864	1,429,864	1,509,864	1,519,864	1,519,864	1,519,864	1,519,864					
Jun-88	0	49,000	89,808	129,766	335,518	744,365	987,365	1,210,404	1,478,404	1,540,404	1,615,404	1,645,404	1,706,404	1,706,404	1,706,404	1,706,404	1,861,404	1,881,404	1,881,404	1,981,404	2,071,404	2,071,404						
Jun-89	0	69,855	213,355	489,131	863,231	1,204,731	1,459,731	1,698,233	1,920,733	2,091,233	2,237,233	2,267,233	2,390,233	2,430,233	2,455,233	2,455,233	2,518,733	2,703,733	2,753,733	2,863,733	2,926,233							
Jun-90	0	114,301	396,269	738,709	1,274,460	1,506,025	1,656,825	2,151,325	2,197,625	2,337,625	2,337,625	2,494,625	2,494,625	2,509,625	2,509,625	2,534,625	2,640,625	2,700,625	2,700,625	2,715,625								
Jun-91	3,500	77,250	450,750	850,251	1,132,101	1,451,601	1,655,101	1,680,102	1,823,102	1,823,102	1,833,102	1,887,102	1,887,102	1,887,102	1,897,102	2,050,102	2,122,602	2,377,602	2,497,602									
Jun-92	12,000	122,012	304,647	440,233	516,233	667,234	667,234	779,234	855,734	953,734	1,058,734	1,078,734	1,092,234	1,178,502	1,199,369	1,220,236	1,306,736	1,341,736										
Jun-93	6,000	143,948	325,372	556,373	714,373	772,373	821,373	837,373	914,373	999,373	999,373	1,054,373	1,054,373	1,054,373	1,054,373	1,054,373	1,104,373											
Jun-94	9,500	282,655	486,656	676,021	844,521	873,522	901,522	997,522	997,522	1,011,522	1,011,522	1,241,522	1,306,522	1,306,522	1,306,522	1,306,522												
Jun-95	185,350	408,752	779,752	1,060,752	1,151,717	1,268,317	1,285,317	1,285,317	1,285,317	1,347,317	1,405,717	1,439,717	1,439,717	1,519,717	1,519,717													
Jun-96	6,000	252,050	715,550	940,251	1,044,681	1,070,182	1,073,182	1,113,182	1,113,182	1,113,183	1,148,183	1,210,683	1,210,683	1,229,083														
Jun-97	23,365	522,066	844,566	1,162,067	1,366,067	1,474,318	1,474,318	1,579,318	1,685,819	1,745,819	1,828,819	1,828,819	1,828,819															
Jun-98	287,037	643,985	929,445	1,433,445	1,714,945	1,797,945	1,867,480	1,956,445	1,976,445	1,976,445	1,986,445	2,189,195																
Jun-99	203,500	328,000	815,181	1,058,081	1,244,063	1,412,064	1,613,064	1,733,064	1,798,064	1,968,064	1,988,064																	
Jun-00	97,731	584,209	891,246	1,161,046	1,254,546	1,445,545	1,630,429	1,740,547	1,793,548	1,869,548																		
Jun-01	10,000	192,428	527,928	599,428	843,928	1,094,928	1,239,928	1,459,928	1,539,928																			
Jun-02	0	114,545	476,626	760,165	1,200,166	1,486,417	1,595,417	1,860,417																				
Jun-03	0	77,201	674,002	1,104,837	1,322,997	1,577,998	1,652,998																					
Jun-04	47,500	72,777	367,764	887,764	1,245,764	1,434,764																						
Jun-05	6,157	67,023	484,523	1,433,524	1,812,201																							
Jun-06	0	159,500	529,500	1,244,500																								
Jun-07	26,000	264,583	838,585																									
Jun-08	0	282,500																										
Jun-09	250,000																											

Commonwealth of Massachusetts Workers Compensation
All Other - Clusters 5-17 & 95
INDEMNITY
Lump Sum Development
Incremental Lump Sums as a % of Ultimate Losses Excluding Lump Sums

Acc Yr Ending	0-12	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
All Prior Yrs	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.002	0.005	0.007	0.003	0.002	0.000	0.001	0.001	0.001	0.000	0.002	0.003	0.001	0.000	0.002	0.000
Jun-83	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jun-84	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.006	0.002	0.007	0.007	0.007	0.000	0.007	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000		
Jun-85	0.000	0.000	0.000	0.002	0.000	0.003	0.002	0.002	0.003	0.012	0.002	0.005	0.003	0.002	0.000	0.003	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000			
Jun-86	0.000	0.000	0.001	0.002	0.004	0.002	0.004	0.009	0.009	0.000	0.004	0.001	0.002	0.000	0.000	0.000	0.000	0.001	0.003	0.003	0.001	0.002	0.003	0.004				
Jun-87	0.000	0.001	0.006	0.005	0.007	0.003	0.009	0.008	0.004	0.003	0.001	0.000	0.001	0.003	0.002	0.008	0.002	0.004	0.004	0.000	0.000	0.000	0.000					
Jun-88	0.000	0.002	0.001	0.001	0.007	0.014	0.009	0.008	0.010	0.002	0.003	0.001	0.002	0.000	0.000	0.000	0.005	0.001	0.000	0.004	0.003	0.000						
Jun-89	0.000	0.003	0.006	0.011	0.015	0.014	0.010	0.010	0.009	0.007	0.006	0.001	0.005	0.002	0.001	0.000	0.003	0.007	0.002	0.004	0.003							
Jun-90	0.000	0.005	0.012	0.014	0.022	0.010	0.006	0.020	0.002	0.006	0.000	0.007	0.000	0.001	0.000	0.001	0.004	0.002	0.000	0.001								
Jun-91	0.000	0.003	0.017	0.018	0.013	0.015	0.009	0.001	0.007	0.000	0.000	0.002	0.000	0.000	0.000	0.007	0.003	0.012	0.006									
Jun-92	0.001	0.008	0.014	0.010	0.006	0.012	0.000	0.009	0.006	0.008	0.008	0.002	0.001	0.007	0.002	0.002	0.007	0.003										
Jun-93	0.001	0.013	0.017	0.022	0.015	0.005	0.005	0.001	0.007	0.008	0.000	0.005	0.000	0.000	0.000	0.000	0.005											
Jun-94	0.001	0.024	0.018	0.017	0.015	0.003	0.002	0.009	0.000	0.001	0.000	0.020	0.006	0.000	0.000	0.000												
Jun-95	0.019	0.023	0.037	0.028	0.009	0.012	0.002	0.000	0.000	0.006	0.006	0.003	0.000	0.008	0.000													
Jun-96	0.001	0.023	0.043	0.021	0.010	0.002	0.000	0.004	0.000	0.000	0.003	0.006	0.000	0.002														
Jun-97	0.002	0.044	0.029	0.028	0.018	0.010	0.000	0.009	0.009	0.005	0.007	0.000	0.000															
Jun-98	0.031	0.039	0.031	0.055	0.031	0.009	0.008	0.010	0.002	0.000	0.001	0.022																
Jun-99	0.020	0.012	0.048	0.024	0.019	0.017	0.020	0.012	0.006	0.017	0.002																	
Jun-00	0.008	0.038	0.024	0.021	0.007	0.015	0.015	0.009	0.004	0.006																		
Jun-01	0.001	0.015	0.027	0.006	0.020	0.021	0.012	0.018	0.007																			
Jun-02	0.000	0.009	0.027	0.021	0.033	0.021	0.008	0.020																				
Jun-03	0.000	0.006	0.043	0.031	0.016	0.018	0.005																					
Jun-04	0.004	0.002	0.024	0.042	0.029	0.015																						
Jun-05	0.000	0.005	0.031	0.072	0.029																							
Jun-06	0.000	0.013	0.030	0.057																								
Jun-07	0.002	0.023	0.054																									
Jun-08	0.000	0.019																										
Jun-09	0.018																											

Averages		12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336
Simple Avg																												
All Yrs (ex P)	0.004	0.013	0.022	0.021	0.014	0.010	0.007	0.008	0.005	0.005	0.003	0.005	0.001	0.002	0.000	0.002	0.003	0.004	0.002	0.002	0.001	0.000	0.001	0.001	0.000	0.000	0.000	
Latest 5	0.004	0.012	0.036	0.045	0.025	0.018	0.012	0.014	0.006	0.006	0.004	0.010	0.001	0.003	0.000	0.002	0.004	0.005	0.002	0.002	0.001	0.000	0.001					
Latest 3	0.007	0.018	0.038	0.057	0.024	0.018	0.008	0.015	0.006	0.008	0.003	0.009	0.000	0.003	0.000	0.001	0.005	0.006	0.003	0.003	0.002	0.001	0.001	0.002	0.000			
Olympic Avg																												
All Yrs (ex P)	0.003	0.012	0.021	0.020	0.014	0.010	0.006	0.008	0.005	0.004	0.003	0.004	0.001	0.002	0.000	0.001	0.003	0.004	0.001	0.001	0.001	0.000	0.000	0.001	0.000			
Latest 10	0.002	0.012	0.033	0.035	0.021	0.015	0.006	0.009	0.004	0.004	0.003	0.006	0.001	0.002	0.000	0.002	0.003	0.004										
Latest 5	0.001	0.012	0.035	0.043	0.026	0.018	0.012	0.013	0.006	0.004	0.004	0.010	0.000	0.003	0.000	0.001	0.004	0.004	0.002	0.002	0.001	0.000	0.000					

Dev Factor Selection																												
Prior	NA	0.013	0.030	0.047	0.025	0.018	0.011	0.011	0.004	0.004	0.003	0.003	0.002	0.002	0.001	0.003	0.005	0.007	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.000	0.000	
Selected	NA	0.015	0.032	0.041	0.021	0.018	0.011	0.011	0.005	0.004	0.004	0.004	0.002	0.002	0.001	0.001	0.005	0.006	0.003	0.003	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
FacToUlt	NA	0.192	0.176	0.144	0.103	0.082	0.064	0.053	0.042	0.037	0.033	0.029	0.024	0.023	0.021	0.020	0.020	0.015	0.009	0.007	0.004	0.003	0.002	0.001	0.000	0.000	0.000	0.000

Commonwealth of Massachusetts Workers Compensation
All Other - Clusters 5-17 & 95
INDEMNITY
Paid Loss Development
Paid Loss - Lump Sum only

Acc Yr Ending	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336
All Prior Yrs	0	0	0	0	0	0	0	22,500	22,500	22,500	160,000	200,000	280,500	530,734	897,734	1,037,338	1,122,338	1,122,338	1,179,838	1,234,839	1,264,839	1,277,089	1,361,089	1,501,089	1,567,089	1,567,089	1,645,214	1,645,214
Jun-83	0	0	0	0	0	0	0	0	0	0	35,000	42,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	43,750	
Jun-84	0	0	0	0	0	0	91,600	144,850	159,850	214,850	274,550	331,550	331,550	388,550	388,550	388,550	388,550	473,550	473,550	473,550	473,550	473,550	473,550	483,550	483,550	483,550		
Jun-85	0	0	0	30,000	33,000	85,500	120,054	154,054	212,054	427,804	458,004	550,504	600,504	640,504	640,504	689,504	721,504	721,504	746,504	746,504	746,504	746,504	746,504	746,504	746,504			
Jun-86	0	0	12,000	52,559	126,059	158,559	233,559	408,958	588,458	588,458	680,458	700,458	750,458	750,458	750,458	750,458	750,458	780,458	835,458	899,458	915,458	960,458	1,018,733	1,106,534				
Jun-87	0	25,000	155,000	255,666	406,167	467,033	659,558	828,058	919,559	979,365	1,007,365	1,007,365	1,019,865	1,084,865	1,134,865	1,299,864	1,349,864	1,429,864	1,509,864	1,519,864	1,519,864	1,519,864	1,519,864					
Jun-88	0	49,000	89,808	129,766	335,518	744,365	987,365	1,210,404	1,478,404	1,540,404	1,615,404	1,645,404	1,706,404	1,706,404	1,706,404	1,706,404	1,861,404	1,881,404	1,881,404	1,981,404	2,071,404	2,071,404						
Jun-89	0	69,855	213,355	489,131	863,231	1,204,731	1,459,731	1,698,233	1,920,733	2,091,233	2,237,233	2,267,233	2,390,233	2,430,233	2,455,233	2,455,233	2,518,733	2,703,733	2,753,733	2,863,733	2,926,233							
Jun-90	0	114,301	396,269	738,709	1,274,460	1,506,025	1,656,825	2,151,325	2,197,625	2,337,625	2,337,625	2,494,625	2,494,625	2,509,625	2,509,625	2,534,625	2,640,625	2,700,625	2,700,625	2,715,625								
Jun-91	3,500	77,250	450,750	850,251	1,132,101	1,451,601	1,655,101	1,680,102	1,823,102	1,823,102	1,833,102	1,887,102	1,887,102	1,887,102	1,897,102	2,050,102	2,122,602	2,377,602	2,497,602									
Jun-92	12,000	122,012	304,647	440,233	516,233	667,234	667,234	779,234	855,734	953,734	1,058,734	1,078,734	1,092,234	1,178,502	1,199,369	1,220,236	1,306,736	1,341,736										
Jun-93	6,000	143,948	325,372	556,373	714,373	772,373	821,373	837,373	914,373	999,373	999,373	1,054,373	1,054,373	1,054,373	1,054,373	1,054,373	1,104,373											
Jun-94	9,500	282,655	486,656	676,021	844,521	873,522	901,522	997,522	997,522	1,011,522	1,011,522	1,241,522	1,306,522	1,306,522	1,306,522	1,306,522												
Jun-95	185,350	408,752	779,752	1,060,752	1,151,717	1,268,317	1,285,317	1,285,317	1,285,317	1,347,317	1,405,717	1,439,717	1,439,717	1,519,717	1,519,717													
Jun-96	6,000	252,050	715,550	940,251	1,044,681	1,070,182	1,073,182	1,113,182	1,113,182	1,113,183	1,148,183	1,210,683	1,210,683	1,229,083														
Jun-97	23,365	522,066	844,566	1,162,067	1,366,067	1,474,318	1,474,318	1,579,318	1,685,819	1,745,819	1,828,819	1,828,819	1,828,819															
Jun-98	287,037	643,985	929,445	1,433,445	1,714,945	1,797,945	1,867,480	1,956,445	1,976,445	1,976,445	1,986,445	2,189,195																
Jun-99	203,500	328,000	815,181	1,058,081	1,244,063	1,412,064	1,613,064	1,733,064	1,798,064	1,968,064	1,988,064																	
Jun-00	97,731	584,209	891,246	1,161,046	1,254,546	1,445,545	1,630,429	1,740,547	1,793,548	1,869,548																		
Jun-01	10,000	192,428	527,928	599,428	843,928	1,094,928	1,239,928	1,459,928	1,539,928																			
Jun-02	0	114,545	476,626	760,165	1,200,166	1,486,417	1,595,417	1,860,417																				
Jun-03	0	77,201	674,002	1,104,837	1,322,997	1,577,998	1,652,998																					
Jun-04	47,500	72,777	367,764	887,764	1,245,764	1,434,764																						
Jun-05	6,157	67,023	484,523	1,433,524	1,812,201																							
Jun-06	0	159,500	529,500	1,244,500																								
Jun-07	26,000	264,583	838,585																									
Jun-08	0	282,500																										
Jun-09	250,000																											

Age-to-Age Factors

Acc Yr Ending	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
All Prior Yrs								1.000	1.000	7.111	1.250	1.403	1.892	1.691	1.156	1.082	1.000	1.051	1.047	1.024	1.010	1.066	1.103	1.044	1.000	1.050	1.000	
Jun-83											1.221	1.023	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Jun-84							1.581	1.104	1.344	1.278	1.208	1.000	1.172	1.000	1.000	1.000	1.219	1.000	1.000	1.000	1.000	1.000	1.021	1.000	1.000			
Jun-85				1.100	2.591	1.404	1.283	1.376	2.017	1.071	1.202	1.091	1.067	1.000	1.077	1.046	1.000	1.035	1.000	1.000	1.000	1.000	1.000	1.000				
Jun-86			4.380	2.398	1.258	1.473	1.751	1.439	1.000	1.156	1.029	1.071	1.000	1.000	1.000	1.000	1.040	1.070	1.077	1.018	1.049	1.061	1.086					
Jun-87		6.200	1.649	1.589	1.150	1.412	1.255	1.111	1.065	1.029	1.000	1.012	1.064	1.046	1.145	1.038	1.059	1.056	1.007	1.000	1.000	1.000						
Jun-88		1.833	1.445	2.586	2.219	1.326	1.226	1.221	1.042	1.049	1.019	1.037	1.000	1.000	1.000	1.091	1.011	1.000	1.053	1.045	1.000							
Jun-89		3.054	2.293	1.765	1.396	1.212	1.163	1.131	1.089	1.070	1.013	1.054	1.017	1.010	1.000	1.026	1.073	1.018	1.040	1.022								
Jun-90		3.467	1.864	1.725	1.182	1.100	1.298	1.022	1.064	1.000	1.067	1.000	1.006	1.000	1.010	1.042	1.023	1.000	1.006									
Jun-91	22.071	5.835	1.886	1.331	1.282	1.140	1.015	1.085	1.000	1.005	1.029	1.000	1.000	1.005	1.081	1.035	1.120	1.050										
Jun-92	10.168	2.497	1.445	1.173	1.293	1.000	1.168	1.098	1.115	1.110	1.019	1.013	1.079	1.018	1.017	1.071	1.027											
Jun-93	23.991	2.260	1.710	1.284	1.081	1.063	1.019	1.092	1.093	1.000	1.055	1.000	1.000	1.000	1.000	1.047												
Jun-94	29.753	1.722	1.389	1.249	1.034	1.032	1.106	1.000	1.014	1.000	1.227	1.052	1.000	1.000	1.000													
Jun-95	2.205	1.908	1.360	1.086	1.101	1.013	1.000	1.000	1.048	1.043	1.024	1.000	1.056	1.000														
Jun-96	42.008	2.839	1.314	1.111	1.024	1.003	1.037	1.000	1.000	1.031	1.054	1.000	1.015															
Jun-97	22.344	1.618	1.376	1.176	1.079	1.000	1.071	1.067	1.036	1.048	1.000	1.000																
Jun-98	2.244	1.443	1.542	1.196	1.048	1.039	1.048	1.010	1.000	1.005	1.102																	
Jun-99	1.612	2.485	1.298	1.176	1.135	1.142	1.074	1.038	1.095	1.010																		
Jun-00	5.978	1.526	1.303	1.081	1.152	1.128	1.068	1.030	1.042																			
Jun-01	19.243	2.744	1.135	1.408	1.297	1.132	1.177	1.055																				
Jun-02		4.161	1.595	1.579	1.239	1.073	1.166																					
Jun-03		8.730	1.639	1.197	1.193	1.048																						
Jun-04	1.532	5.053	2.414	1.403	1.152																							
Jun-05	10.886	7.229	2.959	1.264																								
Jun-06		3.320	2.350																									
Jun-07	10.176	3.169																										
Jun-08																												

Averages	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-252	252-264	264-276	276-288	288-300	300-312	312-324	324-336	To Ult
Simple Avg																												
All Yrs (ex P)	14.587	3.481	1.826	1.423	1.295	1.144	1.185	1.104	1.121	1.057	1.079	1.024	1.034	1.006	1.027	1.036	1.057	1.026	1.023	1.012	1.008	1.012	1.027	1.000	1.000	1.000		
Latest 5		5.500	2.191	1.370	1.207	1.105	1.107	1.040	1.035	1.028	1.082	1.010	1.030	1.005	1.022	1.044	1.051	1.025	1.036	1.017	1.010	1.012	1.042					
Latest 3		4.573	2.574	1.288	1.194	1.084	1.137	1.041	1.046	1.021	1.052	1.000	1.024	1.000	1.006	1.051	1.057	1.023	1.033	1.022	1.016	1.020	1.036	1.000				
Volume Wtd																												
All Yrs (ex P)	5.255	2.474	1.630	1.292	1.180	1.103	1.123	1.069	1.058	1.037	1.053	1.020	1.023	1.006	1.027	1.043	1.055	1.025	1.027	1.020	1.008	1.016	1.043	1.000	1.000			
Latest 5		4.515	2.145	1.343	1.200	1.102	1.101	1.038	1.037	1.025	1.072	1.010	1.030	1.004	1.025	1.041	1.053	1.023	1.031	1.021	1.008							
Latest 3		3.772	2.581	1.279	1.194	1.079	1.133	1.040	1.044	1.020	1.053	1.000	1.025	1.000	1.006	1.048	1.058	1.022	1.031	1.024	1.010	1.018	1.044					

Dev Factor Selection																												
Prior	4.119	3.496	1.948	1.300	1.243	1.108	1.064	1.026	1.036	1.026	1.047	1.022	1.019	1.006	1.022	1.035	1.057	1.006	1.025	1.021	1.005	1.005	1.005	1.005	1.005	1.001	1.030	
Selected	4.119	3.587	1.887	1.318	1.232	1.095	1.064	1.041	1.035	1.020	1.047	1.020	1.024	1.005	1.022	1.044	1.051	1.023	1.023	1.017	1.005	1.005	1.005	1.005	1.005	1.000	1.000	1.030
FacToUlt	80.104	19.447	5.422	2.873	2.181	1.770	1.617	1.520	1.460	1.411	1.384	1.321	1.295	1.265	1.260	1.233	1.181	1.124	1.098	1.074	1.056	1.051	1.046	1.040	1.035	1.030	1.030	1.030
Percent of Ult	1.2%	5.1%	18.4%	34.8%	45.9%	56.5%	61.8%	65.8%	68.5%	70.9%	72.3%	75.7%	77.2%	79.0%	79.4%	81.1%	84.7%	89.0%	91.0%	93.1%	94.7%	95.2%	95.6%	96.1%	96.6%	97.1%	97.1%	97.1%

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Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	7.4%	0.0%	2.5%	1.5%	1.000	1.000
324	92.6%	1.8%	7.4%	0.6%	0.4%	0.981	0.971
312	90.8%	1.8%	9.2%	0.7%	0.4%	0.950	0.927
300	89.0%	1.7%	11.0%	0.7%	0.4%	0.925	0.890
288	87.2%	1.7%	12.8%	0.7%	0.4%	0.902	0.858
276	85.5%	1.7%	14.5%	0.7%	0.5%	0.880	0.829
264	83.8%	1.6%	16.2%	0.7%	0.5%	0.861	0.801
252	82.2%	1.7%	17.8%	0.8%	0.5%	0.841	0.776
240	80.5%	1.7%	19.5%	0.8%	0.5%	0.824	0.753
228	78.8%	1.8%	21.2%	0.8%	0.6%	0.807	0.731
216	77.1%	1.9%	22.9%	1.0%	0.7%	0.792	0.711
204	75.2%	2.2%	24.8%	1.1%	0.8%	0.778	0.694
192	73.0%	2.2%	27.0%	1.2%	0.9%	0.767	0.680
180	70.9%	2.2%	29.1%	1.2%	0.9%	0.755	0.666
168	68.7%	2.1%	31.3%	1.2%	1.0%	0.744	0.652
156	66.6%	2.2%	33.4%	1.4%	1.1%	0.732	0.637
144	64.4%	2.3%	35.6%	1.5%	1.2%	0.721	0.624
132	62.1%	2.1%	37.9%	1.4%	1.1%	0.711	0.612
120	60.0%	2.1%	40.0%	1.4%	1.2%	0.699	0.598
108	57.9%	2.1%	42.1%	1.5%	1.2%	0.687	0.584
96	55.9%	2.7%	44.1%	2.0%	1.7%	0.676	0.571
84	53.2%	2.6%	46.8%	2.0%	1.8%	0.668	0.563
72	50.7%	3.0%	49.3%	2.4%	2.2%	0.660	0.554
60	47.7%	3.9%	52.3%	3.3%	3.0%	0.655	0.548
48	43.8%	5.1%	56.2%	4.5%	4.2%	0.654	0.549
36	38.6%	9.0%	61.4%	8.2%	7.8%	0.658	0.556
24	29.6%	15.8%	70.4%	14.9%	14.5%	0.677	0.582
12	13.7%	13.7%	86.3%	13.5%	13.3%	0.712	0.626
Total		100.0%					

NOTES:

(2) = 1 / Section 8, Exhibit 1, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

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Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	7,503,662	12,930,094		6,562,591	11,308,468
6/30/82-83	541,652	980,960	0.981	531,134	961,910
6/30/83-84	929,166	1,599,773	0.950	882,970	1,520,235
6/30/84-85	1,479,261	2,737,261	0.925	1,367,631	2,530,698
6/30/85-86	2,053,779	3,170,779	0.902	1,851,495	2,858,478
6/30/86-87	2,469,389	3,547,389	0.880	2,174,098	3,123,190
6/30/87-88	4,350,225	6,161,225	0.861	3,743,486	5,301,900
6/30/88-89	3,765,097	4,528,097	0.841	3,167,493	3,809,388
6/30/89-90	4,533,258	4,853,258	0.824	3,735,372	3,999,050
6/30/90-91	4,763,453	4,792,453	0.807	3,844,801	3,868,208
6/30/91-92	3,099,345	3,846,345	0.792	2,453,890	3,045,323
6/30/92-93	2,818,713	3,572,713	0.778	2,193,031	2,779,663
6/30/93-94	3,261,420	3,292,420	0.767	2,500,424	2,524,191
6/30/94-95	3,168,398	3,183,398	0.755	2,393,082	2,404,412
6/30/95-96	3,623,147	4,265,147	0.744	2,694,810	3,172,314
6/30/96-97	4,145,299	4,829,299	0.732	3,034,370	3,535,060
6/30/97-98	3,734,743	4,390,743	0.721	2,693,306	3,166,380
6/30/98-99	4,336,063	5,046,063	0.711	3,082,049	3,586,713
6/30/99-00	5,677,709	6,451,709	0.699	3,967,743	4,508,636
6/30/00-01	5,589,927	6,335,927	0.687	3,841,303	4,353,941
6/30/01-02	6,470,956	7,269,956	0.676	4,371,895	4,911,714
6/30/02-03	7,268,153	8,119,153	0.668	4,858,336	5,427,180
6/30/03-04	6,956,930	7,736,930	0.660	4,593,831	5,108,885
6/30/04-05	8,032,036	8,235,036	0.655	5,258,631	5,391,536
6/30/05-06	8,281,853	9,536,853	0.654	5,414,767	6,235,299
6/30/06-07	8,032,318	11,016,318	0.658	5,286,735	7,250,753
6/30/07-08	12,503,069	15,243,069	0.677	8,470,508	10,326,787
6/30/08-09	14,986,821	16,758,821	0.712	10,669,034	11,930,511
Total	144,375,842	174,431,188		105,638,817	128,940,824
			(7) Total Discount Factor:	0.732	0.739

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	7,503,662	12,930,094
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	1,071,952	1,847,156
(11) Discounted Value at 4%:	6,562,591	11,308,468

NOTES:
(2), (3) From Section 8, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 8, Exhibit 1, Page 13, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

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Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	7,503,662	12,930,094		6,163,565	10,620,877
6/30/82-83	541,652	980,960	0.971	526,099	952,792
6/30/83-84	929,166	1,599,773	0.927	861,447	1,483,178
6/30/84-85	1,479,261	2,737,261	0.890	1,316,926	2,436,872
6/30/85-86	2,053,779	3,170,779	0.858	1,761,818	2,720,028
6/30/86-87	2,469,389	3,547,389	0.829	2,046,222	2,939,490
6/30/87-88	4,350,225	6,161,225	0.801	3,486,657	4,938,153
6/30/88-89	3,765,097	4,528,097	0.776	2,920,123	3,511,888
6/30/89-90	4,533,258	4,853,258	0.753	3,412,249	3,653,117
6/30/90-91	4,763,453	4,792,453	0.731	3,480,657	3,501,848
6/30/91-92	3,099,345	3,846,345	0.711	2,203,354	2,734,403
6/30/92-93	2,818,713	3,572,713	0.694	1,955,082	2,478,062
6/30/93-94	3,261,420	3,292,420	0.680	2,216,649	2,237,719
6/30/94-95	3,168,398	3,183,398	0.666	2,109,383	2,119,369
6/30/95-96	3,623,147	4,265,147	0.652	2,361,302	2,779,711
6/30/96-97	4,145,299	4,829,299	0.637	2,642,396	3,078,408
6/30/97-98	3,734,743	4,390,743	0.624	2,332,304	2,741,969
6/30/98-99	4,336,063	5,046,063	0.612	2,654,845	3,089,558
6/30/99-00	5,677,709	6,451,709	0.598	3,395,162	3,857,999
6/30/00-01	5,589,927	6,335,927	0.584	3,265,795	3,701,629
6/30/01-02	6,470,956	7,269,956	0.571	3,692,885	4,148,863
6/30/02-03	7,268,153	8,119,153	0.563	4,091,871	4,570,972
6/30/03-04	6,956,930	7,736,930	0.554	3,854,412	4,286,562
6/30/04-05	8,032,036	8,235,036	0.548	4,404,363	4,515,678
6/30/05-06	8,281,853	9,536,853	0.549	4,544,382	5,233,020
6/30/06-07	8,032,318	11,016,318	0.556	4,463,611	6,121,839
6/30/07-08	12,503,069	15,243,069	0.582	7,271,771	8,865,352
6/30/08-09	14,986,821	16,758,821	0.626	9,386,598	10,496,443
Total	144,375,842	174,431,188		92,821,928	113,815,802
			(7) Total Discount Factor:	0.643	0.652

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	7,503,662	12,930,094
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	1,071,952	1,847,156
(11) Discounted Value at 6%:	6,163,565	10,620,877

NOTES:
(2), (3) From Section 8, Exhibit 1, Page 1, Columns 8, 9
(4) From Section 8, Exhibit 1, Page 13, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Total Indemnity (Including Lump Sums) + Medical

Calculation of Fiscal Year 7/1/09-10 Payments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
						Cumulative	Incremental Paid		Estimated Payments from		FY 7/1/09 - 6/30/10	
Accident	Est Ult Losses	Est Ult Losses	Paid Losses	Reserves	Reserves	Percent	as a % of	as a % of	7/1/09 - 6/30/10		as a % of Reserves	
Year	(Low)	(High)	to Date	(Low)	(High)	Paid	Ultimates	Reserves	(Low)	(High)	(Low)	(High)
All Prior Yrs	50,951,744	56,396,672	43,254,236	7,697,508	13,142,436				703,887	774,275	9.1%	5.9%
6/30/82-83	6,206,741	6,668,187	5,665,089	541,652	1,003,099	88.0%	1.5%	12.5%	67,717	125,407	12.5%	12.5%
6/30/83-84	9,508,698	10,226,891	8,579,532	929,166	1,647,359	86.9%	1.5%	11.5%	106,758	189,276	11.5%	11.5%
6/30/84-85	18,527,000	19,786,000	17,010,388	1,516,612	2,775,612	88.8%	1.5%	13.4%	203,062	371,633	13.4%	13.4%
6/30/85-86	22,472,000	23,589,000	20,346,156	2,125,844	3,242,844	88.3%	1.0%	8.6%	182,388	278,222	8.6%	8.6%
6/30/86-87	22,752,000	23,832,000	20,212,232	2,539,768	3,619,768	86.8%	1.0%	7.6%	192,080	273,760	7.6%	7.6%
6/30/87-88	33,306,000	35,121,000	28,801,183	4,504,817	6,319,817	84.2%	1.0%	6.3%	284,768	399,502	6.3%	6.3%
6/30/88-89	30,778,000	31,544,000	26,816,499	3,961,501	4,727,501	86.1%	1.0%	7.2%	284,139	339,081	7.2%	7.2%
6/30/89-90	30,694,000	31,018,000	25,917,287	4,776,713	5,100,713	84.0%	2.1%	12.9%	615,850	657,622	12.9%	12.9%
6/30/90-91	27,989,000	28,019,000	22,990,966	4,998,034	5,028,034	82.1%	1.9%	10.6%	529,214	532,391	10.6%	10.6%
6/30/91-92	17,299,000	18,046,000	13,989,975	3,309,025	4,056,025	79.2%	2.9%	14.1%	466,313	571,581	14.1%	14.1%
6/30/92-93	13,808,000	14,562,000	10,785,755	3,022,245	3,776,245	76.0%	3.1%	13.0%	394,252	492,611	13.0%	13.0%
6/30/93-94	15,861,000	15,892,000	12,319,524	3,541,477	3,572,477	77.6%	2.0%	8.9%	316,146	318,914	8.9%	8.9%
6/30/94-95	14,235,000	14,254,000	10,809,056	3,425,944	3,444,944	75.9%	1.7%	7.1%	243,426	244,776	7.1%	7.1%
6/30/95-96	14,516,000	15,167,000	10,635,499	3,880,501	4,531,501	71.7%	4.2%	14.9%	578,084	675,065	14.9%	14.9%
6/30/96-97	16,124,000	16,823,000	11,641,221	4,482,779	5,181,779	70.7%	1.0%	3.4%	151,933	175,624	3.4%	3.4%
6/30/97-98	13,954,000	14,633,000	9,919,419	4,034,581	4,713,581	69.4%	1.3%	4.1%	167,206	195,345	4.1%	4.1%
6/30/98-99	15,246,000	15,982,000	10,488,495	4,757,505	5,493,505	67.2%	2.2%	6.8%	322,388	372,263	6.8%	6.8%
6/30/99-00	18,363,000	19,166,000	12,118,007	6,244,993	7,047,993	64.6%	2.6%	7.3%	457,388	516,201	7.3%	7.3%
6/30/00-01	17,289,000	18,068,000	11,090,574	6,198,426	6,977,426	62.7%	1.8%	4.9%	306,820	345,381	4.9%	4.9%
6/30/01-02	18,651,000	19,497,000	11,561,934	7,089,066	7,935,066	60.6%	2.1%	5.4%	381,349	426,858	5.4%	5.4%
6/30/02-03	19,843,000	20,730,000	11,721,116	8,121,884	9,008,884	57.8%	2.8%	6.7%	545,976	605,603	6.7%	6.7%
6/30/03-04	18,398,000	19,212,000	10,422,780	7,975,220	8,789,220	55.4%	2.4%	5.3%	420,878	463,836	5.3%	5.3%
6/30/04-05	20,863,000	21,612,000	11,771,684	9,091,316	9,840,316	55.4%	0.0%	0.0%	-650	-704	0.0%	0.0%
6/30/05-06	19,170,000	20,901,000	9,525,892	9,644,108	11,375,108	47.5%	7.9%	15.0%	1,449,458	1,709,618	15.0%	15.0%
6/30/06-07	18,662,000	22,719,000	8,920,327	9,741,673	13,798,673	43.1%	4.4%	7.8%	758,950	1,075,021	7.8%	7.8%
6/30/07-08	22,791,000	26,268,000	7,630,720	15,160,280	18,637,280	31.1%	12.0%	17.4%	2,641,776	3,247,666	17.4%	17.4%
6/30/08-09	22,889,000	26,813,000	3,529,053	19,359,947	23,283,947	14.2%	16.9%	19.7%	3,815,051	4,588,310	19.7%	19.7%
Total	571,147,183	606,545,750	408,474,597	162,672,586	198,071,153				16,586,609	19,965,136	10.2%	10.1%

NOTES:

(2) Exhibit 1, Page 1, Column (4) + Exhibit 2, Page 1, Column (4)
(3) Exhibit 1, Page 1, Column (5) + Exhibit 2, Page 1, Column (5)
(4) Exhibit 1, Page 1, Column (2) + Exhibit 2, Page 1, Column (2)
(5) = (2) - (4)
(6) = (3) - (4)
(7) = (4) / Average of Columns (2), (3)
(8) = (7) - Prior Year's (7)
(9) = (8) / (1.00 - (7))
(10) = (5) * (9)
(11) = (6) * (9)
(12) = (10) / (5)
(13) = (11) / (6)

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Medical

Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Paid Loss	Ult Loss - Paid Loss Method	Ult Loss - Paid BF Method	Aon Selected Ult (Low)	Aon Selected Ult (High)	Outstanding Losses (Low)	Outstanding Losses (High)	Ult Loss Cost (Low)	Ult Loss Cost (High)
All Prior Yrs		2,843,632			3,037,477	3,055,974	193,846	212,342		
6/30/82-83		495,741	507,725		495,741	517,879	0	22,139		
6/30/83-84		790,813	813,980		790,813	838,399	0	47,586		
6/30/84-85	714,731	1,122,649	1,161,315	1,160,486	1,160,000	1,161,000	37,351	38,351	0.162	0.162
6/30/85-86	768,615	1,808,935	1,880,593	1,880,689	1,881,000	1,881,000	72,065	72,065	0.245	0.245
6/30/86-87	883,277	1,564,621	1,634,734	1,636,599	1,635,000	1,637,000	70,379	72,379	0.185	0.185
6/30/87-88	1,346,746	3,084,408	3,238,739	3,242,919	3,239,000	3,243,000	154,592	158,592	0.241	0.241
6/30/88-89	1,465,984	3,487,596	3,684,074	3,686,963	3,684,000	3,687,000	196,404	199,404	0.251	0.252
6/30/89-90	1,473,293	3,756,545	3,999,919	4,003,958	4,000,000	4,004,000	243,455	247,455	0.272	0.272
6/30/90-91	1,383,691	3,363,420	3,598,722	3,598,359	3,598,000	3,599,000	234,580	235,580	0.260	0.260
6/30/91-92	1,341,919	2,623,319	2,833,298	2,833,475	2,833,000	2,833,000	209,681	209,681	0.211	0.211
6/30/92-93	1,324,022	2,349,467	2,552,638	2,553,498	2,553,000	2,553,000	203,533	203,533	0.193	0.193
6/30/93-94	1,400,303	2,804,943	3,084,949	3,084,934	3,085,000	3,085,000	280,057	280,057	0.220	0.220
6/30/94-95	1,472,926	2,265,454	2,523,329	2,526,993	2,523,000	2,527,000	257,546	261,546	0.171	0.172
6/30/95-96	1,556,911	1,990,646	2,248,449	2,256,544	2,248,000	2,257,000	257,354	266,354	0.144	0.145
6/30/96-97	1,953,175	2,338,520	2,676,218	2,690,534	2,676,000	2,691,000	337,480	352,480	0.137	0.138
6/30/97-98	1,890,544	1,821,161	2,121,231	2,144,294	2,121,000	2,144,000	299,839	322,839	0.112	0.113
6/30/98-99	2,053,169	2,264,558	2,686,109	2,711,968	2,686,000	2,712,000	421,442	447,442	0.131	0.132
6/30/99-00	2,177,952	2,618,716	3,185,986	3,214,572	3,186,000	3,215,000	567,284	596,284	0.146	0.148
6/30/00-01	2,170,750	2,477,500	3,085,711	3,119,020	3,086,000	3,119,000	608,500	641,500	0.142	0.144
6/30/01-02	2,261,335	2,212,890	2,830,721	2,877,520	2,831,000	2,878,000	618,110	665,110	0.125	0.127
6/30/02-03	2,228,246	2,608,269	3,462,052	3,497,566	3,462,000	3,498,000	853,731	889,731	0.155	0.157
6/30/03-04	2,222,588	2,669,710	3,688,465	3,721,643	3,688,000	3,722,000	1,018,290	1,052,290	0.166	0.167
6/30/04-05	2,274,629	3,640,720	5,245,527	5,171,691	4,700,000	5,246,000	1,059,280	1,605,280	0.207	0.231
6/30/05-06	2,445,102	2,837,745	4,311,492	4,676,463	4,200,000	4,676,000	1,362,255	1,838,255	0.172	0.191
6/30/06-07	2,575,811	3,990,645	6,773,372	6,318,749	5,700,000	6,773,000	1,709,355	2,782,355	0.221	0.263
6/30/07-08	2,745,738	2,842,788	6,237,373	6,130,295	5,500,000	6,237,000	2,657,212	3,394,212	0.200	0.227
6/30/08-09	2,711,675	1,326,874	7,851,756	6,284,413	5,700,000	7,852,000	4,373,126	6,525,126	0.210	0.290
Total	44,843,132	68,002,287	87,918,476	85,024,149	86,299,031	91,642,252	18,296,744	23,639,965		
Tot 6/30/84-09	44,843,132	63,872,101	86,596,771	85,024,149	81,975,000	87,230,000	18,102,899	23,357,899	0.183	0.195

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 8, Exhibit 2, Page 2, Column 3
(4) From Section 8, Exhibit 2, Page 2, Column 8
(5) From Section 8, Exhibit 2, Page 3, Column 8
(6), (7) Selected based on (3), (4), and (5)
(8) = (6) - (3)
(9) = (7) - (3)
(10) = (6) / (2) / 10
(11) = (7) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Medical

Paid Loss Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Accident Year	Payroll (000's)	Paid Loss	Paid LDF	Adjustment for Tail	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Paid Counts 7/1/07-08	Paid Counts 7/1/08-09	Average Outstanding Claim
All Prior Yrs		2,843,632							17	12	
6/30/82-83		495,741	1.024	1.000	507,725	N/A	507,725		3	2	5,992
6/30/83-84		790,813	1.029	1.000	813,980	N/A	813,980		1	0	
6/30/84-85	714,731	1,122,649	1.034	1.000	1,161,315	N/A	1,161,315	0.162	4	4	9,666
6/30/85-86	768,615	1,808,935	1.040	1.000	1,880,593	N/A	1,880,593	0.245	5	6	11,943
6/30/86-87	883,277	1,564,621	1.045	1.000	1,634,734	N/A	1,634,734	0.185	4	2	35,057
6/30/87-88	1,346,746	3,084,408	1.050	1.000	3,238,739	N/A	3,238,739	0.240	8	6	25,722
6/30/88-89	1,465,984	3,487,596	1.056	1.000	3,684,074	N/A	3,684,074	0.251	11	13	15,114
6/30/89-90	1,473,293	3,756,545	1.065	1.000	3,999,919	N/A	3,999,919	0.271	9	8	30,422
6/30/90-91	1,383,691	3,363,420	1.070	1.000	3,598,722	N/A	3,598,722	0.260	14	7	33,615
6/30/91-92	1,341,919	2,623,319	1.080	1.000	2,833,298	N/A	2,833,298	0.211	9	7	29,997
6/30/92-93	1,324,022	2,349,467	1.086	1.000	2,552,638	N/A	2,552,638	0.193	10	10	20,317
6/30/93-94	1,400,303	2,804,943	1.100	1.000	3,084,949	N/A	3,084,949	0.220	12	10	28,001
6/30/94-95	1,472,926	2,265,454	1.114	1.000	2,523,329	N/A	2,523,329	0.171	12	13	19,836
6/30/95-96	1,556,911	1,990,646	1.130	1.000	2,248,449	N/A	2,248,449	0.144	7	4	64,451
6/30/96-97	1,953,175	2,338,520	1.144	1.000	2,676,218	N/A	2,676,218	0.137	13	8	42,212
6/30/97-98	1,890,544	1,821,161	1.165	1.000	2,121,231	N/A	2,121,231	0.112	13	15	20,005
6/30/98-99	2,053,169	2,264,558	1.186	1.000	2,686,109	N/A	2,686,109	0.131	14	11	38,323
6/30/99-00	2,177,952	2,618,716	1.217	1.000	3,185,986	N/A	3,185,986	0.146	21	17	33,369
6/30/00-01	2,170,750	2,477,500	1.245	1.000	3,085,711	N/A	3,085,711	0.142	23	20	30,411
6/30/01-02	2,261,335	2,212,890	1.279	1.000	2,830,721	N/A	2,830,721	0.125	29	27	22,883
6/30/02-03	2,228,246	2,608,269	1.327	1.000	3,462,052	N/A	3,462,052	0.155	43	39	21,892
6/30/03-04	2,222,588	2,669,710	1.382	1.000	3,688,465	N/A	3,688,465	0.166	61	37	27,534
6/30/04-05	2,274,629	3,640,720	1.441	1.000	5,245,527	N/A	5,245,527	0.231	96	54	29,719
6/30/05-06	2,445,102	2,837,745	1.519	1.000	4,311,492	N/A	4,311,492	0.176	174	89	16,559
6/30/06-07	2,575,811	3,990,645	1.697	1.000	6,773,372	N/A	6,773,372	0.263	539	172	16,179
6/30/07-08	2,745,738	2,842,788	2.194	1.000	6,237,373	N/A	6,237,373	0.227	870	638	5,321
6/30/08-09	2,711,675	1,326,874	5.917	1.000	7,851,756	N/A	7,851,756	0.290		889	7,340
Total	44,843,132	68,002,287			87,918,476		87,918,476		2,022	2,120	

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3), (4) From Section 8, Exhibit 2, Page 7
(5) Based on information from the MA WCRIB 9/1/08 filing. Consideration for development beyond 252 months made in selection of LDF's.
(6) = (3) x (4) x (5)
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10), (11) Provided by Commonwealth of Massachusetts
(12) = Maximum of [{(6) - (3)} / (11)] and 0

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Medical

Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Accident Year	Payroll (000's)	A Priori Loss Rate	Paid Loss	Paid LDF	Ultimate Loss Excluding Lump Sum	Est Ult Lump Sum Payments	Ultimate Loss Including Lump Sum	Ultimate Loss Cost	Ultimate Loss Cost Excluding Lump Sum
All Prior Yrs									
6/30/82-83									
6/30/83-84									
6/30/84-85	714,731	0.159	1,122,649	1.034	1,160,486	N/A	1,160,486	0.162	0.162
6/30/85-86	768,615	0.245	1,808,935	1.040	1,880,689	N/A	1,880,689	0.245	0.245
6/30/86-87	883,277	0.190	1,564,621	1.045	1,636,599	N/A	1,636,599	0.185	0.185
6/30/87-88	1,346,746	0.247	3,084,408	1.050	3,242,919	N/A	3,242,919	0.241	0.241
6/30/88-89	1,465,984	0.255	3,487,596	1.056	3,686,963	N/A	3,686,963	0.252	0.252
6/30/89-90	1,473,293	0.276	3,756,545	1.065	4,003,958	N/A	4,003,958	0.272	0.272
6/30/90-91	1,383,691	0.260	3,363,420	1.070	3,598,359	N/A	3,598,359	0.260	0.260
6/30/91-92	1,341,919	0.211	2,623,319	1.080	2,833,475	N/A	2,833,475	0.211	0.211
6/30/92-93	1,324,022	0.194	2,349,467	1.086	2,553,498	N/A	2,553,498	0.193	0.193
6/30/93-94	1,400,303	0.220	2,804,943	1.100	3,084,934	N/A	3,084,934	0.220	0.220
6/30/94-95	1,472,926	0.174	2,265,454	1.114	2,526,993	N/A	2,526,993	0.172	0.172
6/30/95-96	1,556,911	0.149	1,990,646	1.130	2,256,544	N/A	2,256,544	0.145	0.145
6/30/96-97	1,953,175	0.143	2,338,520	1.144	2,690,534	N/A	2,690,534	0.138	0.138
6/30/97-98	1,890,544	0.121	1,821,161	1.165	2,144,294	N/A	2,144,294	0.113	0.113
6/30/98-99	2,053,169	0.139	2,264,558	1.186	2,711,968	N/A	2,711,968	0.132	0.132
6/30/99-00	2,177,952	0.154	2,618,716	1.217	3,214,572	N/A	3,214,572	0.148	0.148
6/30/00-01	2,170,750	0.150	2,477,500	1.245	3,119,020	N/A	3,119,020	0.144	0.144
6/30/01-02	2,261,335	0.135	2,212,890	1.279	2,877,520	N/A	2,877,520	0.127	0.127
6/30/02-03	2,228,246	0.162	2,608,269	1.327	3,497,566	N/A	3,497,566	0.157	0.157
6/30/03-04	2,222,588	0.171	2,669,710	1.382	3,721,643	N/A	3,721,643	0.167	0.167
6/30/04-05	2,274,629	0.220	3,640,720	1.441	5,171,691	N/A	5,171,691	0.227	0.227
6/30/05-06	2,445,102	0.220	2,837,745	1.519	4,676,463	N/A	4,676,463	0.191	0.191
6/30/06-07	2,575,811	0.220	3,990,645	1.697	6,318,749	N/A	6,318,749	0.245	0.245
6/30/07-08	2,745,738	0.220	2,842,788	2.194	6,130,295	N/A	6,130,295	0.223	0.223
6/30/08-09	2,711,675	0.220	1,326,874	5.917	6,284,413	N/A	6,284,413	0.232	0.232
Total	44,843,132		63,872,101		85,024,149		85,024,149		

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 8, Exhibit 2, Page 4, Column 11
(4) From Section 8, Exhibit 2, Page 2, Column 3
(5) From Section 8, Exhibit 2, Page 2, Column 4
(6) = (4) + [{1 - {1 / (5)}} x (3) x (2) x 10]
(7) Lump Sum Payments are considered in the Indemnity analysis (Section 1)
(8) = (6) + (7)
(9) = (8) / (2) / 10
(10) = (6) / (2) / 10

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Medical

Calculation of Initial Expected Loss Rate

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Accident Year	Payroll (000's)	Expected Ult Loss	Unadjusted Loss Cost	Benefit Level Factor	Adjusted Loss Cost	Trend Factor	Trended Adjusted Loss Cost	Detrended Loss Cost	Prior Selected Loss Cost	Current Selected Loss Cost
All Prior Yrs										
6/30/82-83										
6/30/83-84										
6/30/84-85									0.159	0.159
6/30/85-86									0.245	0.245
6/30/86-87									0.190	0.190
6/30/87-88									0.247	0.247
6/30/88-89									0.255	0.255
6/30/89-90									0.276	0.276
6/30/90-91	1,383,691	3,598,722	0.260	1.157	0.301	2.107	0.634	0.260	0.293	0.260
6/30/91-92	1,341,919	2,833,298	0.211	1.152	0.243	2.026	0.493	0.211	0.239	0.211
6/30/92-93	1,324,022	2,552,638	0.193	1.152	0.222	1.948	0.433	0.193	0.214	0.194
6/30/93-94	1,400,303	3,084,949	0.220	1.142	0.252	1.873	0.471	0.220	0.239	0.220
6/30/94-95	1,472,926	2,523,329	0.171	1.134	0.194	1.801	0.350	0.171	0.185	0.174
6/30/95-96	1,556,911	2,248,449	0.144	1.120	0.162	1.732	0.280	0.144	0.161	0.149
6/30/96-97	1,953,175	2,676,218	0.137	1.101	0.151	1.665	0.251	0.137	0.154	0.143
6/30/97-98	1,890,544	2,121,231	0.112	1.100	0.123	1.601	0.198	0.112	0.133	0.121
6/30/98-99	2,053,169	2,686,109	0.131	1.100	0.144	1.539	0.222	0.131	0.146	0.139
6/30/99-00	2,177,952	3,185,986	0.146	1.100	0.161	1.480	0.238	0.146	0.161	0.154
6/30/00-01	2,170,750	3,085,711	0.142	1.075	0.153	1.423	0.217	0.142	0.154	0.150
6/30/01-02	2,261,335	2,830,721	0.125	1.067	0.134	1.369	0.183	0.125	0.141	0.135
6/30/02-03	2,228,246	3,462,052	0.155	1.040	0.162	1.316	0.213	0.155	0.162	0.162
6/30/03-04	2,222,588	3,688,465	0.166	1.014	0.168	1.265	0.213	0.166	0.220	0.171
6/30/04-05	2,274,629	5,245,527	0.231	1.003	0.231	1.217	0.282	0.231	0.220	0.220
6/30/05-06	2,445,102	4,311,492	0.176	1.000	0.176	1.170	0.206	0.176	0.220	0.220
6/30/06-07	2,575,811	6,773,372	0.263	1.000	0.263	1.125	0.296	0.263	0.220	0.220
6/30/07-08	2,745,738	6,237,373	0.227	1.000	0.227	1.082	0.246	0.227	0.220	0.220
6/30/08-09	2,711,675	7,851,756	0.290	1.000	0.290	1.040	0.301	0.290		0.220
Total	38,190,487	70,997,396								

Trend Last 4 (ex 08-09):	3.5%	Avg 3 (x08-09):	0.249
Trend Last 8 (ex 08-09):	8.4%	Avg 5 (x08-09):	0.248
Trend Last 12 (ex 08-09):	5.4%	Avg 10 (x08-09):	0.231
Prior Selected Trend:	4.0%	Prior Sel Avg:	0.220
Selected Trend:	4.0%	Sel. Loss Cost:	0.220

NOTES:
(2) Provided by Commonwealth of Massachusetts
(3) From Section 8, Exhibit 2, Page 2, Column 6
(4) = (3) / (2) / 10
(5) Based on information from the MA WCRIB
(6) = (4) x (5)
(7) Based on Selected Trend from (6)
(8) = (6) x (7)
(9) = (8) / [(5) * (7)]
(10) From Aon analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Medical

Calculation of 1982 & Prior Reserves (Page 1)

Method 1

(1)	Average Payment Trend		0.900	
(2)	Credibility		62%	
(3)	Average Pmt Trend Statewide		0.890	
(4)	Credibility Weighted Trend		0.896	
		(Low)		(High)
(5)	Selected Range	0.887		0.905
(6)	Incremental Paid for 2009	25,370		25,370
(7)	Estimated Reserve	199,574		242,075
(8)	Paid to Date (82 & Prior)	2,843,632		2,843,632
(9)	Est Ult Paid for 1982 & Prior	3,043,205		3,085,707

Method 2

		(Current)	(Prior)
(10)	Avg Incremental Paid (3 yrs)	26,874	29,711
(11)	Projected Number of Years	7	7
(12)	Estimated Reserve	188,118	207,978
(13)	Paid to Date (82 & Prior)	2,843,632	2,818,262
(14)	Est Ult Paid for 1982 & Prior	3,031,750	3,026,240
(14a)	Paid Counts During Fiscal Year	12	17

		(Low)	(High)
(15)	Sel Ult Excluding Lump Sums	3,037,477	3,055,974
(16)	Lump Sum Ultimates	N/A	N/A
(17)	Ult Loss Including Lump Sums	**3,037,477**	**3,055,974**
(18)	Implied Tail	1.068	1.075
(19)	Ult Loss Inc Lump Sums @ 6/08	3,052,135	3,074,010

NOTES:

(1) From Section 8, Exhibit 2, Page 6
(2) = (Average of Section 8, Exhibit 2, Page 6, Column 3 / 175,000) ^ 0.5
(3) Average Statewide Trend
(4) = (1) x (2) + (4) x {1 - (2)}
(5) Selected judgmentally based on (4)
(6), (14a) Provided by Commonwealth of Massachusetts
(7) = (6) x (5) / {1 - (5)}
(8), (16) From Section 8, Exhibit 2, Page 2, Column 3
(9) = (7) + (8)
(10) Avg of 3 latest years from Section 8, Exhibit 2, Page 6, Column 3
(11) Selected judgmentally
(12) = (10 x (11)
(14) = (12) + (13)
(15) = Average of (9) and (14)
(16) Lump Sums are considered in Indemnity analysis (Section 1)
(17) = (15) + (16)
(18) = (15) / (8)
(19) From Prior Aon Analysis as of June 30, 2008

Commonwealth of Massachusetts
Workers Compensation
Reserve Analysis at June 30, 2009

All Other - Clusters 5-17 & 95
Medical

Calculation of 1982 & Prior Reserves (Page 2)

(1)	(2)	(3)	(4)	(5)		
Year	X	Incremental Paids	LN	Average Observed Trend		Trend Calculations
1992	1	206,798	12.239			
1993	2	153,285	11.940	0.741		
1994	3	146,363	11.894	0.955		
1995	4	120,472	11.699	0.823		
1996	5	130,279	11.777	1.081		
1997	6	37,349	10.528	0.287		
1998	7	24,406	10.103	0.653		
1999	8	85,275	11.354	3.494		
2000	9	30,381	10.322	0.356	n =	18
2001	10	26,076	10.169	0.858	S(x) =	36,009
2002	11	28,013	10.240	1.074	S(x-sq) =	72,036,489
2003	12	24,232	10.095	0.865	S(xy) =	388,792
2004	13	32,198	10.380	1.329	S(y) =	194
2005	14	42,136	10.649	1.309	D =	8,721
2006	15	33,882	10.431	0.804	slope =	-0.115
2007	16	22,266	10.011	0.657	Avg Trend =	0.885
2008	17	32,986	10.404	1.481		
2009	18	25,370	10.141	0.769		
					Selected Trend:	**0.900**

NOTES:

(3) 2009 provided by Commonwealth of Massachusetts. Prior years from Aon analysis as of June 30, 2008

(4) LN [(3)]

(5) Eg. 2009: 0.769 = 25370 / 32986

Commonwealth of Massachusetts Workers Compensation
All Other - Clusters 5-17 & 95
MEDICAL
Paid Loss Development
Paid Loss (Excluding Lump Sum)

Acc Yr Ending	*12*	*24*	*36*	*48*	*60*	*72*	*84*	*96*	*108*	*120*	*132*	*144*	*156*	*168*	*180*	*192*	*204*	*216*	*228*	*240*	*252*	*264*	*276*	*288*	*300*	*312*	*324*
June-83	27,370	65,800	95,928	121,026	146,374	172,082	195,518	223,519	270,937	291,319	312,256	316,614	336,461	401,393	453,214	453,179	457,283	457,468	457,468	457,468	458,118	472,628	476,174	480,561	485,930	491,063	495,741
June-84	73,019	172,377	253,637	324,243	391,630	438,262	505,877	586,886	610,938	636,458	664,679	683,784	693,120	716,886	724,043	734,862	745,334	749,852	758,667	762,583	783,107	784,865	788,687	788,743	790,813	790,813	
June-85	91,462	222,608	324,021	409,170	488,686	592,053	702,853	747,423	785,283	911,116	929,832	957,391	968,422	980,992	1,009,751	1,031,712	1,051,061	1,066,218	1,077,726	1,088,791	1,096,356	1,103,232	1,110,832	1,116,052	1,122,649		
June-86	197,516	482,005	708,037	875,864	1,053,127	1,211,316	1,370,683	1,467,692	1,572,492	1,608,200	1,631,069	1,655,833	1,672,723	1,699,156	1,716,974	1,724,323	1,731,547	1,743,355	1,755,277	1,764,089	1,780,012	1,796,528	1,802,048	1,808,935			
June-87	199,777	488,687	761,278	928,992	1,116,174	1,247,272	1,326,215	1,394,678	1,416,827	1,433,554	1,451,102	1,461,072	1,470,676	1,482,961	1,498,691	1,507,156	1,517,732	1,527,729	1,533,186	1,539,237	1,545,443	1,554,224	1,564,621				
June-88	390,619	1,150,212	1,830,796	2,204,311	2,429,489	2,580,235	2,679,602	2,758,965	2,816,870	2,872,713	2,895,135	2,917,336	2,938,306	2,953,260	2,965,159	2,980,478	3,005,909	3,019,968	3,040,247	3,060,774	3,075,967	3,084,408					
June-89	348,632	1,379,611	1,965,598	2,380,914	2,616,790	2,882,836	2,988,159	3,078,524	3,143,724	3,188,707	3,222,672	3,251,157	3,271,467	3,290,603	3,312,237	3,338,112	3,358,373	3,385,594	3,459,727	3,477,288	3,487,596						
June-90	597,392	1,787,214	2,367,627	2,727,013	2,917,488	3,052,042	3,170,650	3,294,118	3,385,084	3,460,338	3,498,784	3,525,521	3,559,539	3,594,665	3,616,129	3,673,092	3,699,660	3,720,191	3,743,464	3,756,545							
June-91	708,625	1,924,338	2,444,979	2,785,515	2,902,296	3,018,419	3,064,528	3,074,954	3,092,506	3,113,710	3,131,050	3,142,716	3,165,865	3,200,123	3,230,691	3,265,408	3,303,782	3,334,465	3,363,420								
June-92	588,418	1,588,370	1,986,839	2,229,495	2,290,208	2,325,875	2,375,312	2,430,547	2,462,691	2,497,761	2,542,769	2,553,772	2,574,534	2,586,268	2,593,937	2,607,986	2,617,238	2,623,319									
June-93	415,674	1,315,738	1,611,871	1,719,235	1,836,642	1,871,759	1,907,504	1,930,526	1,977,226	2,009,894	2,048,320	2,106,226	2,144,269	2,190,485	2,240,879	2,296,700	2,349,467										
June-94	598,740	1,383,736	1,705,173	1,941,862	2,012,247	2,200,199	2,290,696	2,346,328	2,406,956	2,509,745	2,549,583	2,601,202	2,677,455	2,727,826	2,785,899	2,804,943											
June-95	625,005	1,262,191	1,500,916	1,627,990	1,716,166	1,770,565	1,843,652	1,919,317	2,018,626	2,068,939	2,105,461	2,177,442	2,207,352	2,235,130	2,265,454												
June-96	442,026	1,106,672	1,298,637	1,506,086	1,588,152	1,626,688	1,672,734	1,723,992	1,784,200	1,838,291	1,904,595	1,938,999	1,973,969	1,990,646													
June-97	490,343	1,177,901	1,656,955	1,851,037	1,939,610	2,054,998	2,100,197	2,157,406	2,207,438	2,247,927	2,302,138	2,315,796	2,338,520														
June-98	326,869	974,658	1,226,365	1,350,342	1,476,983	1,551,929	1,637,433	1,716,707	1,747,491	1,769,878	1,797,150	1,821,161															
June-99	484,930	1,204,187	1,456,433	1,645,438	1,757,364	1,866,452	1,932,933	2,065,834	2,135,187	2,187,567	2,264,558																
June-00	687,002	1,407,750	1,709,714	1,905,283	2,094,421	2,260,264	2,375,651	2,506,812	2,566,510	2,618,716																	
June-01	555,924	1,355,841	1,668,220	1,965,335	2,137,275	2,265,629	2,333,456	2,389,586	2,477,500																		
June-02	456,844	1,259,496	1,683,493	1,908,166	2,029,871	2,101,432	2,140,880	2,212,890																			
June-03	314,443	1,423,035	2,006,147	2,291,763	2,403,958	2,513,521	2,608,269																				
June-04	598,148	1,733,246	2,216,316	2,434,141	2,548,142	2,669,710																					
June-05	744,557	2,314,627	3,030,458	3,409,706	3,640,720																						
June-06	971,841	2,207,952	2,611,952	2,837,745																							
June-07	1,118,370	3,111,007	3,990,645																								
June-08	1,399,818	2,842,788																									
June-09	1,326,874																										

Age-to-Age Factors

Acc Yr Ending	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*
June-83	2.404	1.458	1.262	1.209	1.176	1.136	1.143	1.212	1.075	1.072	1.014	1.063	1.193	1.129	1.000	1.009	1.000	1.000	1.000	1.001	1.032	1.008	1.009	1.011	1.011	1.010
June-84	2.361	1.471	1.278	1.208	1.119	1.154	1.160	1.041	1.042	1.044	1.029	1.014	1.034	1.010	1.015	1.014	1.006	1.012	1.005	1.027	1.002	1.005	1.000	1.003	1.000	
June-85	2.434	1.456	1.263	1.194	1.212	1.187	1.063	1.051	1.160	1.021	1.030	1.012	1.013	1.029	1.022	1.019	1.014	1.011	1.010	1.007	1.006	1.007	1.005	1.006		
June-86	2.440	1.469	1.237	1.202	1.150	1.132	1.071	1.071	1.023	1.014	1.015	1.010	1.016	1.010	1.004	1.004	1.007	1.007	1.005	1.009	1.009	1.003	1.004			
June-87	2.446	1.558	1.220	1.201	1.117	1.063	1.052	1.016	1.012	1.012	1.007	1.007	1.008	1.011	1.006	1.007	1.007	1.004	1.004	1.004	1.006	1.007				
June-88	2.945	1.592	1.204	1.102	1.062	1.039	1.030	1.021	1.020	1.008	1.008	1.007	1.005	1.004	1.005	1.009	1.005	1.007	1.007	1.005	1.003					
June-89	3.957	1.425	1.211	1.099	1.102	1.037	1.030	1.021	1.014	1.011	1.009	1.006	1.006	1.007	1.008	1.006	1.008	1.022	1.005	1.003						
June-90	2.992	1.325	1.152	1.070	1.046	1.039	1.039	1.028	1.022	1.011	1.008	1.010	1.010	1.006	1.016	1.007	1.006	1.006	1.003							
June-91	2.716	1.271	1.139	1.042	1.040	1.015	1.003	1.006	1.007	1.006	1.004	1.007	1.011	1.010	1.011	1.012	1.009	1.009								
June-92	2.699	1.251	1.122	1.027	1.016	1.021	1.023	1.013	1.014	1.018	1.004	1.008	1.005	1.003	1.005	1.004	1.002									
June-93	3.165	1.225	1.067	1.068	1.019	1.019	1.012	1.024	1.017	1.019	1.028	1.018	1.022	1.023	1.025	1.023										
June-94	2.311	1.232	1.139	1.036	1.093	1.041	1.024	1.026	1.043	1.016	1.020	1.029	1.019	1.021	1.007											
June-95	2.019	1.189	1.085	1.054	1.032	1.041	1.041	1.052	1.025	1.018	1.034	1.014	1.013	1.014												
June-96	2.504	1.173	1.160	1.054	1.024	1.028	1.031	1.035	1.030	1.036	1.018	1.018	1.008													
June-97	2.402	1.407	1.117	1.048	1.059	1.022	1.027	1.023	1.018	1.024	1.006	1.010														
June-98	2.982	1.258	1.101	1.094	1.051	1.055	1.048	1.018	1.013	1.015	1.013															
June-99	2.483	1.209	1.130	1.068	1.062	1.036	1.069	1.034	1.025	1.035																
June-00	2.049	1.215	1.114	1.099	1.079	1.051	1.055	1.024	1.020																	
June-01	2.439	1.230	1.178	1.087	1.060	1.030	1.024	1.037																		
June-02	2.757	1.337	1.133	1.064	1.035	1.019	1.034																			
June-03	4.526	1.410	1.142	1.049	1.046	1.038																				
June-04	2.898	1.279	1.098	1.047	1.048																					
June-05	3.109	1.309	1.125	1.068																						
June-06	2.272	1.183	1.086																							
June-07	2.782	1.283																								
June-08	2.031																									

Averages	*12-24*	*24-36*	*36-48*	*48-60*	*60-72*	*72-84*	*84-96*	*96-108*	*108-120*	*120-132*	*132-144*	*144-156*	*156-168*	*168-180*	*180-192*	*192-204*	*204-216*	*216-228*	*228-240*	*240-252*	*252-264*	*264-276*	*276-288*	*288-300*	*300-312*	*312-324*	*To Ult*
Simple Avg																											
All Yrs	2.697	1.329	1.157	1.095	1.075	1.057	1.049	1.040	1.032	1.022	1.015	1.015	1.026	1.021	1.010	1.010	1.006	1.009	1.005	1.008	1.010	1.006	1.004	1.007	1.005	1.010	
Latest 5	2.618	1.293	1.117	1.063	1.054	1.035	1.046	1.027	1.021	1.026	1.018	1.018	1.013	1.014	1.013	1.010	1.006	1.009	1.005	1.006	1.005	1.006					
Latest 3	2.361	1.258	1.103	1.055	1.043	1.029	1.038	1.031	1.019	1.025	1.012	1.014	1.013	1.019	1.012	1.013	1.006	1.012	1.005	1.004	1.006	1.006	1.003	1.007			
Volume Wtd																											
All Yrs	2.627	1.296	1.138	1.074	1.060	1.041	1.037	1.028	1.024	1.017	1.013	1.012	1.013	1.013	1.010	1.010	1.007	1.010	1.005	1.006	1.007	1.005	1.004	1.006	1.004		
Latest 5	2.526	1.284	1.115	1.063	1.053	1.035	1.045	1.027	1.021	1.026	1.018	1.018	1.013	1.014	1.012	1.010	1.006	1.010	1.005	1.005	1.005						
Latest 3	2.339	1.262	1.105	1.056	1.043	1.029	1.038	1.031	1.020	1.026	1.012	1.014	1.014	1.019	1.012	1.012	1.006	1.012	1.005	1.004	1.005	1.005	1.003				

Dev Factor Selection																											
Industry 1	1.985	1.166	1.061	1.032	1.017	1.014	1.013																				
Industry 2		1.346	1.110	1.053	1.030	1.018	1.015	1.011	1.012	1.011	1.011	1.010	1.007	1.007	1.007	1.006	1.006	1.005	1.005	1.005							
Prior	*2.724*	*1.303*	*1.122*	*1.053*	*1.047*	*1.033*	*1.045*	*1.027*	*1.022*	*1.022*	*1.021*	*1.017*	*1.014*	*1.013*	*1.013*	*1.008*	*1.008*	*1.009*	*1.006*	*1.008*	*1.006*	*1.005*	*1.005*	*1.005*	*1.005*	*1.032*	
Selected	2.697	1.293	1.117	1.055	1.043	1.041	1.038	1.027	1.024	1.026	1.018	1.018	1.013	1.014	1.013	1.012	1.006	1.009	1.005	1.008	1.006	1.005	1.005	1.005	1.005	1.005	1.024
FacToUlt	5.917	2.194	1.697	1.519	1.441	1.382	1.327	1.279	1.245	1.217	1.186	1.165	1.144	1.130	1.114	1.100	1.086	1.080	1.070	1.065	1.056	1.050	1.045	1.040	1.034	1.029	1.024
Percent of Ult	16.9%	45.6%	58.9%	65.8%	69.4%	72.4%	75.3%	78.2%	80.3%	82.2%	84.3%	85.9%	87.4%	88.5%	89.8%	90.9%	92.0%	92.6%	93.5%	93.9%	94.7%	95.2%	95.7%	96.2%	96.7%	97.2%	97.6%

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Comparison of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Ultimate Loss		Ultimate Loss		Change in Ultimate Loss		Change in Ultimate Loss	
Accident	As of 6/08		As of 6/09		(Dollar)	(Percent)	(Dollar)	(Percent)
Year	Low	High	Low	High	Low	Low	High	High
All Prior Yrs	3,052,135	3,074,010	3,037,477	3,055,974	(14,657)	-0.5%	(18,037)	-0.6%
6/30/82-83	491,063	516,845	495,741	517,879	4,678	1.0%	1,035	0.2%
6/30/83-84	790,813	844,695	790,813	838,399	0	0.0%	(6,296)	-0.7%
6/30/84-85	1,162,000	1,163,000	1,160,000	1,161,000	(2,000)	-0.2%	(2,000)	-0.2%
6/30/85-86	1,887,000	1,888,000	1,881,000	1,881,000	(6,000)	-0.3%	(7,000)	-0.4%
6/30/86-87	1,636,000	1,638,000	1,635,000	1,637,000	(1,000)	-0.1%	(1,000)	-0.1%
6/30/87-88	3,257,000	3,261,000	3,239,000	3,243,000	(18,000)	-0.6%	(18,000)	-0.6%
6/30/88-89	3,712,000	3,713,000	3,684,000	3,687,000	(28,000)	-0.8%	(26,000)	-0.7%
6/30/89-90	4,021,000	4,024,000	4,000,000	4,004,000	(21,000)	-0.5%	(20,000)	-0.5%
6/30/90-91	3,614,000	3,648,000	3,598,000	3,599,000	(16,000)	-0.4%	(49,000)	-1.3%
6/30/91-92	2,858,000	2,888,000	2,833,000	2,833,000	(25,000)	-0.9%	(55,000)	-1.9%
6/30/92-93	2,528,000	2,555,000	2,553,000	2,553,000	25,000	1.0%	(2,000)	-0.1%
6/30/93-94	3,105,000	3,130,000	3,085,000	3,085,000	(20,000)	-0.6%	(45,000)	-1.4%
6/30/94-95	2,523,000	2,546,000	2,523,000	2,527,000	0	0.0%	(19,000)	-0.7%
6/30/95-96	2,259,000	2,290,000	2,248,000	2,257,000	(11,000)	-0.5%	(33,000)	-1.4%
6/30/96-97	2,696,000	2,740,000	2,676,000	2,691,000	(20,000)	-0.7%	(49,000)	-1.8%
6/30/97-98	2,137,000	2,197,000	2,121,000	2,144,000	(16,000)	-0.7%	(53,000)	-2.4%
6/30/98-99	2,658,000	2,719,000	2,686,000	2,712,000	28,000	1.1%	(7,000)	-0.3%
6/30/99-00	3,187,000	3,248,000	3,186,000	3,215,000	(1,000)	0.0%	(33,000)	-1.0%
6/30/00-01	3,047,000	3,110,000	3,086,000	3,119,000	39,000	1.3%	9,000	0.3%
6/30/01-02	2,852,000	2,938,000	2,831,000	2,878,000	(21,000)	-0.7%	(60,000)	-2.0%
6/30/02-03	3,459,000	3,498,000	3,462,000	3,498,000	3,000	0.1%	0	0.0%
6/30/03-04	3,672,000	4,044,000	3,688,000	3,722,000	16,000	0.4%	(322,000)	-8.0%
6/30/04-05	4,600,000	5,175,000	4,700,000	5,246,000	100,000	2.2%	71,000	1.4%
6/30/05-06	4,300,000	4,832,000	4,200,000	4,676,000	(100,000)	-2.3%	(156,000)	-3.2%
6/30/06-07	5,600,000	6,904,000	5,700,000	6,773,000	100,000	1.8%	(131,000)	-1.9%
6/30/07-08	5,700,000	6,300,000	5,500,000	6,237,000	(200,000)	-3.5%	(63,000)	-1.0%
6/30/08-09								
Total	80,804,010	84,884,550	80,599,031	83,790,252	(204,979)	-0.3%	(1,094,298)	-1.3%

NOTES:

(2), (3) From Aon analysis as of June 30, 2008

(4), (5) From Section 8, Exhibit 2, Page 1, Columns 6, 7

(6) = (4) - (2)

(7) = (4) / (2) - 1

(8) = (5) - (3)

(9) = (5) / (3) - 1

Commonwealth of Massachusetts
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Calculation of Discount Factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maturity	Cumulative Paid Loss Development	Incremental Paid Loss Development	Percent Unpaid	Pres Value of Increm. Pmts (4%)	Pres Value of Increm. Pmts (6%)	Discount Factor At: 4%	6%
336	100.0%	2.4%	0.0%	0.8%	0.5%	1.000	1.000
324	97.6%	0.5%	2.4%	0.2%	0.1%	0.981	0.971
312	97.2%	0.5%	2.8%	0.2%	0.1%	0.949	0.926
300	96.7%	0.5%	3.3%	0.2%	0.1%	0.923	0.888
288	96.2%	0.5%	3.8%	0.2%	0.1%	0.899	0.854
276	95.7%	0.5%	4.3%	0.2%	0.1%	0.877	0.824
264	95.2%	0.6%	4.8%	0.2%	0.2%	0.857	0.797
252	94.7%	0.8%	5.3%	0.3%	0.2%	0.841	0.775
240	93.9%	0.5%	6.1%	0.2%	0.1%	0.830	0.761
228	93.5%	0.9%	6.5%	0.4%	0.3%	0.811	0.736
216	92.6%	0.5%	7.4%	0.3%	0.2%	0.803	0.727
204	92.0%	1.1%	8.0%	0.6%	0.4%	0.787	0.705
192	90.9%	1.1%	9.1%	0.6%	0.5%	0.784	0.703
180	89.8%	1.2%	10.2%	0.7%	0.5%	0.779	0.698
168	88.5%	1.2%	11.5%	0.7%	0.5%	0.774	0.692
156	87.4%	1.5%	12.6%	0.9%	0.7%	0.766	0.682
144	85.9%	1.5%	14.1%	1.0%	0.8%	0.763	0.679
132	84.3%	2.1%	15.7%	1.4%	1.1%	0.758	0.673
120	82.2%	1.9%	17.8%	1.3%	1.1%	0.759	0.675
108	80.3%	2.1%	19.7%	1.5%	1.3%	0.754	0.669
96	78.2%	2.8%	21.8%	2.1%	1.8%	0.750	0.664
84	75.3%	3.0%	24.7%	2.3%	2.0%	0.751	0.666
72	72.4%	3.0%	27.6%	2.4%	2.2%	0.749	0.665
60	69.4%	3.6%	30.6%	3.0%	2.8%	0.746	0.661
48	65.8%	6.9%	34.2%	6.0%	5.6%	0.745	0.660
36	58.9%	13.3%	41.1%	12.1%	11.5%	0.761	0.681
24	45.6%	28.7%	54.4%	27.0%	26.3%	0.792	0.723
12	16.9%	16.9%	83.1%	16.6%	16.4%	0.837	0.782
Total		100.0%					

NOTES:

(2) = 1 / Section 8, Exhibit 2, Page 2, Column 4

(3) Incremental % based on (2)

(4) = 1 - (2)

(5) = [(3) / 1.04] ^ {[(1) - 6] / 12}

(6) = [(3) / 1.06] ^ {[(1) - 6] / 12}

(7), (8) Discount factor based on (5), (6)

Commonwealth of Massachusetts
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Outstanding Loss Discounting - 4.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	4.0%	(Low)	(High)
All Prior Yrs	193,846	212,342		169,535	185,711
6/30/82-83	0	22,139	0.981	0	21,709
6/30/83-84	0	47,586	0.949	0	45,174
6/30/84-85	37,351	38,351	0.923	34,461	35,384
6/30/85-86	72,065	72,065	0.899	64,782	64,782
6/30/86-87	70,379	72,379	0.877	61,746	63,501
6/30/87-88	154,592	158,592	0.857	132,528	135,957
6/30/88-89	196,404	199,404	0.841	165,166	167,689
6/30/89-90	243,455	247,455	0.830	202,029	205,348
6/30/90-91	234,580	235,580	0.811	190,153	190,963
6/30/91-92	209,681	209,681	0.803	168,398	168,398
6/30/92-93	203,533	203,533	0.787	160,094	160,094
6/30/93-94	280,057	280,057	0.784	219,544	219,544
6/30/94-95	257,546	261,546	0.779	200,665	203,782
6/30/95-96	257,354	266,354	0.774	199,276	206,245
6/30/96-97	337,480	352,480	0.766	258,546	270,038
6/30/97-98	299,839	322,839	0.763	228,772	246,320
6/30/98-99	421,442	447,442	0.758	319,449	339,157
6/30/99-00	567,284	596,284	0.759	430,393	452,395
6/30/00-01	608,500	641,500	0.754	458,675	483,550
6/30/01-02	618,110	665,110	0.750	463,323	498,553
6/30/02-03	853,731	889,731	0.751	640,830	667,852
6/30/03-04	1,018,290	1,052,290	0.749	763,188	788,671
6/30/04-05	1,059,280	1,605,280	0.746	790,137	1,197,409
6/30/05-06	1,362,255	1,838,255	0.745	1,014,708	1,369,268
6/30/06-07	1,709,355	2,782,355	0.761	1,300,193	2,116,353
6/30/07-08	2,657,212	3,394,212	0.792	2,105,738	2,689,782
6/30/08-09	4,373,126	6,525,126	0.837	3,662,140	5,464,266
Total	18,296,744	23,639,965		14,404,469	18,657,895
			(7) Total Discount Factor:	0.787	0.789

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	193,846	212,342
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	27,692	30,335
(11) Discounted Value at 4%:	169,535	185,711

NOTES:
(2), (3) From Section 8, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 8, Exhibit 2, Page 9, Column 7
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)

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Outstanding Loss Discounting - 6.0%

(1)	(2)	(3)	(4)	(5)	(6)
	Undiscounted		Discount	Discounted	
Accident	Outstanding Losses		Factor at	Outstanding Losses	
Year	(Low)	(High)	6.0%	(Low)	(High)
All Prior Yrs	193,846	212,342		159,226	174,419
6/30/82-83	0	22,139	0.971	0	21,503
6/30/83-84	0	47,586	0.926	0	44,050
6/30/84-85	37,351	38,351	0.888	33,149	34,037
6/30/85-86	72,065	72,065	0.854	61,558	61,558
6/30/86-87	70,379	72,379	0.824	58,014	59,663
6/30/87-88	154,592	158,592	0.797	123,209	126,397
6/30/88-89	196,404	199,404	0.775	152,262	154,588
6/30/89-90	243,455	247,455	0.761	185,268	188,312
6/30/90-91	234,580	235,580	0.736	172,537	173,272
6/30/91-92	209,681	209,681	0.727	152,342	152,342
6/30/92-93	203,533	203,533	0.705	143,512	143,512
6/30/93-94	280,057	280,057	0.703	196,844	196,844
6/30/94-95	257,546	261,546	0.698	179,653	182,444
6/30/95-96	257,354	266,354	0.692	178,119	184,348
6/30/96-97	337,480	352,480	0.682	230,168	240,399
6/30/97-98	299,839	322,839	0.679	203,536	219,149
6/30/98-99	421,442	447,442	0.673	283,642	301,141
6/30/99-00	567,284	596,284	0.675	382,814	402,384
6/30/00-01	608,500	641,500	0.669	407,070	429,146
6/30/01-02	618,110	665,110	0.664	410,473	441,684
6/30/02-03	853,731	889,731	0.666	568,695	592,675
6/30/03-04	1,018,290	1,052,290	0.665	677,319	699,934
6/30/04-05	1,059,280	1,605,280	0.661	700,099	1,060,961
6/30/05-06	1,362,255	1,838,255	0.660	899,108	1,213,275
6/30/06-07	1,709,355	2,782,355	0.681	1,164,449	1,895,399
6/30/07-08	2,657,212	3,394,212	0.723	1,921,728	2,454,735
6/30/08-09	4,373,126	6,525,126	0.782	3,419,834	5,102,722
Total	18,296,744	23,639,965		13,064,627	16,950,892
			(7) Total Discount Factor:	0.714	0.717

	Discount Calculation for All Prior Years	
	(Low)	(High)
(8) Estimated Total Reserve:	193,846	212,342
(9) Projected Number of Years:	7	7
(10) Projected Paid Loss per Year:	27,692	30,335
(11) Discounted Value at 6%:	159,226	174,419

NOTES:
(2), (3) From Section 8, Exhibit 2, Page 1, Columns 8, 9
(4) From Section 8, Exhibit 2, Page 9, Column 8
(5) = (2) x (4)
(6) = (3) x (4)
(7) = Sum of (5) / Sum of (2) and Sum of (6) / Sum of (3)
(10) = (8) / (9)